

hang[®]
On

SMART SOLUTIONS

FOR INDUSTRIAL COATING



PRODUCT HANDBOOK #13



HangOn is a partner who helps customers to find smart solutions for hanging, masking and handling which increases the efficiency and profitability in their coating process. We develop and produce in our own factories and distribute our products to more than 40 countries around the world.



HANGON AB

Industrivägen 7
SE-335 73 Hillerstorp
Sweden

Tel: +46 370 373 373

info@hangon.com
order@hangon.com

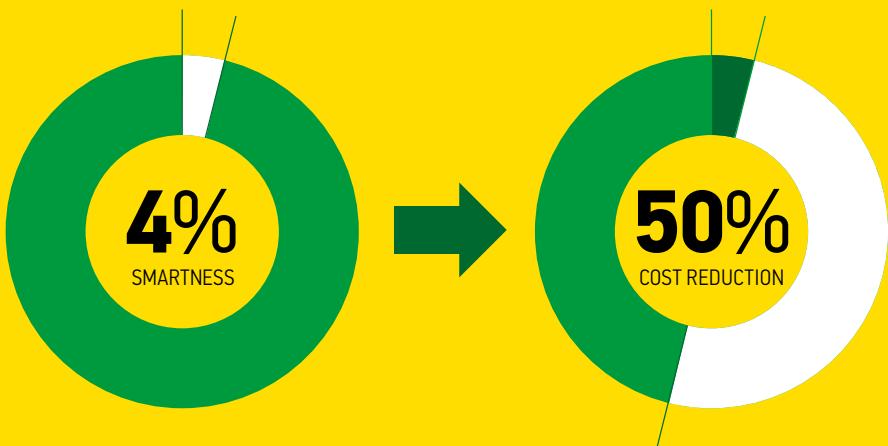
www.hangon.com

**“WE MAKE
THE INDUSTRIAL
COATING PROCESS
BETTER”**

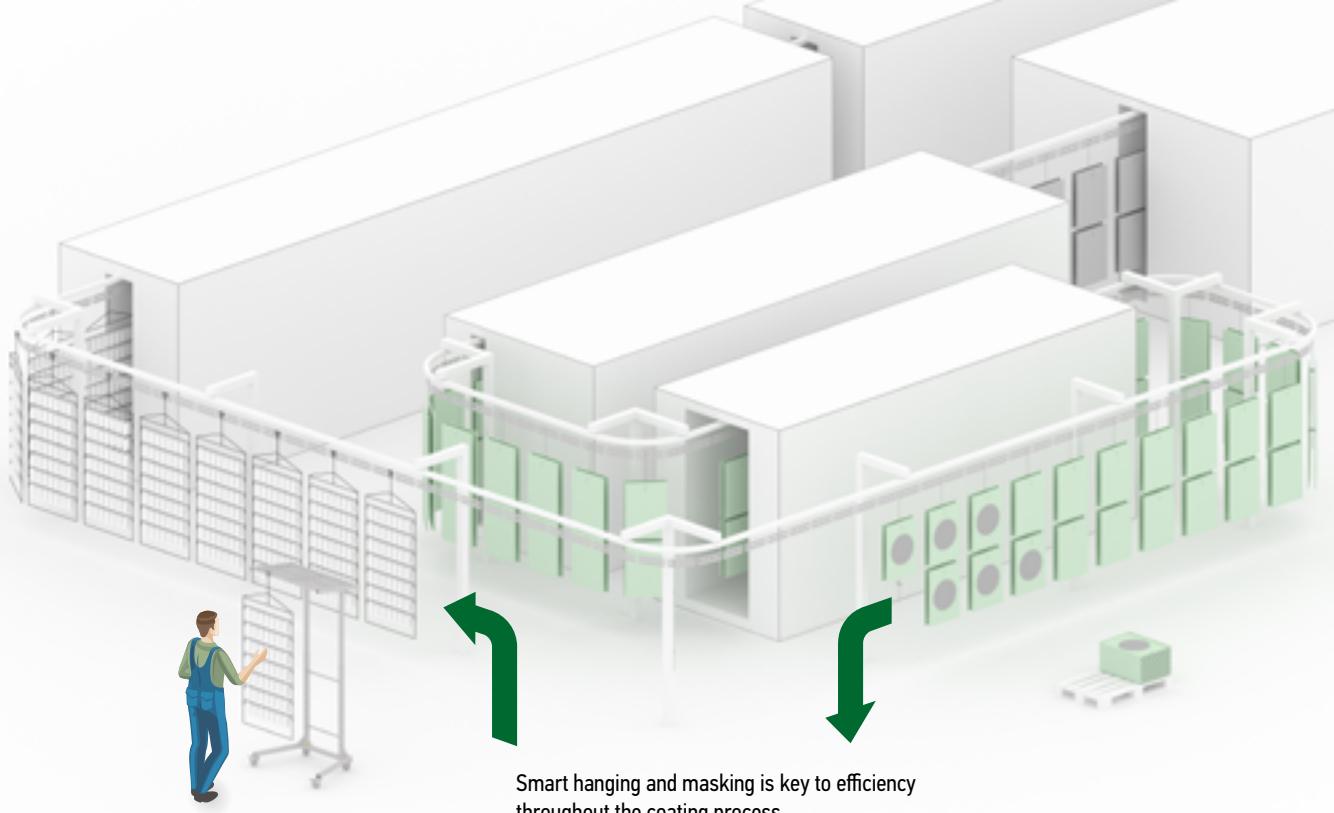


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SMART HANGING AND MASKING CAN REDUCE YOUR TOTAL COATING COST BY 50%



See calculation on page 166 and at www.hangon.com/en/calculation



Smart hanging and masking is key to efficiency throughout the coating process.

Small details can make a big difference. Smart hanging and masking is key to efficiency throughout the coating process and affect factors such as:

- » Coating line efficiency
- » Time for hanging, masking & handling
- » Coating result & quality

Masking, hooks and hanging are a minor cost of the industrial coating process, often less than 4% of the total coating cost. **Smart hanging and masking** can however reduce the **total coating cost by up to 50%**.



HANGON GREEN EFFECT

Lower energy – higher profit



Learn how to lower your energy consumption



Reduce costs and increase profit



Contribute to a greener coating industry

JOIN US FOR A GREENER COATING INDUSTRY – AND SAVE MONEY

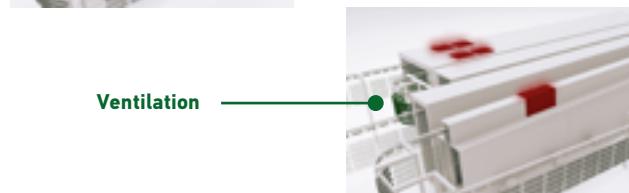
Did you know that you might be able to coat twice as many products in half the time? All you need to do is fill the line. A higher hanging density has the enormous potential to both reduce energy consumption and increase your profit. A double effect we call the HangOn Green Effect.

The major part of energy usage in your coating line is constant, regardless of the amount of goods coated. This is due to energy losses in radiation through outer surfaces, ventilation and heat leakage through openings. The difference in energy consumption is due to more goods being heated up.

The idea behind the project was originally to understand in depth what the energy consumption in a coating line really looks like. To achieve this HangOn conducted a thorough study of the energy consumption in five different standard powder coating line set-ups, which is the base for the HangOn Green Effect concept.



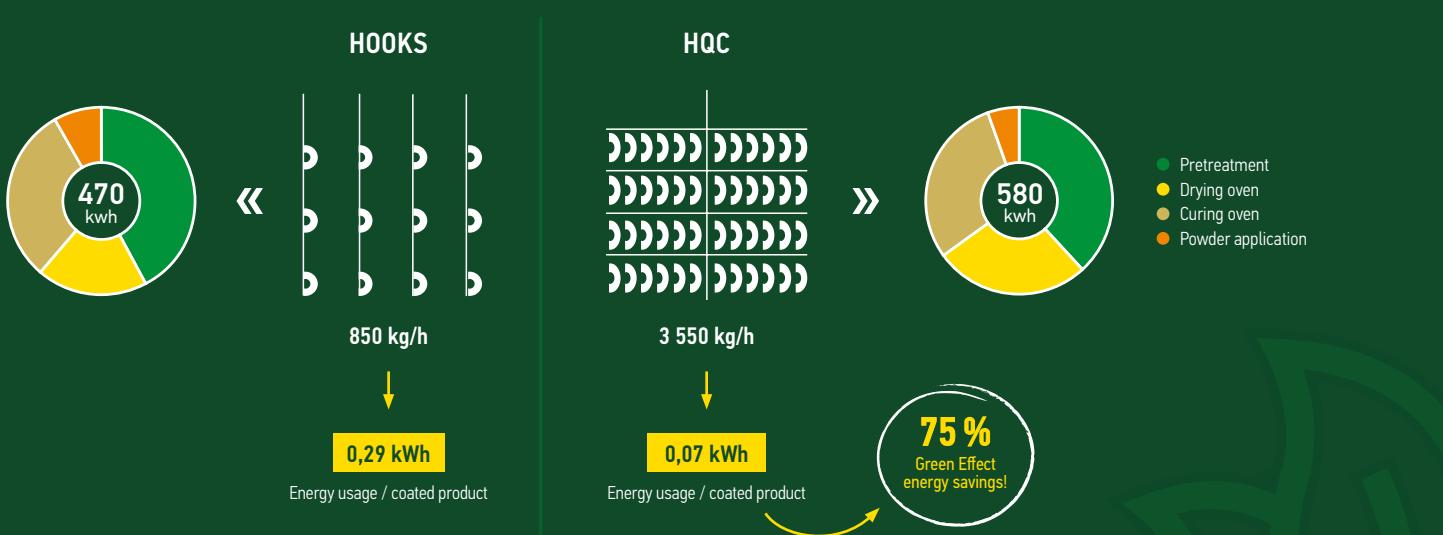
Radiation



Ventilation

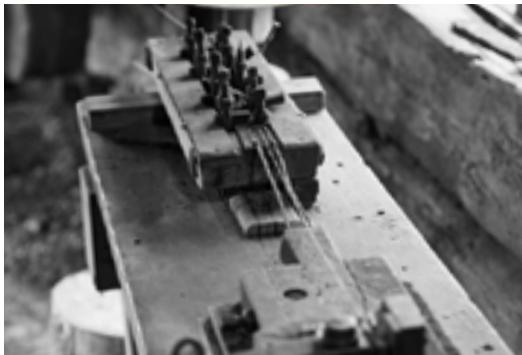


Heat leakage



FOR GENERATIONS WE HAVE DEVELOPED WITH OUR CUSTOMERS

Centuries of smart solutions have paid off. At HangOn know-how and industrial coating process experience run deep, which means that we quickly find the smartest solutions that give you the best result.



State-of-the-art wire-drawing in the 19th century.



Never-ending future development.



Part of the staff around 1930. The hatless boy's name is Erland – the future father and grandfather of the present owners.



Håkan (2nd from left) with sons Petter, Jakob and Lukas in front of our newly extended main distribution hub in Hillerstorp. A leap from 12,000 m² to 20,000 m² during 2017.

The Törefors family's entrepreneurial spirit dates back to the 16th century. Early in the 19th century they founded their first steel wire company, and in the 1930s, business expanded internationally. Initial products for the coating industry were manufactured in the mid-1970s. In 1989, a new generation succeeded, and since then development has accelerated with further specialization for the coating industry. New products have been launched, new services have been introduced, and new markets have been discovered. And above all, a multitude of smart solutions for better and more efficient coating have seen the light of day.

Our R&D is constantly focused on finding new solutions for your challenges. Sometimes we come up with answers before questions arise and solve yet unidentified problems. We are happy to provide advice on how to make your process more efficient, and can provide calculations that show exactly how much money you save or make with our smart solutions.

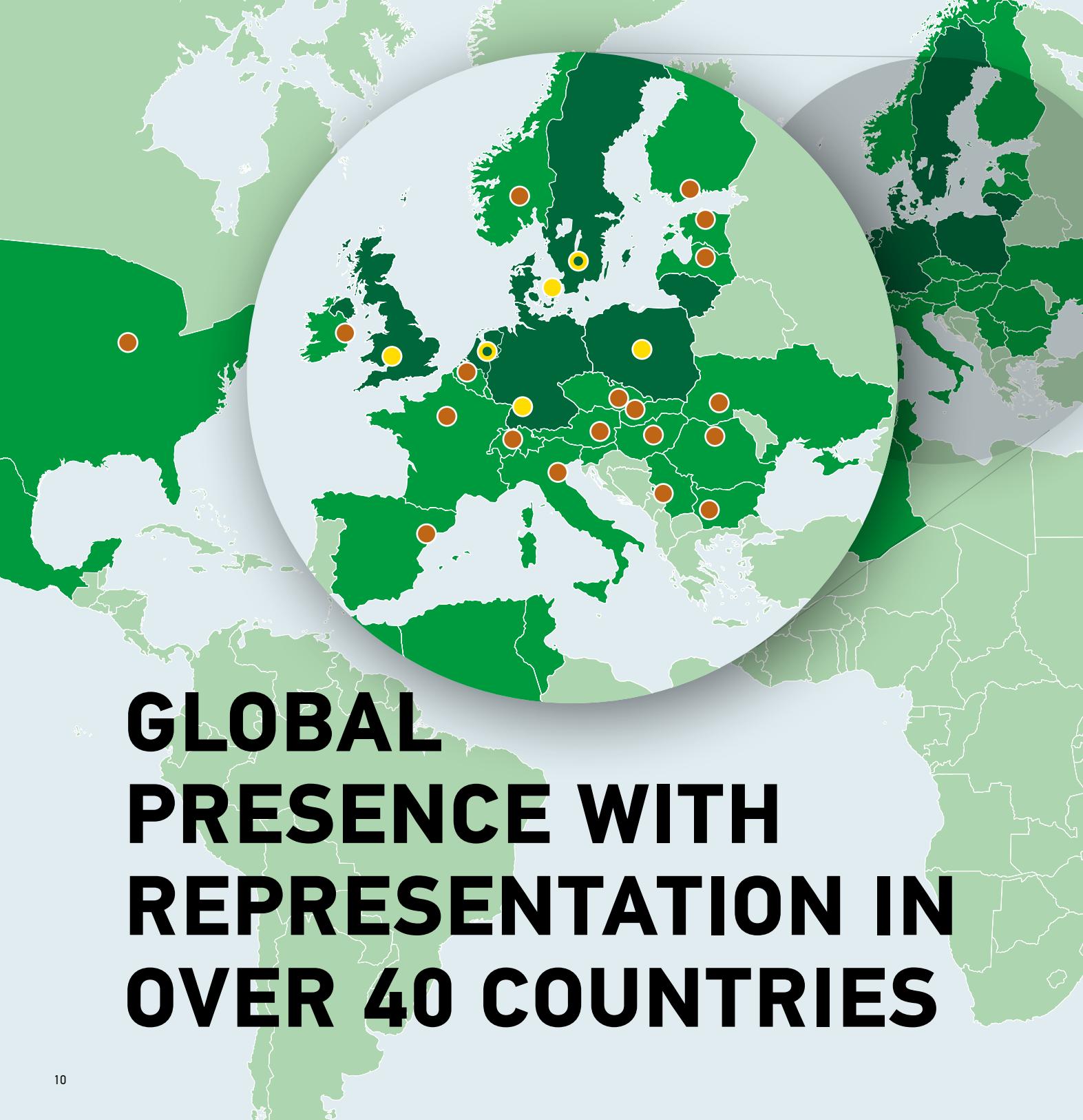
"Smart thinking is never stupid. We focus on small solutions that make a big difference for your business. What you do with the resources saved, well, that is up to you."

HangOn keeps on growing – with new colleagues, new technological possibilities and new smart solutions. Regardless of how big we grow, we will never grow apart – we will always grow with you. Always close, only a phone call away and delivering as promised, if not more.

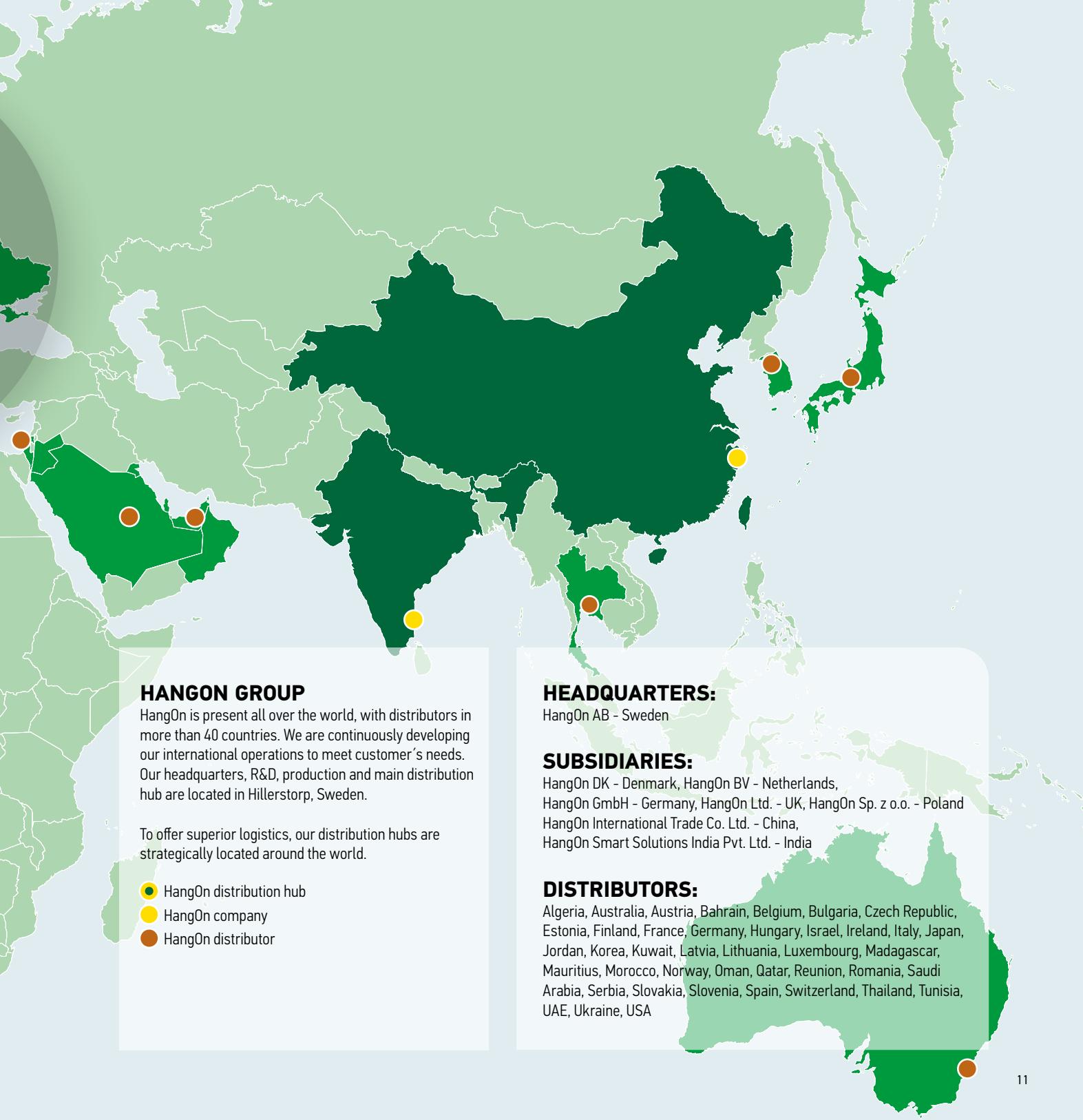
Welcome to HangOn.

Delve into our smart history
in the book *Hooked On Wire* and at
www.hangon.com/en/hooked_on_wire





**GLOBAL
PRESENCE WITH
REPRESENTATION IN
OVER 40 COUNTRIES**





SMART LOGISTICS & SALES SUPPORT

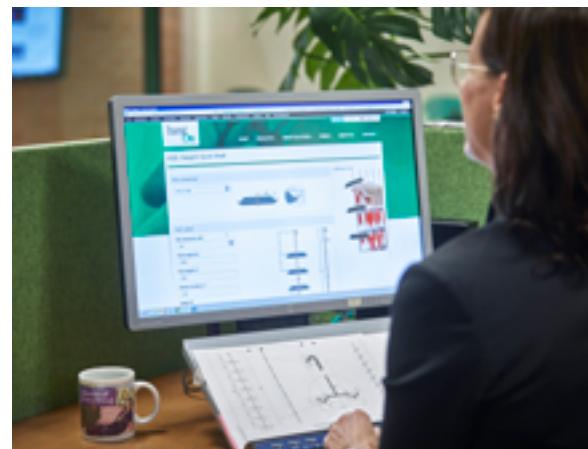
HangOn delivery is much more than just delivering products. You always receive extensive know-how and smart solutions for hanging and masking too.



HangOn's service is present throughout the delivery chain, from order to shipping. Our customized IT solutions streamline our entire order, manufacturing and delivery process. This ensures that you get products faster and at a lower cost. Our spreadsheet programs, available to all HangOn distributors, produce 3D-models and draft proposals for smart solutions for your order.

We know that quick response and fast delivery are important for your operations. One of our trademarks is that we always get back to you directly and that you can trust us to deliver in time. We are constantly improving our logistic solutions to ensure the best possible deliveries today and in the future.

Our main distribution hub in Sweden, recently extended to 20 000 m², houses a new logistics centre where we are developing and extending both warehousing and shipping. But above all, it is a hub where know-how, manufacturing and smart logistic solutions all come together.



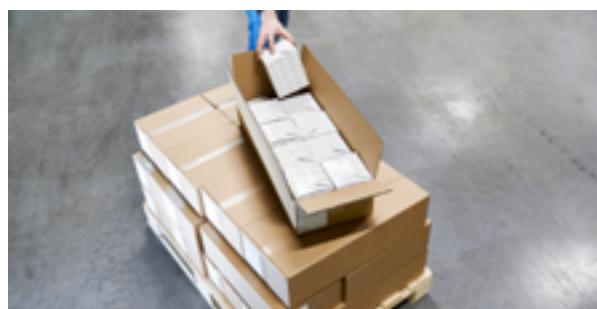
Our spreadsheet programs, available to all HangOn distributors through our Extranet.



The customer service team in the Netherlands.



Barcode handling.



Modularized packaging.



Our products are delivered well-packaged to avoid transport damage.



Our Swedish hub, 20 000 m².



Our hub in the Netherlands, 4 000 m².

FULL-SERVICE DISTRIBUTION HUBS

To optimize the logistics chain, HangOn's full-service distribution hubs deliver directly to end customers. Each is strategically located to provide the best possible service to our various markets. Markets far from these hubs are provided for by local warehouses with a selected range, customized to local needs.

- » All handbook products in stock.
- » We ship orders received before 14:00 the same day.
- » Standardized and modularized packaging materials minimize the risk of transport damages.
- » Customized routines and systems incl. bar coding, developed to achieve an efficient and reliable process from order to dispatch
- » Trained and service-minded staff specialized in HangOn products and services.
- » All distributors have access to online balances through our Extranet.

HANGON EXPERIENCE CENTER

A CREATIVE SPACE FOR SMART SOLUTIONS

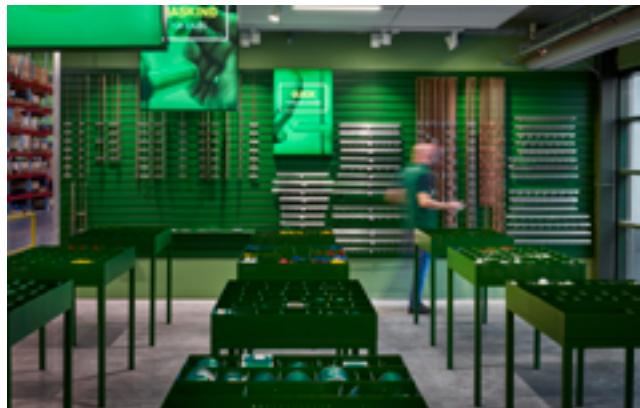


The best way to understand a new concept is by experiencing it. Look, touch and experiment your way through all our possible solutions. Who knows, you might find a really smart one.

The HangOn Experience Center is a creative and interactive space with four different departments. The laboratory, sample shop, conference & meeting area and our brand new addition: the studio. If you need some new inspiration or someone to brainstorm ideas with, you are very welcome to visit our Experience Centers in Sweden or the Netherlands.



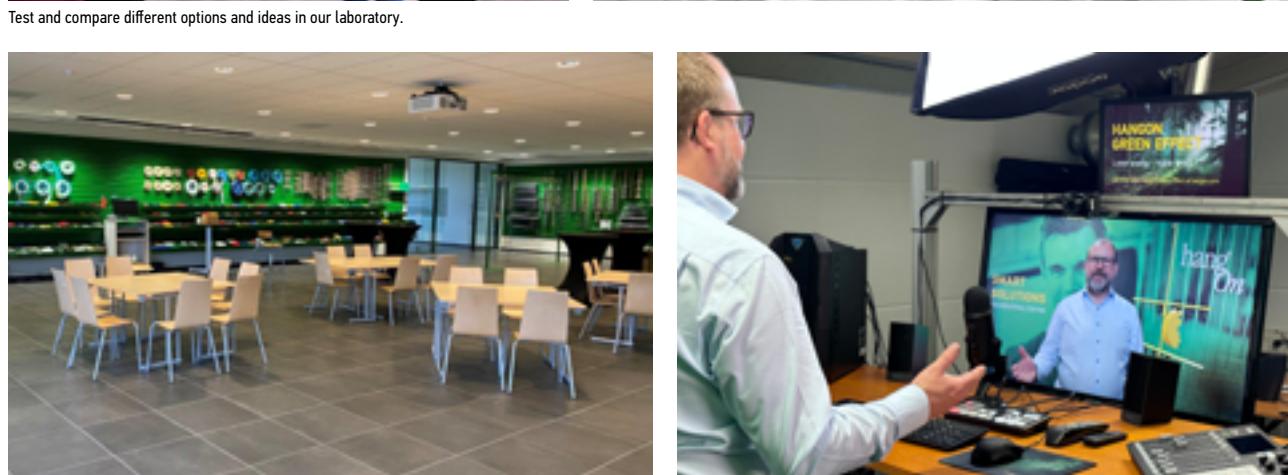
Conference and meeting area.



Have a look at our smart hanging and masking solutions. Maybe take some home with you?



Test and compare different options and ideas in our laboratory.



Our brand new Experience Center in the Netherlands.



Create your own professional webinars in our studio.



CUSTOMIZATION IS STANDARD TO US

Every year we produce thousands of special solutions and have developed a streamlined process
- HANGON CUSTOM PRODUCT DEVELOPMENT PROCESS

As experts in our field, we are highly knowledgeable about every tiny detail of the industrial coating process. Our R&D department has decades of experience to develop specialized solutions for the coating industry.

Listening closely to your needs and gathering the necessary information enables innovative and smart solutions. We analyse how various tasks in your specific coating process can be solved in the best possible way. Finding the smartest solution for your individual needs may take time – but our experience is that every hour invested pays off through long-term profitability.



PRODUCT DEVELOPMENT

We put the same effort into continuously developing and improving our standardized solutions as we do into designing customized solutions.

Many of the solutions that count as standard are, in fact, simply revolutionary.

Our Quick Family is a prominent example of making the coating process more efficient and simplify automation.

HQC

A version of HQL, adapted to mount on shafts, and with a hook, Ø1,5 mm.

HQW D

A quick and flexible wire shaft that can be used with hooks, shafts or frames. Efficient packing and east to start up.

HQS

A smart hanging system with a flexible shaft with welded profiles which minimizes hanging marks. Is easy both to get started with and adapt to the desired length (400–2400 mm). Holds up to 100 kg.

HQL

Levels for small products. The hooks are only Ø1,0 mm which mean minimal hanging marks.
Made of durable spring wire.

GAQ

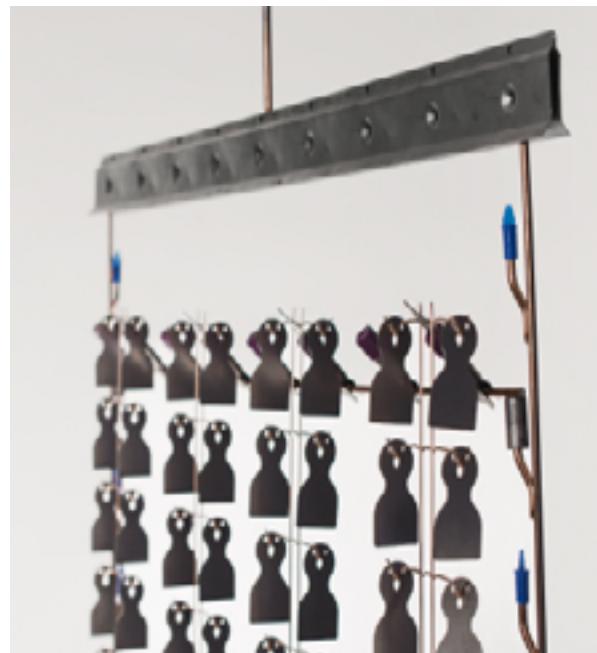
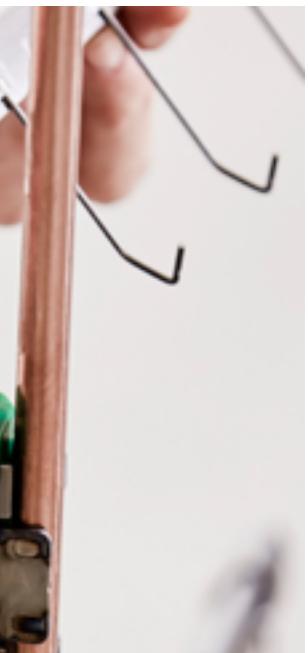
Axle masking with ribs and material optimized design. The masking can also be used for holes. Thanks to GAQ, axle masking has never been faster.



HQC



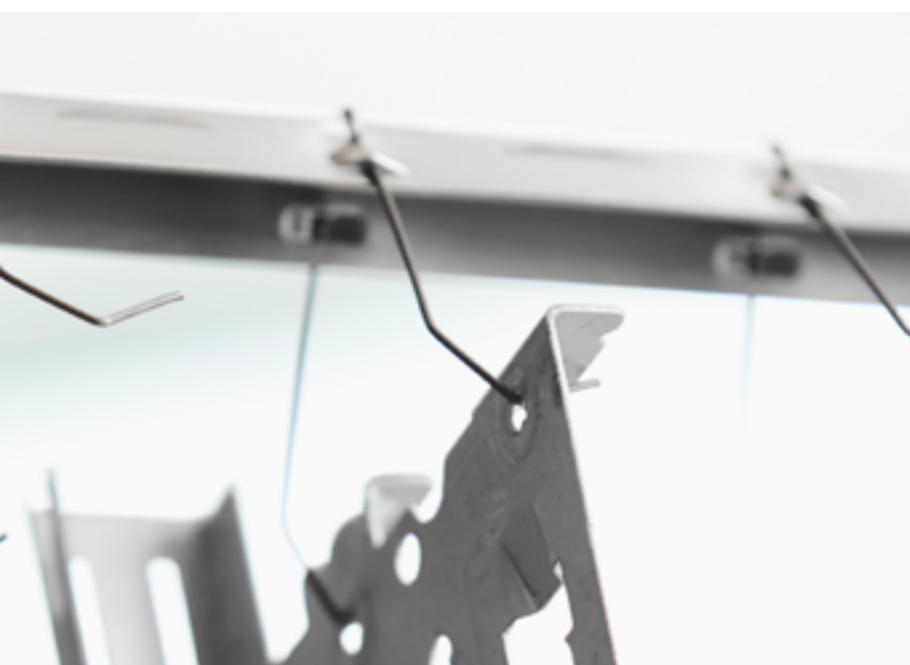
HQL



HQW D



HQS



GAQ

PRODUCTION DEVELOPMENT

Right from the start, HangOn has had a great interest in efficient production.

Over the years we have developed numerous specialized machines and production methods, and we continue to do so today, to the same degree. Depending on customer needs, we develop products and unique manufacturing methods.



Smart solution robot hooks for automation, produced by a machine that we have developed at HangOn.



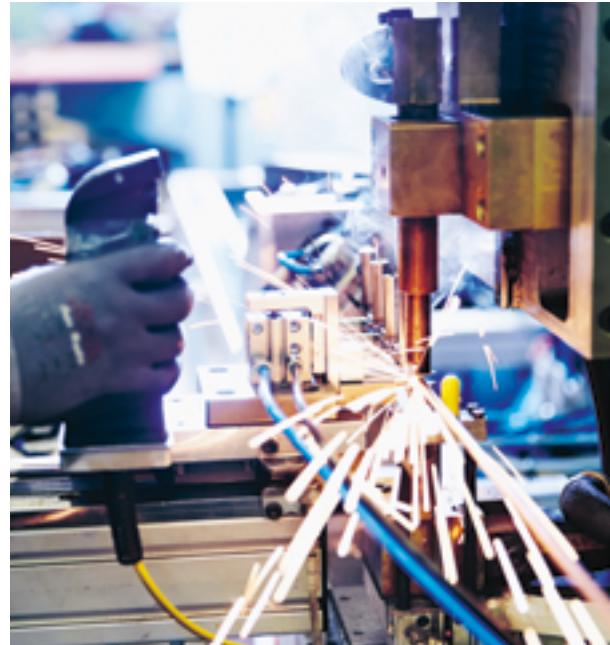
HQC - three different materials become one product and is manufactured by a machine developed by HangOn.



One of our latest smart solutions, HQL, is manufactured by a machine that we have developed at HangOn.



One of the smart solutions in our Quick Family, HQS, is manufactured by a machine developed by HangOn.



Automated spot welding is also one of our manufacturing methods, developed at HangOn.

PRODUCTION PHOTOS FROM SWEDEN, THE NETHERLANDS & CHINA



Modern MIG/MAG/TIG-welding.



We have "state-of-the-art" cnc-machinery for advanced shaping of wire.



Silicone rubber production



Masking discs with target print and slit back. A production process that demands unique skills.



Machine for rational cutting and stamping of various materials.



High precision coil metal punching.



Cutting of EPDM maskings.

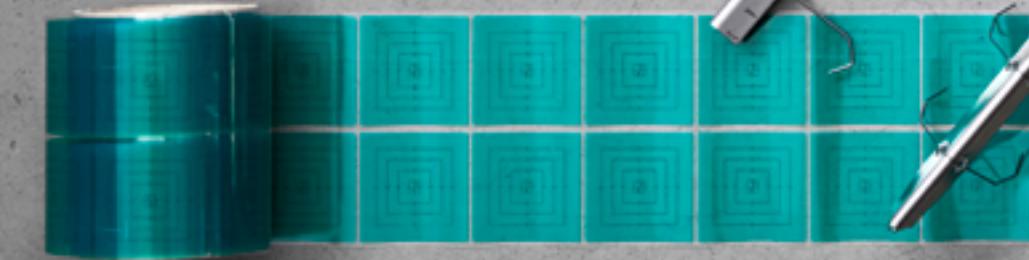


Our wire machines produce millions of hooks every day.

POTENT PATENTS!

We are constantly inventing new smart solutions while developing our products.

Many special projects for specific customers and products lead to solutions with wider applications. These often have the potential to make the coating industry much more efficient, which is why we apply for patents and design patents. As of today we hold more than 40 patents and design patents.





CONTROL & ANALYSIS

An initial step in the process of customizing and developing new solutions is to analyse, measure objects and check design plans.

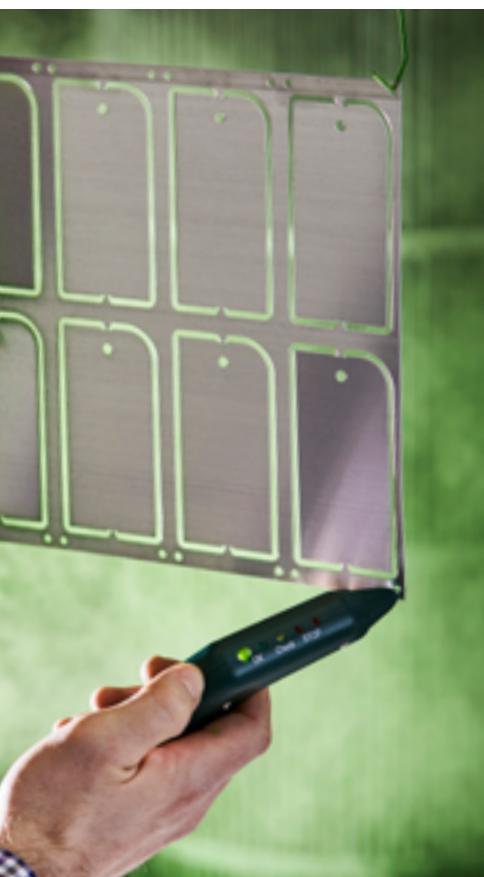
The next step, when we have an idea for solving the task at hand, is to make prototypes and samples, and run physical tests.

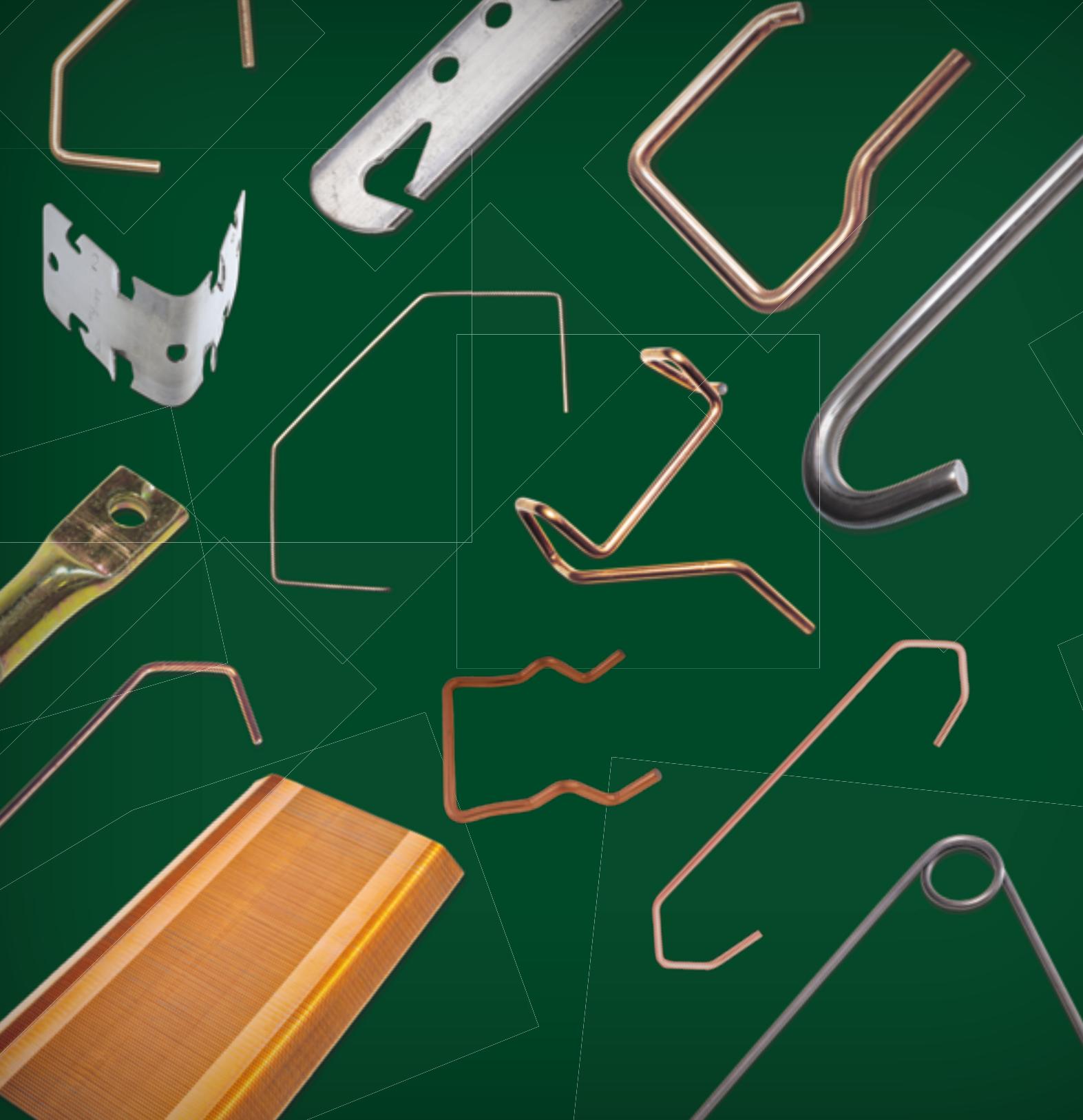
OUR MEASURING AND TESTING TOOLS INCLUDE:

- » Pull test equipment » Coating test equipment
- » Precision measuring equipment » Coating line equipment
- » High precision scales » 3D CAD
- » Profile projector » Advanced CNC
- » Conveyor for testing » 3D printers
- » Ovens » Waterjet

Several of these tools and methods are used daily to maintain excellent manufacturing quality.





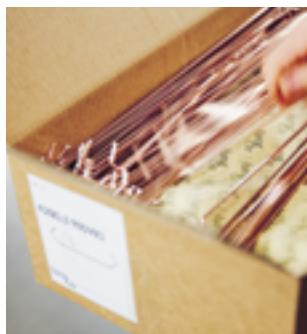




HOOKS

33	V680	VERTICAL HOOKS
33	PDVx2 F	ROBOT HOOKS
33	PTRVx2	STANDARD HOOKS
34	PDVx2	STANDARD HOOKS
36	PDVx2 M	STANDARD HOOKS
37	PDV	STANDARD HOOKS
38	PRx2	STANDARD HOOKS
39	90DVx2	STANDARD HOOKS
40	90DV	STANDARD HOOKS
41	90Rx2	STANDARD HOOKS
41	180Rx2	STANDARD HOOKS
41	45DV	STANDARD HOOKS
42	HPY / ROB / RO	PIPE HOOKS
43	PH / PK / PKM	SHEET CLAMP HOOKS
44	PS	PULL SPRING HOOKS
44	AC	ALLIGATOR CLAMPS
45	MS / MT / CU	EYEBOLTS / SCREW CAPS / COPPER STANDARD HOOKS
47		NON STOCKED ITEMS, HOOKS

ALWAYS 400 SIZES OF STANDARD HOOKS IN STOCK

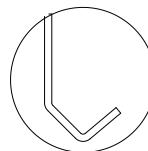


- » Always 400 sizes in stock
- » Separated by paper layers for easier picking
- » Modularized boxes
- » Our standard hooks are made of a copper drawn mild steel wire
- » There is always a volume discount of 5% when ordering a full pallet with 5 layers of boxes

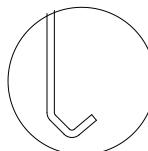


DIFFERENT SHAPES FOR DIFFERENT PURPOSES

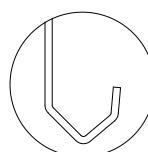
DV - DOUBLE ANGLE



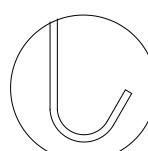
- » V-shape gives more stable hanging
- » Easy to use, low sloped ends
- » Avoids shadowing by good distance to hanging point but is still strong
- » Defined hanging point gives safe grounding and more turns in the line



- ### DV M - DOUBLE ANGLE MINI
- » Same as DV but can take more weight



- ### TRV - TRIPLE ANGLE
- » Extra end gives more security when dipping and heavy duty pre-treatment
 - » A good alternative to radius hooks



R - RADIUS

- » Can in some situations be easier to use in narrow hanging holes
- » On some occasions the flat hanging point can leave less hanging marks



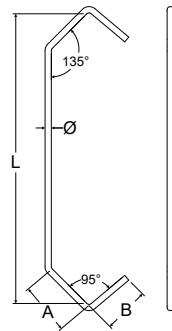
VERTICAL HOOKS

Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	R, mm	V °	D, mm	Max load,kg
V680X3,0 PR50D10	800	20	680X3,0	4	50°	10	25
V680X3,5 PR30D15	700	20	680X3,5	4	30°	15	30
V680X3,5 PR50D15	700	20	680X3,5	4	50°	15	30
V680X4,0 PR30D20	500	20	680X4,0	4	30°	20	45

» Standardized hook with safety bent upper end

» Different lower edn forms

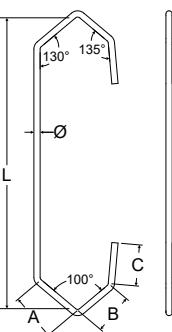
ROBOT HOOKS



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
F050X1,5 PDVX2	7 500	40	050X1,5	17	15
F050X2,0 PDVX2	5 500	40	050X2,0	17	15
F060X1,5 PDVX2	7 500	40	060X1,5	17	15
F060X2,0 PDVX2	5 500	40	060X2,0	17	15
F075X1,5 PDVX2	6 000	40	075X1,5	17	15
F075X2,0 PDVX2	4 400	40	075X2,0	17	15
F100X1,5 PDVX2	6 000	30	100X1,5	17	15
F100X2,0 PDVX2	4 400	30	100X2,0	17	15
F120X2,0 PDVX2	4 400	30	120X2,0	17	15

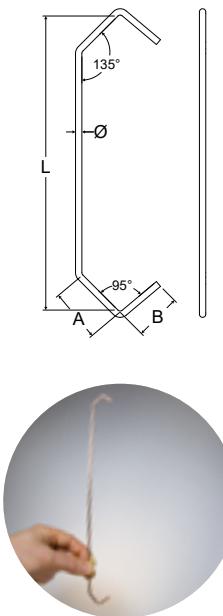
» Fixed together with tape

STANDARD HOOKS, PTRVx2



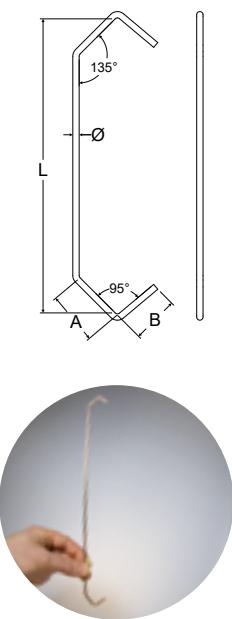
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A mm	B mm	C mm
050X2,0 PTRVX2	4000	30	050X2,0	14	11	13
060X2,0 PTRVX2	4000	30	060X2,0	14	11	13
075X2,0 PTRVX2	3000	30	075X2,0	14	11	13
075X3,0 PTRVX2	2000	30	075X3,0	15	12	14
100X2,0 PTRVX2	2000	30	100X2,0	14	11	13
100X3,0 PTRVX2	1500	30	100X3,0	15	12	14
150X2,0 PTRVX2	1200	40	150X2,0	14	11	13
150X3,0 PTRVX2	700	40	150X3,0	15	12	14
200X3,0 PTRVX2	800	30	200X3,0	15	12	14
400X3,0 PTRVX2	600	30	400X3,0	15	12	14
500X3,0 PTRVX2	500	30	500X3,0	15	12	14

STANDARD HOOKS, PDVx2



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
020X1,1 PDVX2	10000	70	020X1,1	17	15
050X0,6 PDVX2	10000	40	050X0,6	17	15
050X1,1 PDVX2	10000	40	050X1,1	17	15
050X1,5 PDVX2	5000	40	050X1,5	17	15
050X2,0 PDVX2	4000	40	050X2,0	17	15
050X3,0 PDVX2	3000	40	050X3,0	18	18
060X1,5 PDVX2	5000	40	060X1,5	17	15
060X2,0 PDVX2	4000	40	060X2,0	17	15
060X3,0 PDVX2	2000	40	060X3,0	18	18
075X1,1 PDVX2	6000	40	075X1,1	17	15
075X1,5 PDVX2	4000	30	075X1,5	17	15
075X2,0 PDVX2	4000	30	075X2,0	17	15
075X3,0 PDVX2	2500	30	075X3,0	18	18
075X4,0 PDVX2	1200	40	075X4,0	20	20
100X0,6 PDVX2	4000	40	100X0,6	17	15
100X1,1 PDVX2	4000	30	100X1,1	17	15
100X1,5 PDVX2	3000	30	100X1,5	17	15
100X2,0 PDVX2	3000	30	100X2,0	17	15
100X2,5 PDVX2	2000	30	100X2,5	18	18
100X3,0 PDVX2	1500	30	100X3,0	18	18
100X4,0 PDVX2	800	40	100X4,0	20	20
100X5,0 PDVX2	500	40	100X5,0	22	22
100X6,0 PDVX2	500	40	100X6,0	22	22
100X8,0 PDVX2	300	40	100X8,0	24	24
100X10,0 PDVX2	200	40	100X10,0	30	30
120X1,5 PDVX2	2000	30	120X1,5	17	15
120X2,0 PDVX2	2000	30	120X2,0	17	15
120X3,0 PDVX2	1000	40	120X3,0	18	18
120X4,0 PDVX2	600	40	120X4,0	20	20
150X1,1 PDVX2	3400	40	150X1,1	17	15
150X1,5 PDVX2	2400	40	150X1,5	17	15
150X2,0 PDVX2	1500	40	150X2,0	17	15
150X2,5 PDVX2	1000	40	150X2,5	18	18
150X3,0 PDVX2	800	40	150X3,0	18	18
150X4,0 PDVX2	500	40	150X4,0	20	20
150X5,0 PDVX2	350	40	150X5,0	22	22
150X6,0 PDVX2	300	40	150X6,0	22	22
150X8,0 PDVX2	200	40	150X8,0	24	24
150X12,0 PDVX2	100	40	150X12,0	32	32
200X1,5 PDVX2	2200	40	200X1,5	17	15
200X2,0 PDVX2	1400	40	200X2,0	17	15
200X2,5 PDVX2	800	40	200X2,5	18	18
200X3,0 PDVX2	800	40	200X3,0	18	18
200X4,0 PDVX2	500	40	200X4,0	20	20
200X5,0 PDVX2	300	40	200X5,0	22	22
200X6,0 PDVX2	250	40	200X6,0	22	22
200X8,0 PDVX2	125	40	200X8,0	24	24
200X10,0 PDVX2	100	40	200X10,0	30	30
250X1,5 PDVX2	2000	40	250X1,5	17	15
250X2,0 PDVX2	1200	40	250X2,0	17	15
250X3,0 PDVX2	800	40	250X3,0	18	18
250X4,0 PDVX2	500	40	250X4,0	20	20

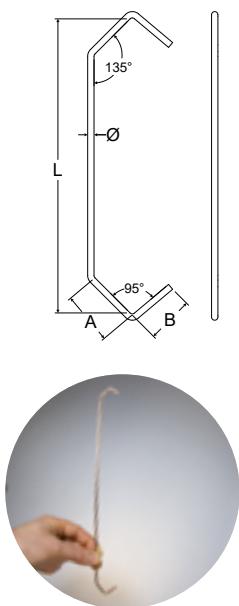
STANDARD HOOKS, PDVx2



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
250X5,0 PDVX2	300	40	250X5,0	22	22
250X6,0 PDVX2	250	40	250X6,0	22	22
250X8,0 PDVX2	150	40	250X8,0	24	24
300X1,5 PDVX2	1800	40	300X1,5	17	15
300X2,0 PDVX2	1200	40	300X2,0	17	15
300X2,5 PDVX2	800	40	300X2,5	18	18
300X3,0 PDVX2	600	40	300X3,0	18	18
300X4,0 PDVX2	400	40	300X4,0	20	20
300X5,0 PDVX2	250	40	300X5,0	22	22
300X6,0 PDVX2	200	40	300X6,0	22	22
300X8,0 PDVX2	150	30	300X8,0	24	24
300X10,0 PDVX2	50	40	300X10,0	30	30
300X12,0 PDVX2	75	30	300X12,0	32	32
350X1,5 PDVX2	2400	30	350X1,5	17	15
350X2,0 PDVX2	1600	30	350X2,0	17	15
350X3,0 PDVX2	800	30	350X3,0	18	18
350X4,0 PDVX2	500	30	350X4,0	20	20
400X1,5 PDVX2	1800	30	400X1,5	17	15
400X2,0 PDVX2	1300	30	400X2,0	17	15
400X2,5 PDVX2	500	30	400X2,5	18	18
400X3,0 PDVX2	800	30	400X3,0	18	18
400X4,0 PDVX2	400	30	400X4,0	20	20
400X5,0 PDVX2	250	30	400X5,0	22	22
400X6,0 PDVX2	200	30	400X6,0	22	22
400X8,0 PDVX2	100	30	400X8,0	24	24
450X2,0 PDVX2	1500	30	450X2,0	17	15
450X3,0 PDVX2	800	30	450X3,0	18	18
450X4,0 PDVX2	500	30	450X4,0	20	20
500X1,5 PDVX2	2200	30	500X1,5	17	15
500X2,0 PDVX2	1200	30	500X2,0	17	15
500X2,5 PDVX2	800	30	500X2,5	18	18
500X3,0 PDVX2	700	30	500X3,0	18	18
500X4,0 PDVX2	450	30	500X4,0	20	20
500X5,0 PDVX2	250	30	500X5,0	22	22
500X6,0 PDVX2	200	30	500X6,0	22	22
500X8,0 PDVX2	100	30	500X8,0	24	24
550X1,5 PDVX2	2400	20	550X1,5	17	15
550X2,0 PDVX2	1600	20	550X2,0	17	15
550X3,0 PDVX2	900	20	550X3,0	18	18
600X1,5 PDVX2	2000	20	600X1,5	17	15
600X2,0 PDVX2	1500	20	600X2,0	17	15
600X2,5 PDVX2	800	20	600X2,5	18	18
600X3,0 PDVX2	600	20	600X3,0	18	18
600X4,0 PDVX2	500	20	600X4,0	20	20
600X5,0 PDVX2	250	20	600X5,0	22	22
600X6,0 PDVX2	200	20	600X6,0	22	22
600X8,0 PDVX2	120	20	600X8,0	24	24
700X1,5 PDVX2	2000	20	700X1,5	17	15
700X2,0 PDVX2	1500	20	700X2,0	17	15
700X3,0 PDVX2	800	20	700X3,0	18	18
700X4,0 PDVX2	500	20	700X4,0	20	20
700X5,0 PDVX2	300	20	700X5,0	22	22

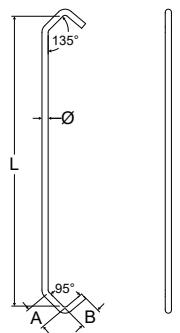


STANDARD HOOKS, PDVx2



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
700X6,0 PDVX2	300	20	700X6,0	22	22
700X8,0 PDVX2	100	20	700X8,0	24	24
800X2,0 PDVX2	1600	20	800X2,0	17	15
800X3,0 PDVX2	800	20	800X3,0	18	18
800X4,0 PDVX2	500	20	800X4,0	20	20
800X5,0 PDVX2	300	20	800X5,0	22	22
800X6,0 PDVX2	200	20	800X6,0	22	22
800X8,0 PDVX2	100	20	800X8,0	24	24
900X2,0 PDVX2	2000	10	900X2,0	17	15
900X3,0 PDVX2	1000	10	900X3,0	18	18
900X4,0 PDVX2	600	10	900X4,0	20	20
900X5,0 PDVX2	400	10	900X5,0	22	22
900X6,0 PDVX2	250	10	900X6,0	22	22
900X8,0 PDVX2	125	10	900X8,0	24	24
1000X2,0 PDVX2	1600	10	1000X2,0	17	15
1000X3,0 PDVX2	900	10	1000X3,0	18	18
1000X4,0 PDVX2	500	10	1000X4,0	20	20
1000X5,0 PDVX2	250	10	1000X5,0	22	22
1000X6,0 PDVX2	200	10	1000X6,0	22	22
1000X8,0 PDVX2	100	10	1000X8,0	24	24

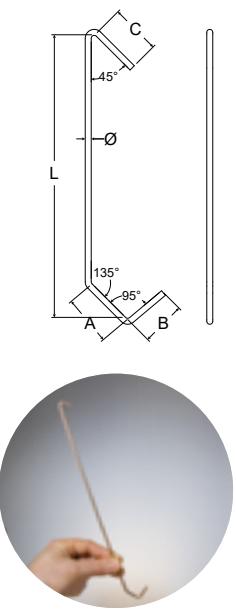
STANDARD HOOKS, PDVx2 M



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
060X1,5 PDVX2 M	8000	40	060X1,5	11	11
060X2,0 PDVX2 M	5000	40	060X2,0	11	11
075X1,5 PDVX2 M	8000	30	075X1,5	11	11
075X2,0 PDVX2 M	4000	30	075X2,0	11	11
100X1,5 PDVX2 M	5000	30	100X1,5	11	11
100X2,0 PDVX2 M	4000	30	100X2,0	11	11
150X1,5 PDVX2 M	2500	40	150X1,5	11	11
150X2,0 PDVX2 M	1800	40	150X2,0	11	11
200X2,0 PDVX2 M	2000	40	200X2,0	11	11

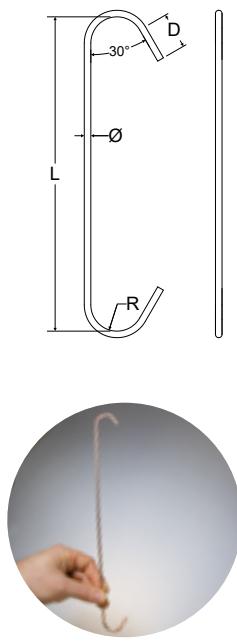


STANDARD HOOKS, PDV



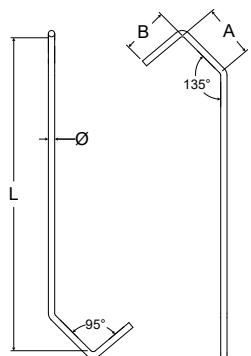
Prod No.	Qty per box	Qty boxes/ pallet	L x Ø mm	A mm	B mm	C mm
150X3,0 PDV	900	40	150X3,0	18	18	18
250X1,5 PDV	2400	40	250X1,5	17	15	17
250X3,0 PDV	900	40	250X3,0	18	18	18
300X1,5 PDV	1800	40	300X1,5	17	15	17
300X2,0 PDV	1400	40	300X2,0	17	15	17
300X3,0 PDV	800	40	300X3,0	18	18	18
350X1,5 PDV	2400	30	350X1,5	17	15	17
350X2,0 PDV	1600	30	350X2,0	17	15	17
350X3,0 PDV	1000	30	350X3,0	18	18	18
400X2,0 PDV	1400	30	400X2,0	17	15	17
400X3,0 PDV	800	30	400X3,0	18	18	18
400X4,0 PDV	500	30	400X4,0	20	20	19
450X1,5 PDV	3000	30	450X1,5	17	15	17
450X2,0 PDV	2000	30	450X2,0	17	15	17
450X3,0 PDV	1000	30	450X3,0	18	18	18
500X1,5 PDV	2100	30	500X1,5	17	15	17
500X2,0 PDV	1500	30	500X2,0	17	15	17
500X3,0 PDV	800	30	500X3,0	18	18	18
500X4,0 PDV	600	30	500X4,0	20	20	19
550X1,5 PDV	3000	20	550X1,5	17	15	17
550X2,0 PDV	2100	20	550X2,0	17	15	17
550X3,0 PDV	1100	20	550X3,0	18	18	18
600X1,5 PDV	2400	20	600X1,5	17	15	17
600X2,0 PDV	1800	20	600X2,0	17	15	17
600X3,0 PDV	900	20	600X3,0	18	18	18
600X4,0 PDV	500	20	600X4,0	20	20	19
700X2,0 PDV	1600	20	700X2,0	17	15	17
700X3,0 PDV	900	20	700X3,0	18	18	18
700X4,0 PDV	500	20	700X4,0	20	20	19
800X2,0 PDV	1800	20	800X2,0	17	15	17
800X3,0 PDV	800	20	800X3,0	18	18	18
800X4,0 PDV	500	20	800X4,0	20	20	19
900X2,0 PDV	2000	10	900X2,0	17	15	17
900X3,0 PDV	1200	10	900X3,0	18	18	18
1000X2,0 PDV	1800	10	1000X2,0	17	15	17
1000X3,0 PDV	1000	10	1000X3,0	18	18	18

STANDARD HOOKS, PRx2



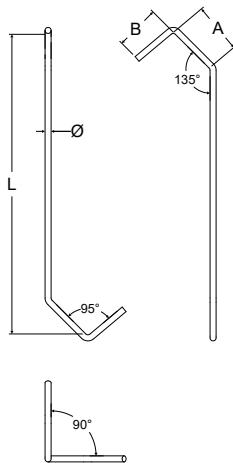
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	R, mm	D, mm
050X1,5 PRX2	5000	40	050X1,5	8	11
050X2,0 PRX2	4000	40	050X2,0	8	11
060X1,5 PRX2	5000	40	060X1,5	8	11
060X1,5 PR11X2	3000	40	060X1,5	11	15
060X2,0 PRX2	4000	40	060X2,0	8	11
060X2,0 PR11X2	4000	30	060X2,0	11	15
060X3,0 PRX2	2000	30	060X3,0	11	15
075X1,5 PRX2	4000	40	075X1,5	8	11
075X1,5 PR11X2	3000	40	075X1,5	11	15
075X2,0 PRX2	4000	30	075X2,0	8	11
075X2,0 PR11X2	3000	30	075X2,0	11	15
075X3,0 PRX2	2000	30	075X3,0	11	15
100X1,5 PRX2	3000	30	100X1,5	8	11
100X1,5 PR11X2	2500	30	100X1,5	11	15
100X2,0 PRX2	2500	30	100X2,0	8	11
100X2,0 PR11X2	2000	30	100X2,0	11	15
100X3,0 PRX2	1500	30	100X3,0	11	15
100X4,0 PRX2	800	40	100X4,0	11	16
100X5,0 PRX2	500	40	100X5,0	11	16
100X6,0 PRX2	500	40	100X6,0	11	16
150X1,5 PRX2	2000	40	150X1,5	8	11
150X2,0 PRX2	1200	40	150X2,0	8	11
150X2,0 PR11X2	1200	40	150X2,0	11	15
150X3,0 PRX2	700	40	150X3,0	11	15
150X4,0 PRX2	500	40	150X4,0	11	16
150X5,0 PRX2	350	40	150X5,0	11	16
150X6,0 PRX2	300	40	150X6,0	11	16
200X2,0 PRX2	1400	40	200X2,0	8	11
200X3,0 PRX2	800	30	200X3,0	11	15
200X4,0 PRX2	500	40	200X4,0	11	16
200X5,0 PRX2	350	40	200X5,0	11	16
200X6,0 PRX2	250	40	200X6,0	11	16
200X16,0 PRX2	20	70	200X16,0	25	30
250X2,0 PRX2	1500	40	250X2,0	8	11
250X3,0 PRX2	600	40	250X3,0	11	15
250X4,0 PRX2	400	40	250X4,0	11	16
300X3,0 PRX2	600	30	300X3,0	11	15
300X4,0 PRX2	350	40	300X4,0	11	16
300X5,0 PRX2	250	40	300X5,0	11	16
300X6,0 PRX2	200	40	300X6,0	11	16
350X3,0 PRX2	600	30	350X3,0	11	15
400X3,0 PRX2	600	30	400X3,0	11	15
400X4,0 PRX2	350	30	400X4,0	11	16
400X16,0 PRX2	20	30	400X16,0	25	30
500X3,0 PRX2	500	30	500X3,0	11	15
500X4,0 PRX2	350	30	500X4,0	11	16
550X3,0 PRX2	700	20	550X3,0	11	15
600X3,0 PRX2	600	20	600X3,0	11	15
600X16,0 PRX2	20	20	600X16,0	25	30
700X3,0 PRX2	500	20	700X3,0	11	15
800X16,0 PRX2	20	20	800X16,0	25	30
1000X16,0 PRX2	20	10	1000X16,0	25	30

STANDARD HOOKS, 90DVx2



Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
050X1,5 90DVX2	5000	40	050X1,5	17	15
050X2,0 90DVX2	3000	40	050X2,0	17	15
050X3,0 90DVX2	2500	40	050X3,0	18	18
060X2,0 90DVX2	3000	40	060X2,0	17	15
075X1,5 90DVX2	4000	30	075X1,5	17	15
075X2,0 90DVX2	2500	40	075X2,0	17	15
075X3,0 90DVX2	1200	40	075X3,0	18	18
100X1,5 90DVX2	2000	30	100X1,5	17	15
100X2,0 90DVX2	2000	30	100X2,0	17	15
100X3,0 90DVX2	1200	30	100X3,0	18	18
100X4,0 90DVX2	700	40	100X4,0	20	20
120X2,0 90DVX2	1500	30	120X2,0	17	15
120X3,0 90DVX2	1000	30	120X3,0	18	18
150X1,5 90DVX2	2000	40	150X1,5	17	15
150X2,0 90DVX2	1200	40	150X2,0	17	15
150X3,0 90DVX2	600	40	150X3,0	18	18
150X4,0 90DVX2	500	40	150X4,0	20	20
150X5,0 90DVX2	300	40	150X5,0	22	22
200X1,5 90DVX2	2100	40	200X1,5	17	15
200X2,0 90DVX2	1200	40	200X2,0	17	15
200X3,0 90DVX2	600	40	200X3,0	18	18
200X4,0 90DVX2	500	40	200X4,0	20	20
200X6,0 90DVX2	250	40	200X6,0	22	22
250X1,5 90DVX2	1800	40	250X1,5	17	15
250X2,0 90DVX2	1200	40	250X2,0	17	15
250X3,0 90DVX2	700	40	250X3,0	18	18
250X4,0 90DVX2	400	40	250X4,0	20	20
300X2,0 90DVX2	1000	40	300X2,0	17	15
300X3,0 90DVX2	600	40	300X3,0	18	18
300X4,0 90DVX2	400	40	300X4,0	20	20
300X6,0 90DVX2	250	30	300X6,0	22	22
350X1,5 90DVX2	1800	30	350X1,5	17	15
350X2,0 90DVX2	1400	30	350X2,0	17	15
350X3,0 90DVX2	800	30	350X3,0	18	18
350X4,0 90DVX2	400	30	350X4,0	20	20
400X2,0 90DVX2	1200	30	400X2,0	17	15
400X3,0 90DVX2	600	30	400X3,0	18	18
400X4,0 90DVX2	400	30	400X4,0	20	20
450X2,0 90DVX2	1500	30	450X2,0	17	15
450X3,0 90DVX2	800	30	450X3,0	18	18
500X1,5 90DVX2	2000	30	500X1,5	17	15
500X2,0 90DVX2	1200	30	500X2,0	17	15
500X3,0 90DVX2	600	30	500X3,0	18	18
500X4,0 90DVX2	400	30	500X4,0	20	20
550X2,0 90DVX2	1500	20	550X2,0	17	15
550X3,0 90DVX2	900	20	550X3,0	18	18
600X1,5 90DVX2	2000	20	600X1,5	17	15
600X2,0 90DVX2	1500	20	600X2,0	17	15
600X3,0 90DVX2	800	20	600X3,0	18	18
600X4,0 90DVX2	400	20	600X4,0	20	20
600X5,0 90DVX2	250	20	600X5,0	22	22
700X1,5 90DVX2	2100	20	700X1,5	17	15

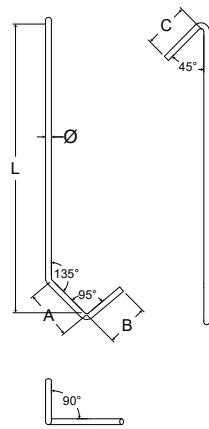




STANDARD HOOKS, 90DVx2

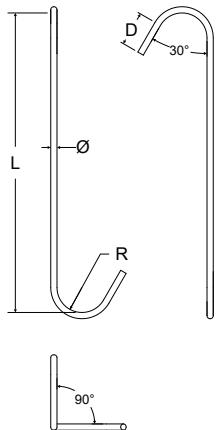
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm
700X2,0 90DVX2	1500	20	700X2,0	17	15
700X3,0 90DVX2	800	20	700X3,0	18	18
700X4,0 90DVX2	500	20	700X4,0	20	20
700X5,0 90DVX2	300	20	700X5,0	22	22
800X2,0 90DVX2	1200	20	800X2,0	17	15
800X3,0 90DVX2	800	20	800X3,0	18	18
800X4,0 90DVX2	450	20	800X4,0	20	20
900X2,0 90DVX2	2000	10	900X2,0	17	15
900X3,0 90DVX2	1000	10	900X3,0	18	18
900X4,0 90DVX2	600	10	900X4,0	20	20
900X5,0 90DVX2	350	10	900X5,0	22	22
1000X2,0 90DVX2	1600	10	1000X2,0	17	15
1000X3,0 90DVX2	900	10	1000X3,0	18	18
1000X4,0 90DVX2	500	10	1000X4,0	20	20

STANDARD HOOKS, 90DV



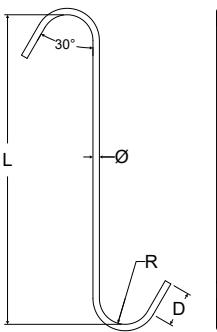
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm	C, mm
250X1,5 90DV	2100	40	250X1,5	17	15	17
250X3,0 90DV	700	40	250X3,0	18	18	18
350X2,0 90DV	1500	30	350X2,0	17	15	17
350X3,0 90DV	900	30	350X3,0	18	18	18
400X2,0 90DV	1400	30	400X2,0	17	15	17
400X3,0 90DV	800	30	400X3,0	18	18	18
400X4,0 90DV	500	30	400X4,0	20	20	19
450X1,5 90DV	2400	30	450X1,5	17	15	17
450X2,0 90DV	1400	30	450X2,0	17	15	17
450X3,0 90DV	900	30	450X3,0	18	18	18
500X1,5 90DV	2100	30	500X1,5	17	15	17
500X2,0 90DV	1400	30	500X2,0	17	15	17
500X3,0 90DV	800	30	500X3,0	18	18	18
550X1,5 90DV	2700	20	550X1,5	17	15	17
550X2,0 90DV	1600	20	550X2,0	17	15	17
550X3,0 90DV	1000	20	550X3,0	18	18	18
600X2,0 90DV	1600	20	600X2,0	17	15	17
600X3,0 90DV	800	20	600X3,0	18	18	18
600X4,0 90DV	600	20	600X4,0	20	20	19
700X2,0 90DV	1800	20	700X2,0	17	15	17
700X3,0 90DV	800	20	700X3,0	18	18	18
700X4,0 90DV	600	20	700X4,0	20	20	19
800X2,0 90DV	1600	20	800X2,0	17	15	17
800X3,0 90DV	800	20	800X3,0	18	18	18
900X2,0 90DV	1600	10	900X2,0	17	15	17

STANDARD HOOKS, 90Rx2



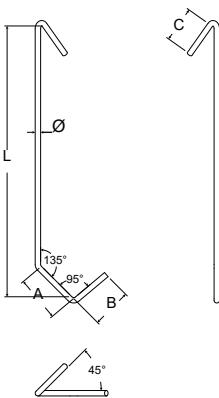
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	R, mm	D, mm
060X1,5 90RX2	3000	40	060X1,5	8	11
060X2,0 90RX2	2500	40	060X2,0	8	11
075X1,5 90RX2	4000	30	075X1,5	8	11
075X2,0 90RX2	2500	30	075X2,0	8	11
075X3,0 90RX2	1000	40	075X3,0	11	15
100X2,0 90RX2	2000	30	100X2,0	8	11
100X3,0 90RX2	1000	30	100X3,0	11	15
150X2,0 90RX2	800	40	150X2,0	8	11
150X3,0 90RX2	500	40	150X3,0	11	15
200X2,0 90RX2	1000	40	200X2,0	8	11
200X3,0 90RX2	500	40	200X3,0	11	15
300X3,0 90RX2	400	40	300X3,0	11	15
400X3,0 90RX2	500	30	400X3,0	11	15
600X3,0 90RX2	600	20	600X3,0	11	15

STANDARD HOOKS, 180Rx2



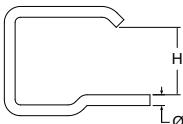
Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	R, mm	D, mm
075X1,5 180RX2	3000	40	075X1,5	8	11
075X2,0 180RX2	3000	30	075X2,0	8	11
075X3,0 180RX2	1400	40	075X3,0	11	15
100X2,0 180RX2	2500	30	100X2,0	8	11
100X3,0 180RX2	1000	30	100X3,0	11	15
100X4,0 180RX2	750	40	100X4,0	11	16
150X2,0 180RX2	1000	40	150X2,0	8	11
150X3,0 180RX2	1000	30	150X3,0	11	15
200X4,0 180RX2	400	40	200X4,0	11	16
300X4,0 180RX2	300	40	300X4,0	11	16

STANDARD HOOKS, 45DV

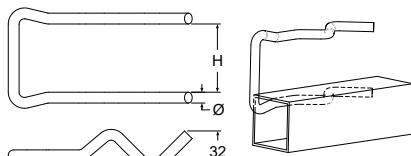


Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm	C, mm
075X2,0 45DV	3000	40	075X2,0	17	15	17
500X4,0 45DV	400	30	500X4,0	20	20	19
800X4,0 45DV	450	20	800X4,0	20	20	19

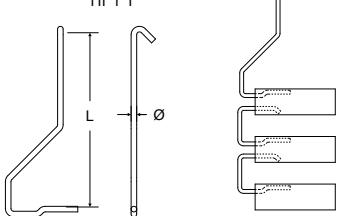
HPY A



HPY B



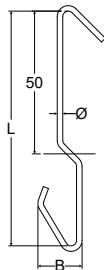
HPY T



PIPE HOOKS

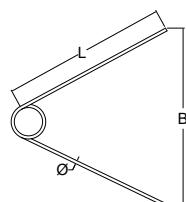
Prod No.	Qty per box	H, mm	L, mm	Ø, mm
HPY A 50X5,0	250	50		5,0
HPY A 50X8,0	150	50		8,0
HPY A 100X5,0	300	100		5,0
HPY A 100X8,0	150	100		8,0
HPY A 100X12,0	75	100		12,0
HPY B 50X8,0	150	50		8,0
HPY B 100X8,0	100	100		8,0
HPY T 250X8,0 90	50		250	8,0
HPY T 250X12,0 90	25		250	12,0

- » Horizontal pipe hanging
- » HPY B stabilize the product from turning
- » Air gap at hole rim to minimize hanging marks



Prod No.	Qty per box	B, mm	L, mm	Ø, mm
ROB 50X2,0 D15	2500	16	84	2,0
ROB 50X2,0 D20	2000	21	89	2,0
ROB 50X2,0 D25	2000	27	94	2,0
ROB 50X2,5 D30	1200	32	99	2,5
ROB 50X2,5 D35	1000	38	109	2,5
ROB 50X3,0 D40	1000	45	119	3,0
ROB 50X3,0 D50	650	55	129	3,0

- » Spring wire hooks with clamp function for vertical pipe hanging
- » Perfect to use with i.e. H11B
- » Air gap at hole rim to minimize hanging marks

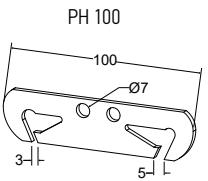


Prod No.	Qty per box	Ø, mm	B, mm	L, mm
RO 100	1000	1	45	40
RO 200	500	2	100	90
RO 300	250	3	80	90

- » Multi purpose clamp hook
- » Flexible for a range of cavity sizes

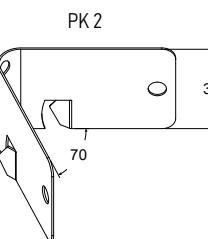
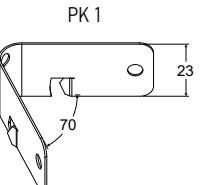
hang
On

SHEET CLAMP HOOKS



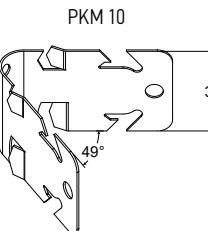
Prod No.	Qty per box	Min-max, mm
PH 100	250	1,0-4,0

- » For sheet metal products without holes for hanging
- » Locks the product with its own weight
- » Creates a minimum of hanging marks



Prod No.	Qty per box	Min-max, mm
PK 1	250	0,5-2,0
PK 2	250	1,0-2,5

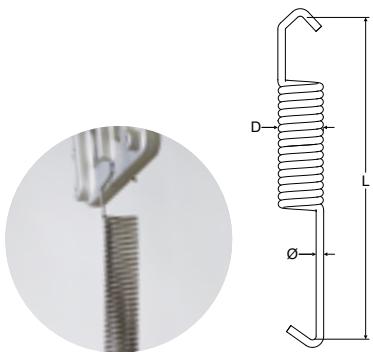
- » Clamp sheet metal object with spring effect
- » Made from stainless steel



Prod No.	Qty per box	Min-max, mm
PKM 10	250	1,0-4,0

- » Multi clamp hook for sheet metal
- » Clamp either with spring effect or own weight
- » Two thickness positions
- » Made from stainless steel

PULL SPRING HOOKS

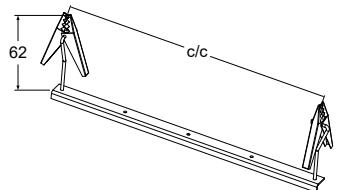


Prod No.	Qty per box	L, mm	Ø, mm	D, mm
PS 050X1,0 D16	200	50	1,0	16
PS 135X1,0 D16	100	135	1,0	16
PS 135X1,5 D24	100	135	1,5	24
PS 250X1,0 D16	100	250	1,0	16
PS 250X1,5 D24	100	250	1,5	24

» Keeps the products in place!

» Suitable for e-coating

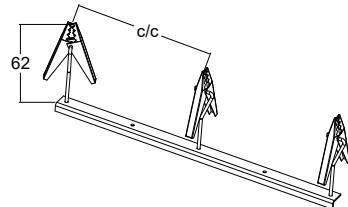
AC 2



ALLIGATOR CLAMPS

Prod No.	Qty per box	Clamps	c/c, mm
AC 2-133	100	2	133
AC 2-200	100	2	200
AC 3-67	100	3	67
AC 3-100	100	3	100
ACW 2-100	100	2	100
ACW 2-133	100	2	133
ACW 2-200	100	2	200

AC 3

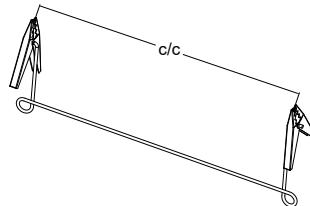


» Specialized for vertical aluminium profile hanging

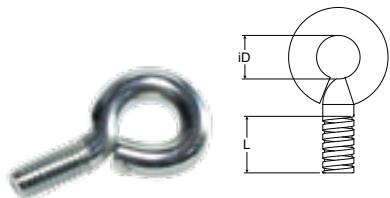
» Keep aluminium profiles apart

» Rotating feature (AC 2/AC 3)

ACW 2



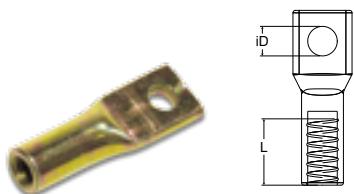
EYEBOLTS



Prod No.	Qty per box	Fits to thread	L, mm	iD, mm
MS 03	500	M3	10	5
MS 04	400	M4	10	6
MS 05	200	M5	10	8
MS 06	100	M6	10	10
MS 08	100	M8	15	12
MS 10	100	M10	20	14
MS 12	25	M12	20	16

- » For hanging in threaded holes
- » Combined hanging and masking

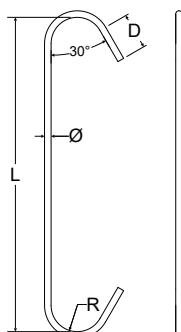
SCREW CAPS



Prod No.	Qty per box	Fits to thread	L, mm	iD, mm
MT 03	500	M3	5	3
MT 04	400	M4	8	3
MT 05	200	M5	13	4
MT 06	100	M6	15	5
MT 08	50	M8	15	6
MT 10	25	M10	20	8
MT 12	25	M12	25	10
MT 14	25	M14	25	12
MT 16	25	M16	25	14
MT 18	25	M18	25	16
MT 20	25	M20	25	18

- » For hanging on threaded bolts
- » Combined hanging and masking

COPPER STANDARD HOOKS



Prod No.	Qty per box	L x Ø mm	R, mm	D, mm
CU050X2,0 PRX2	2000	050X2,0	8	11
CU075X2,0 PRX2	1300	075X2,0	8	11
CU075X3,0 PRX2	500	075X3,0	11	15
CU100X2,0 PRX2	800	100X2,0	8	11
CU100X3,0 PRX2	400	100X3,0	11	15
CU150X2,0 PRX2	700	150X2,0	8	11
CU150X3,0 PRX2	300	150X3,0	11	15

- » For galvanic process
- » Pure copper hooks
- » On stock
- » For actual price, please ask for a quotation!



SMART EXAMPLE / CUSTOMIZED HOOKS



Custom hooks made in state of the art CNC 3D wire forming machines, ranging from 20-2500 mm and dimensions 0,6-16 mm



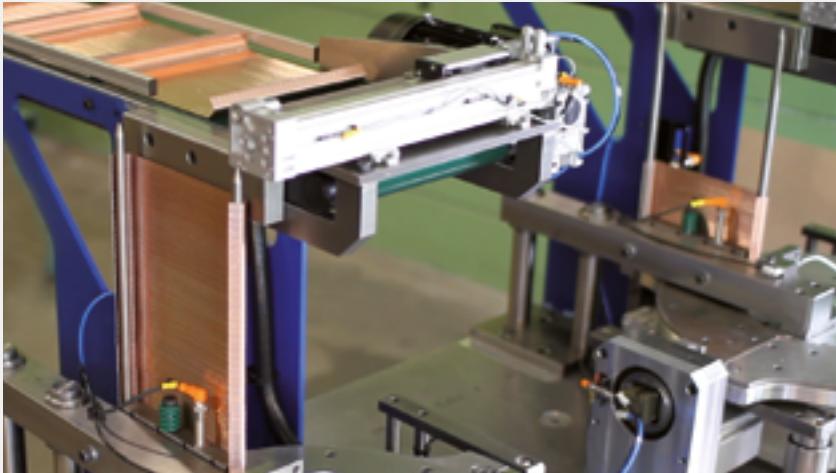
Strong hook with triple-bending



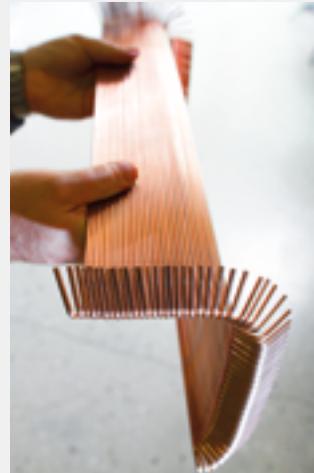
Pipe hook - no hanging marks



SMART EXAMPLE / CUSTOMIZED HOOKS



Custom robot hook dispenser for automatic hanging

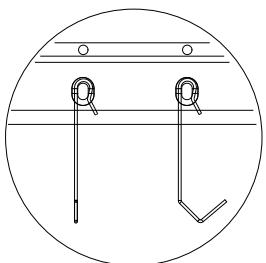


Custom robot hooks F500x3.0

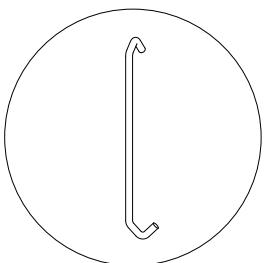
NON STOCKED ITEMS, HOOKS

Here we show some old products which have been replaced by updated and improved products. Sometimes the old ones are preferable and therefore they are still available to order. Some of them are even available as stock items.

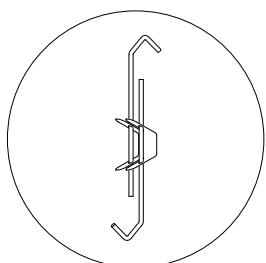
See www.hangon.com for more sizes and/or ask for a quotation.



Locking hooks - PDV+L / 90DV+L

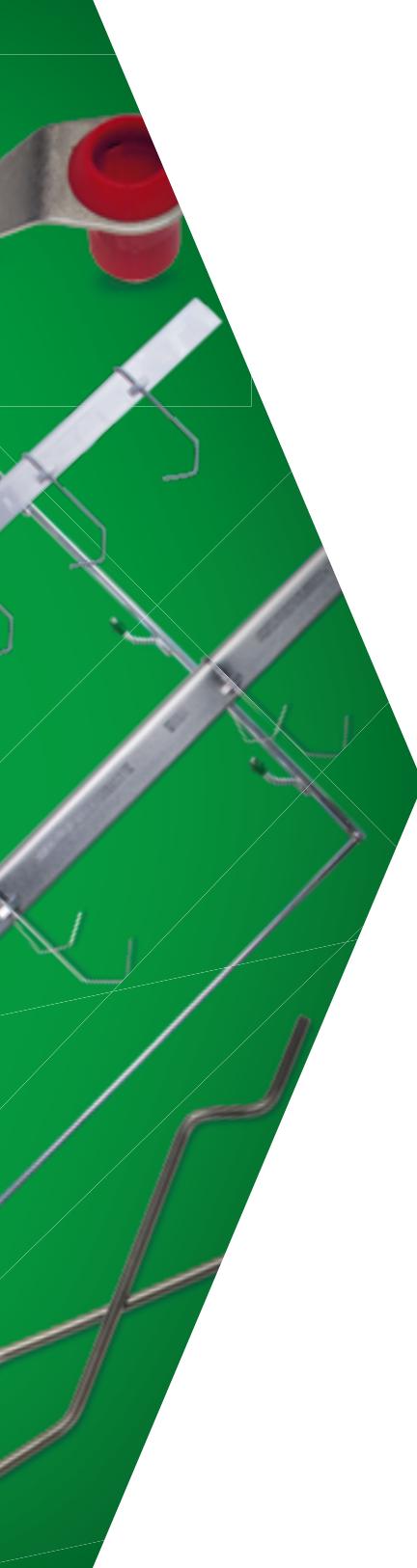


Hooks - 90DVx2 M



Flexhook - FH





HANGING SYSTEMS

50	OVERVIEW	QUICK HANGING SYSTEM
52	OVERVIEW	FLEXIBLE HANGING SYSTEM
54	HQS	HANGON QUICK SHAFTS
58	HQL	HANGON QUICK LEVELS
60	HQC	HANGON QUICK CENTRE LEVELS
62	HQW D	HANGON QUICK WIRE SHAFTS
64	HCF / HCS / H2B	FRAMES / FRAME SIDES / FLEXI-FRAME
66	HCS BH / HCS BHL	BH SHAFTS R65 / BHL SHAFTS R66 / BH SHAFTS R58
68	HCL BHL	LEVELS BHL
69	BHL	MASKINGS / HOOK & ARROW INSERTS
70	BHL / GHA & GHH	YOKES / WIRE ARROWS / MASKING INSERTS
73	BH	MASKINGS / HOOK/PROFILE/YOKE & ARROW INSERTS
76	BH	ARROWS / WIRE HANGING LEVELS
77	HCL / H11B T	E-COATING SOLUTIONS
78	H1B / H11B	SUSPENSION BEAMS
79	H1B / H11B / HTW	ADAPTER / SHAFT BEAMS / TWIN HOOKS
80	HKP / H1BM / H2B-H3B	SUPPORT BRACKETS / CLAMPS / SUSPENSION BEAMS
82	MH	MAGNET HOLDER SYSTEM 2/3/4/5/6
86		HANGER COMPONENTS
89		NON STOCKED ITEMS, HANGING SYSTEM

QUICK

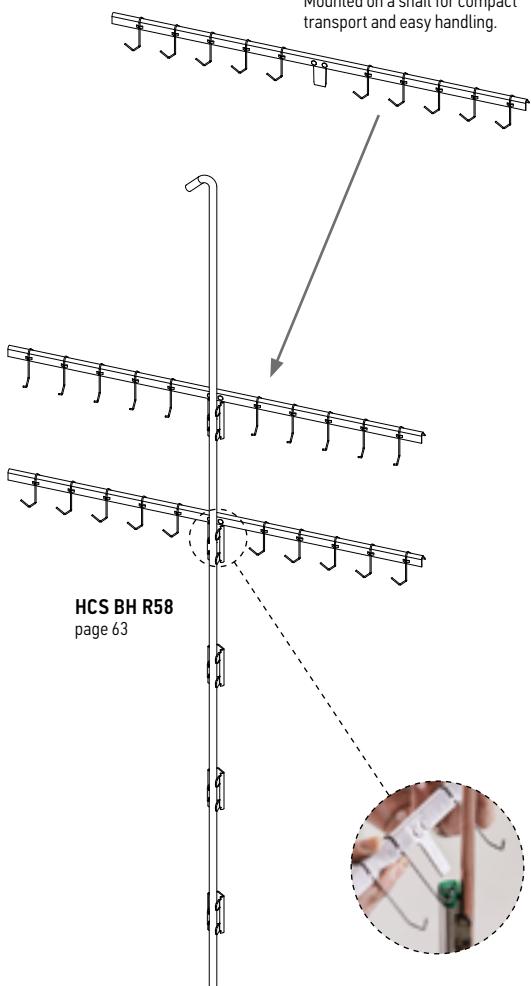
HANGING SYSTEM OVERVIEW

Our quick family consists of three products – HQC, HQL and HQS. All enable high line utilization and great hanging properties. Simple and easy to use which minimize handling time.



HQC (page 60)

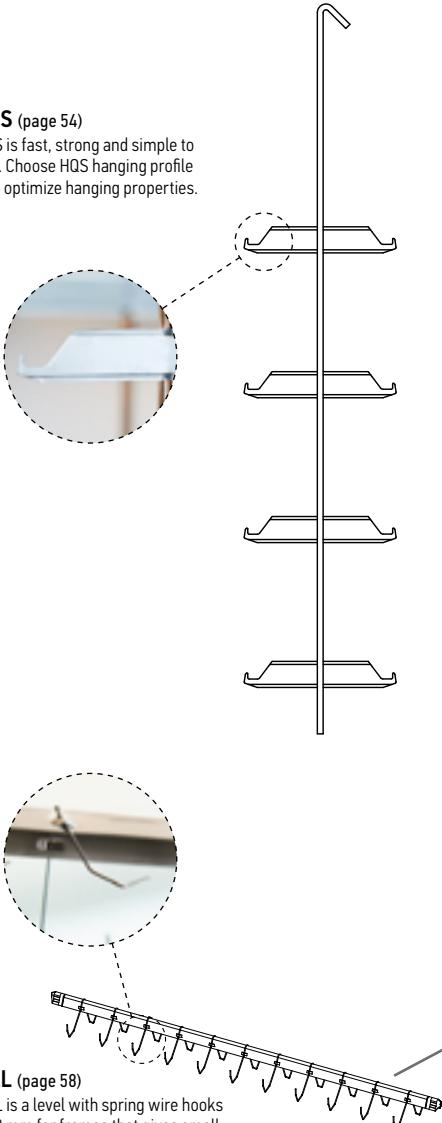
HQC is a level with spring wire hooks Ø1,5 mm for heavy loads and quick renewal of hangers.
Mounted on a shaft for compact transport and easy handling.



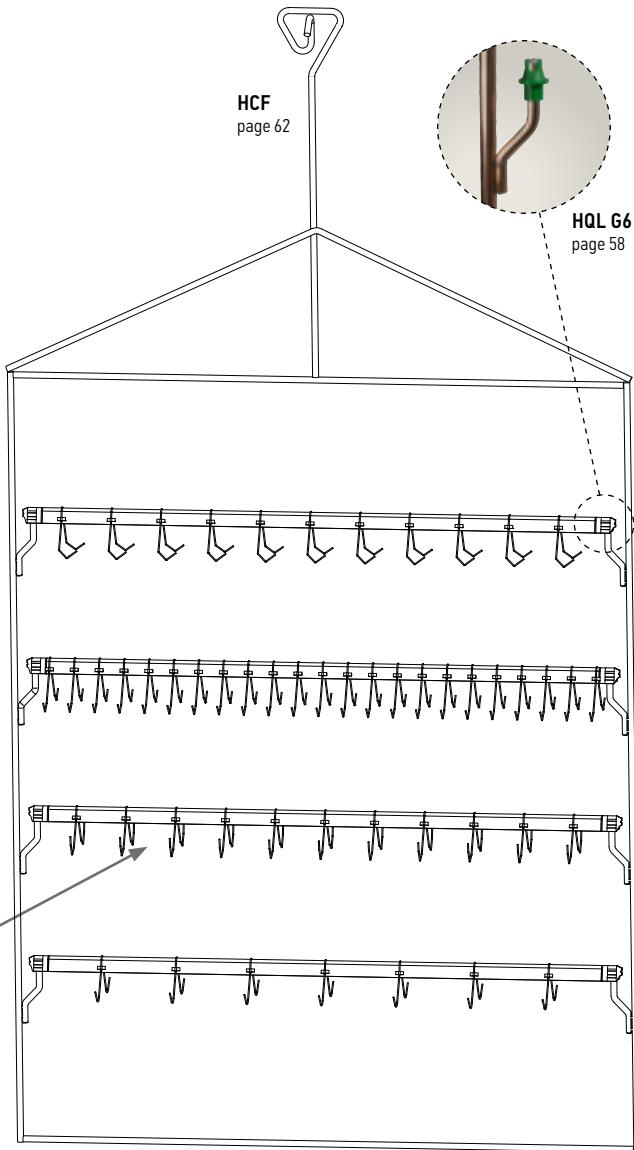
HCS BH R58
page 63

HQS (page 54)

HQS is fast, strong and simple to use. Choose HQS hanging profile that optimizes hanging properties.

**HQL** (page 58)

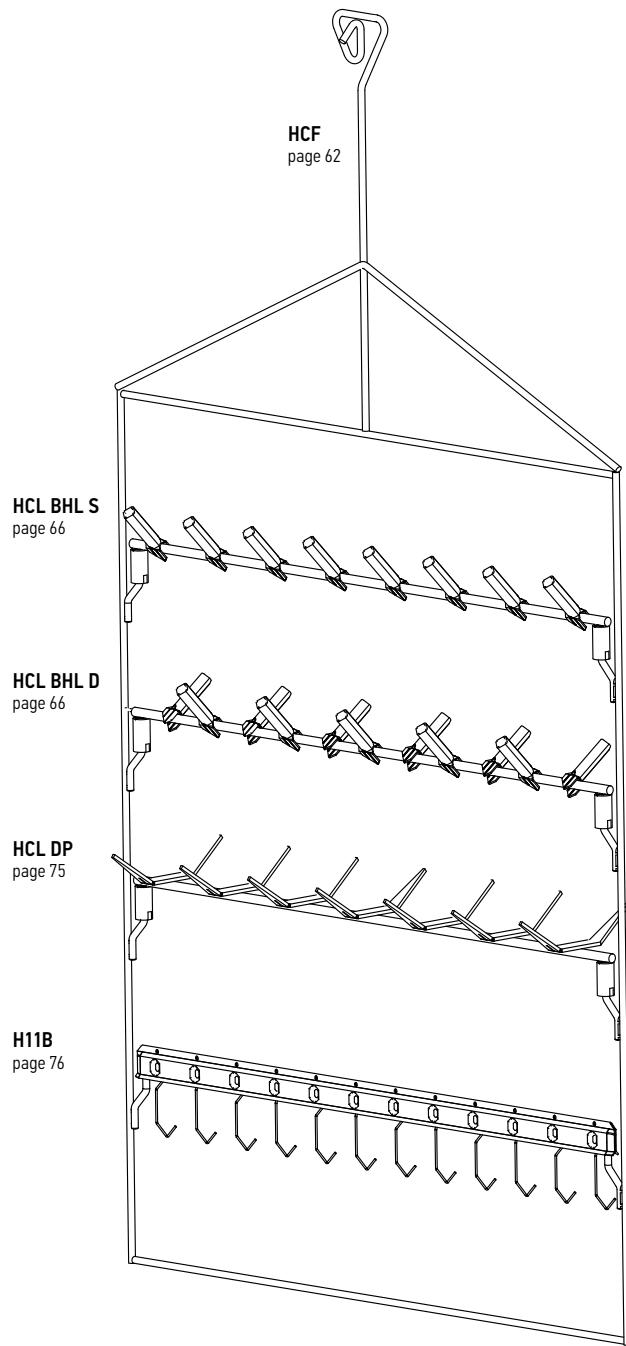
HQL is a level with spring wire hooks Ø1,0 mm for frames that give small hanging marks. Strong, stable and easy to use.

HCF
page 62**HQL G6**
page 58

FLEXIBLE

HANGING SYSTEM OVERVIEW

Hanging system based on components which makes them very flexible and enables you to maximize line utilization. Consist of socket system BH and BHL, beams and e-coating solutions.





BHL INSERTS



BHL G10
Page 67



BHL P D
Page 67



BHL P PS
Page 67



BHL P P
Page 67



GHH
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GHA
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MH 6
Page 82



BHL WA
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BHL Y
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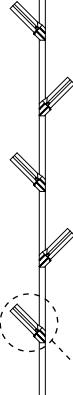


BHL U
Page 68



BHL S
Page 68

BH and BHL sockets offer flexible use of cost efficient hooks, arrows and other inserts. The socket offer protected and safe grounding for repeated use.



BH INSERTS



BH G20
Page 71



BH P D
Page 73



BH P S
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BH Y
Page 73



BH S
Page 72



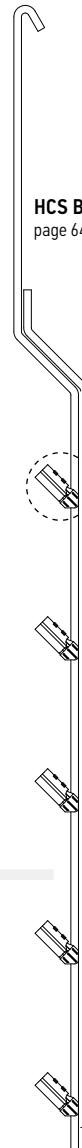
BH S
Page 71



BH EC
Page 75



BHL P D
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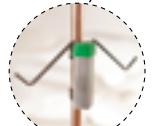
HCS BH
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MH 6
page 82

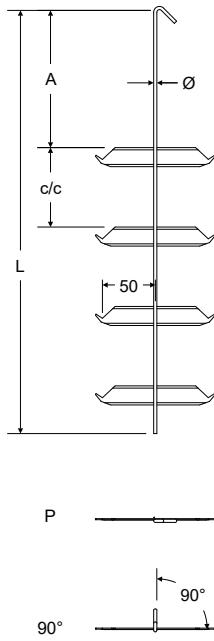


HCS BH R58
page 63



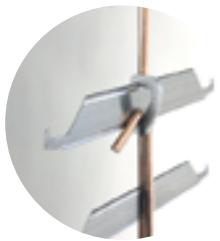
BH D DV
page 71

HQS - HANGON QUICK SHAFTS



Prod No.	Qty per box	No. of hanging points	L mm	A mm	c/c mm	Ø mm	Angle	Form
HQS 800X100X4 PA	90	8	800	450	100	4		A
HQS 800X100X4 90A	90	8	800	450	100	4	90°	A
HQS 800X200X4 PA	90	6	800	350	200	4		A
HQS 800X200X4 90A	90	6	800	350	200	4	90°	A
HQS 1000X100X4 PA	90	10	1000	550	100	4		A
HQS 1000X100X4 90A	90	10	1000	550	100	4	90°	A
HQS 1000X200X4 PA	90	6	1000	550	200	4		A
HQS 1000X200X4 90A	90	6	1000	550	200	4	90°	A
HQS 1200X100X4 PA	90	14	1200	550	100	4		A
HQS 1200X100X4 90A	90	14	1200	550	100	4	90°	A
HQS 1200X200X4 PA	90	8	1200	550	200	4		A
HQS 1200X200X4 90A	90	8	1200	550	200	4	90°	A
HQS 1200X100X4 PAS	150	7	1200	550	100	4		A
HQS 1200X100X4 90AS	150	7	1200	550	100	4	90°	A
HQS 1200X100X4 PC	80	14	1200	550	100	4	C	
HQS 1200X100X4 90C	80	14	1200	550	100	4	90°	C
HQS 1200X100X4 PD	90	14	1200	550	100	4	D	
HQS 1200X100X4 90D	90	14	1200	550	100	4	90°	D
HQS 1200X100X4 PE	80	14	1200	550	100	4	E	
HQS 1200X100X4 90E	80	14	1200	550	100	4	90°	E
HQS 1200X100X4 PF	90	14	1200	550	100	4	F	
HQS 1200X100X4 90F	90	14	1200	550	100	4	90°	F
HQS 1200X100X4 PG	80	14	1200	550	100	4	G	
HQS 1200X100X4 90G	80	14	1200	550	100	4	90°	G
HQS 1200X100X4 PH	90	14	1200	550	100	4	H	
HQS 1200X100X4 90H	90	14	1200	550	100	4	90°	H
HQS 1200X100X4 PI	90	14	1200	550	100	4	I	
HQS 1200X100X4 90I	90	14	1200	550	100	4	90°	I
HQS 1200X100X4 PJ	90	14	1200	550	100	4	J	
HQS 1200X100X4 90J	90	14	1200	550	100	4	90°	J
HQS 1200X100X4 PL	90	14	1200	550	100	4	L	
HQS 1200X100X4 90L	90	14	1200	550	100	4	90°	L
HQS 1200X100X4 PM	90	14	1200	550	100	4	M	
HQS 1200X100X4 90M	90	14	1200	550	100	4	90°	M
HQS 1200X100X4 PN	90	14	1200	550	100	4	N	
HQS 1200X100X4 90N	90	14	1200	550	100	4	90°	N
HQS 1200X100X4 PO	90	14	1200	550	100	4	O	
HQS 1200X100X4 90O	90	14	1200	550	100	4	90°	O
HQS 1200X100X4 PP	90	14	1200	550	100	4	P	
HQS 1200X100X4 90P	90	14	1200	550	100	4	90°	P

- » Fast, 3 times faster than chain hanging
- » Simple, quick start up
- » Strong, max load up to 30 kg/hanging point or 100 kg per HQS shaft
- » Small hanging marks

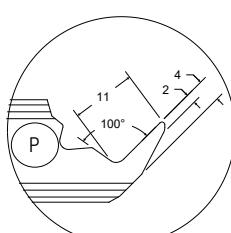
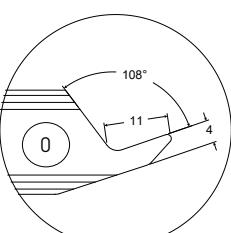
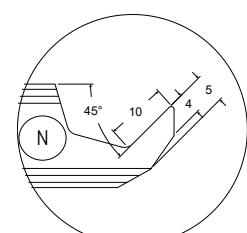
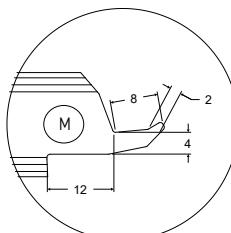
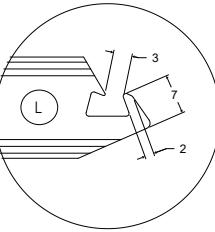
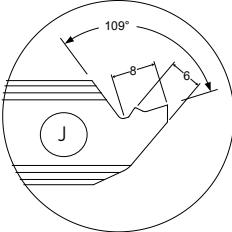
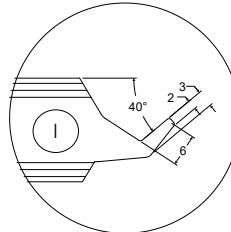
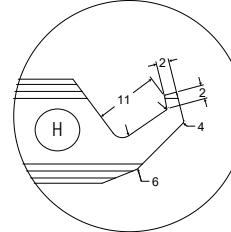
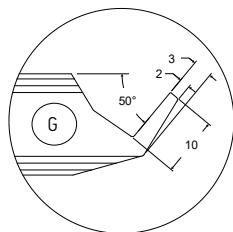
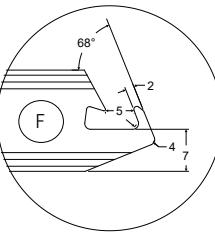
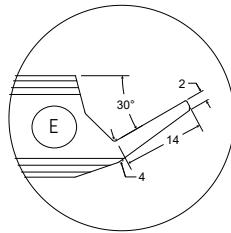
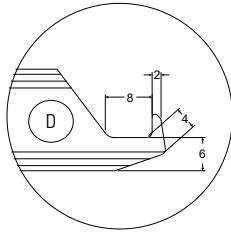
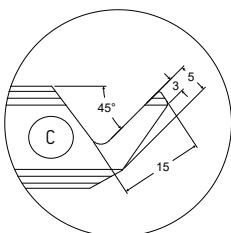
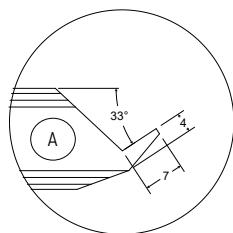


**Prod No.
HQS EXT**

Qty per box
100

\varnothing , mm
2

- » Extend HQS shafts
- » Operates with all HQS arrows





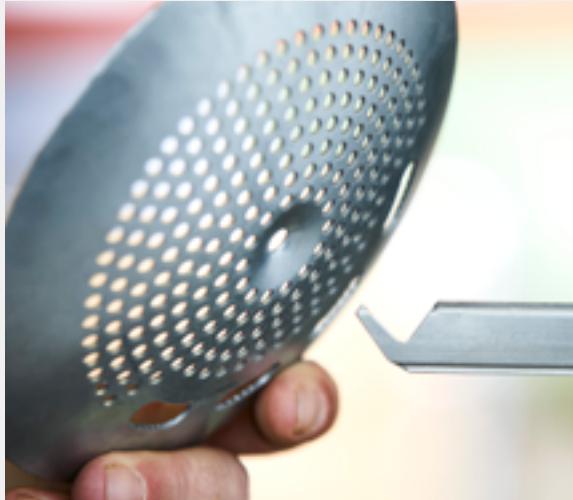
SMART EXAMPLE / HQS



HQS offers high hanging density using height and depth.



Profile hanging has never been more simple.
There are a lots of HQS hanging profiles to choose from.



HQS profiles are a good way to achieve stability in objects that are difficult to hang.



HQS – efficient hanging of small items. Getting started is easy and quick.



SMART EXAMPLE / HQL



HQL with TRV end form for more secure hanging



Single sided HQL with customized hook form and distance



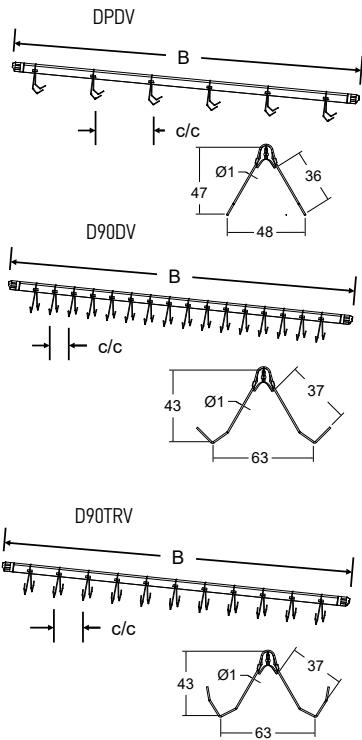
Custom HQL with long legs



HQL with double hanging points to stabilize object

HQL - HANGON QUICK LEVELS

 Design Patent



Prod No.	Qty per box	B, mm	c/c, mm	Angle	No. of hanging points
HQL 700X50 DPDV	60	700	50	90°	26
HQL 700X50 D90DV	45	700	50	90°	26
HQL 700X100 DPDV	60	700	100	90°	12
HQL 700X100 D90DV	45	700	100	90°	12
HQL 800X33 D90DV	45	800	33	90°	46
HQL 800X50 DPDV	60	800	50	90°	30
HQL 800X50 D90DV	45	800	50	90°	30
HQL 800X75 D90DV	45	800	75	90°	20
HQL 800X100 DPDV	60	800	100	90°	14
HQL 800X100 D90DV	45	800	100	90°	14
HQL 1000X50 DPDV	60	1000	50	90°	38
HQL 1000X50 D90DV	45	1000	50	90°	38
HQL 1000X100 DPDV	60	1000	100	90°	18
HQL 1000X100 D90DV	45	1000	100	90°	18

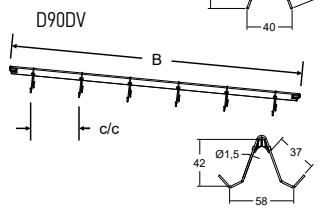
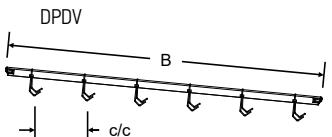
Prod No.	Qty per box	B, mm	c/c, mm	Angle	No. of hanging points
HQL 700X50 D90TRV	45	700	50	90°	26
HQL 800X50 D90TRV	45	800	50	90°	30

- » Save time – up to 30 times faster handling than single hooks
- » Small hanging marks
- » We also offer custom designs
- » Smart and user friendly packaging



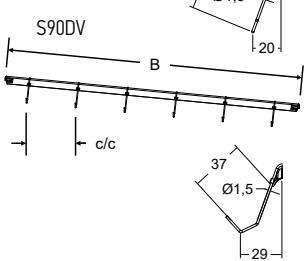
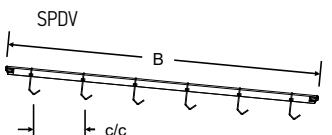
Prod No.	Qty per box	Colour
HQL G6	500	●





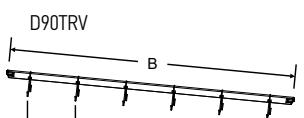
Prod No.	Qty per box	B, mm	c/c, mm	Angle	Ø, mm	No. of hanging points
HQL B800X50 DPDV	60	800	50		1,5	30
HQL B800X50 D90DV	45	800	50	90°	1,5	30
HQL B1000X50 DPDV	60	1000	50		1,5	38
HQL B1000X50 D90DV	45	1000	50	90°	1,5	38

» B DPDV/D90DV -double sided



Prod No.	Qty per box	B, mm	c/c, mm	Angle	Ø, mm	No. of hanging points
HQL B700X75 SPDV	65	700	75		1,5	9
HQL B700X75 S90DV	65	700	75	90°	1,5	9
HQL B700X100 SPDV	65	700	100		1,5	6
HQL B700X100 S90DV	65	700	100	90°	1,5	6
HQL B800X75 SPDV	65	800	75		1,5	10
HQL B800X75 S90DV	65	800	75	90°	1,5	10
HQL B800X100 SPDV	65	800	100		1,5	7
HQL B800X100 S90DV	65	800	100	90°	1,5	7

» B SPDV/S90DV - single sided

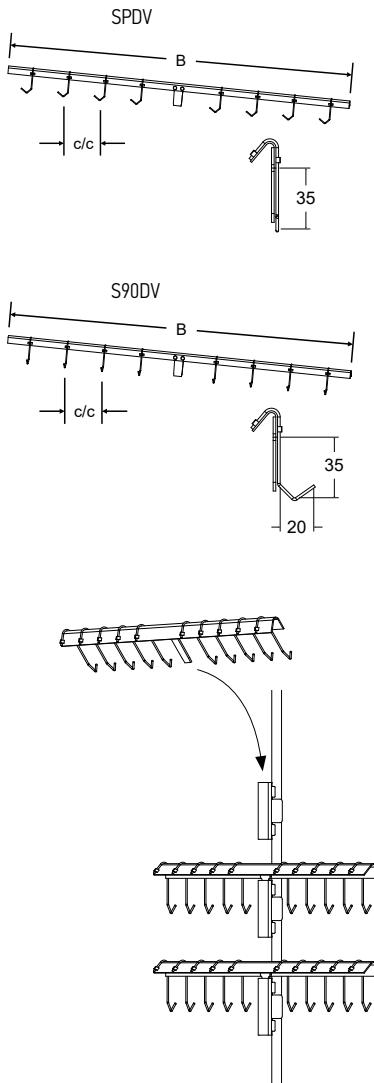


Prod No.	Qty per box	B, mm	c/c, mm	Angle	Ø, mm	No. of hanging points
HQL B800X50 D90TRV	45	800	50	90°	1,5	30
HQL B800X100 D90TRV	45	800	100	90°	1,5	14

» B D90TRV - double sided triple angle

HQC - HANGON QUICK CENTRE LEVELS

 Design Patent



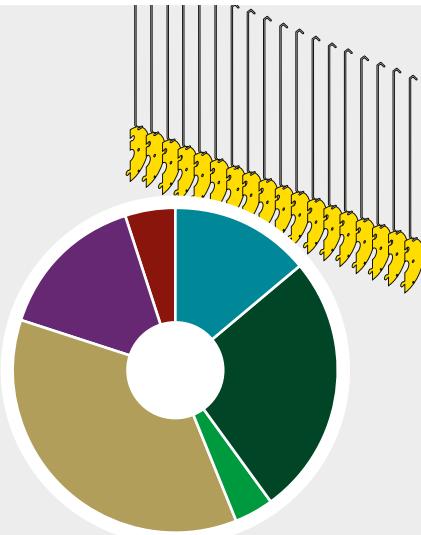
Prod No.	Qty per box	B mm	c/c mm	Angle	No of hanging points
HQC 490X50-8 SPDV	65	490	50		8
HQC 490X50-8 S90DV	65	490	50	90°	8
HQC 590X50-10 SPDV	65	590	50		10
HQC 590X50-10 S90DV	65	590	50	90°	10
HQC 690X50-12 SPDV	65	690	50		12
HQC 690X50-12 S90DV	65	690	50	90°	12
HQC 790X50-14 SPDV	65	790	50		14
HQC 790X50-14 S90DV	65	790	50	90°	14
HQC 990X50-18 SPDV	65	990	50		18
HQC 990X50-18 S90DV	65	990	50	90°	18
HQC 540X75-6 SPDV	65	540	75		6
HQC 540X75-6 S90DV	65	540	75	90°	6
HQC 690X75-8 SPDV	65	690	75		8
HQC 690X75-8 S90DV	65	690	75	90°	8
HQC 840X75-10 SPDV	65	840	75		10
HQC 840X75-10 S90DV	65	840	75	90°	10
HQC 990X75-12 SPDV	65	990	75		12
HQC 990X75-12 S90DV	65	990	75	90°	12
HQC 490X100-4 SPDV	65	490	100		4
HQC 490X100-4 S90DV	65	490	100	90°	4
HQC 690X100-6 SPDV	65	690	100		6
HQC 690X100-6 S90DV	65	690	100	90°	6
HQC 690X100-6 SPTRV	65	690	100		6
HQC 690X100-6 S90TRV	65	690	100	90°	6
HQC 890X100-8 SPDV	65	890	100		8
HQC 890X100-8 S90DV	65	890	100	90°	8

- » Save time – up to 30 times faster handling than single hooks
- » Quick change of HQC levels
- » Effective use of coating line, even with slopes
- » Strong
- » Minimal hanging marks
- » Compact transport and storage of hangers





SMART COST REDUCTION / STANDARD HOOK vs HQC



STANDARD HOOK

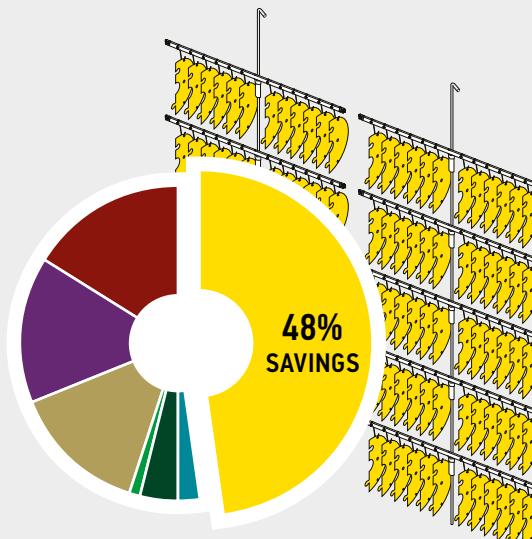
PROCESS PARAMETERS

Line speed	2 m/min
Hanging points per conveyor metre	14,8 item/m
Line cost powder coating	215 €/h
Hanger cost per hanging point	0,007 €/item
Powder cost	0,022 €/item
Off-line cost (prehanging/unloading)	



COATING COST

13 %	Fixed line cost	0,020 €/item
26 %	Energy	0,039 €/item
5 %	Variable line cost	0,008 €/item
36 %	Blue collar	0,054 €/item
15 %	Powder	0,022 €/item
5 %	Hanger cost per hanging point	0,007 €/item
100% TOTAL COATING COST		0,150 €/item



HQC

PROCESS PARAMETERS

Line speed	2 m/min
Hanging points per conveyor metre	86 item/m
Line cost powder coating	215 €/h
Hanger cost per hanging point	0,024 €/item
Powder cost	0,022 €/item
Off-line cost (prehanging/unloading)	0,011 €/item

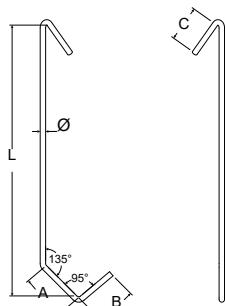
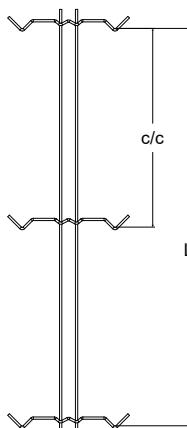


COATING COST

2 %	Fixed line cost	0,003 €/item
4 %	Energy	0,007 €/item
1 %	Variable line cost	0,001 €/item
14 %	Blue collar	0,020 €/item
15 %	Powder	0,023 €/item
16 %	Hanger cost per hanging point	0,024 €/item
52% TOTAL COATING COST		0,078 €/item
48% SAVINGS		0,072 €/item

www.hangon.com/en/calculation_HQC

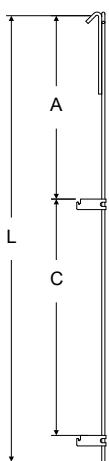
HQW D - HANGON QUICK WIRE SHAFTS



Prod No.	Qty per box	No. hanging points	L, mm	c/c, mm
HQW D350X350X2,0	180	4	350	350
HQW D350X175X2,0	180	6	350	175
HQW D450X450X2,0	180	4	450	450
HQW D450X225X2,0	180	6	450	225
HQW D450X150X2,0	180	8	450	150
HQW D450X75X2,0	180	14	450	75
HQW D450X50X2,0	180	20	450	50
HQW D550X550X2,0	180	4	550	550
HQW D550X275X2,0	180	6	550	275
HQW D525X175X2,0	180	8	525	175
HQW D500X100X2,0	180	12	500	100
HQW D525X75X2,0	180	16	525	75
HQW D550X50X2,0	180	24	550	50
HQW D650X325X2,0	180	6	650	325
HQW D625X125X2,0	180	12	625	125
HQW D600X75X2,0	180	18	600	75
HQW D650X50X2,0	180	28	650	50
HQW D750X375X2,0	180	6	750	375
HQW D750X250X2,0	180	8	750	250
HQW D750X150X2,0	180	12	750	150
HQW D750X125X2,0	180	14	750	125
HQW D750X75X2,0	180	22	750	75
HQW D750X50X2,0	180	32	750	50
HQW D950X475X2,0	180	6	950	475
HQW D900X225X2,0	180	10	900	225
HQW D900X150X2,0	180	14	900	150
HQW D900X100X2,0	180	20	900	100
HQW D950X50X2,0	180	40	950	50

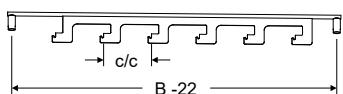
- » Quick, 3 times faster than daisy chain hanging
- » Efficient packing, easy start up
- » Low pricing
- » Easy handling and stable design
- » Flexible, can be used with hooks, shafts or frames
- » Standard program on stock makes HQW D very accessible

Prod No.	Qty per box	Qty boxes/pallet	L x Ø mm	A, mm	B, mm	C, mm
075X2,0 45DV	3000	40	075X2,0	17	15	17
500X4,0 45DV	500	30	500X4,0	20	20	19
800X4,0 45DV	450	20	800X4,0	20	20	19



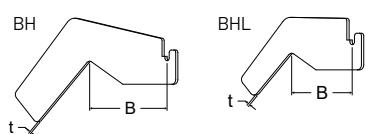
Prod No.	L, mm	A, mm	C, mm	Ø,mm
HCS HQW D 134894	1650	600	1000	6

- » Makes it possible to fill line with HQW D vertically
- » Shaft have double top hooks, plane & 90°



Prod No.	B, mm	Ø, mm	c/c, mm	No of hanging points
HCL HQW D 700X100	678	8	100	6

- » HQW D is possible to use with our flexible frame system



Prod No.	Qty per box	B, mm	t, mm
HQW D BH 40X1,5	100	40	1,5
HQW D BHL 30X1,5	100	30	1,5

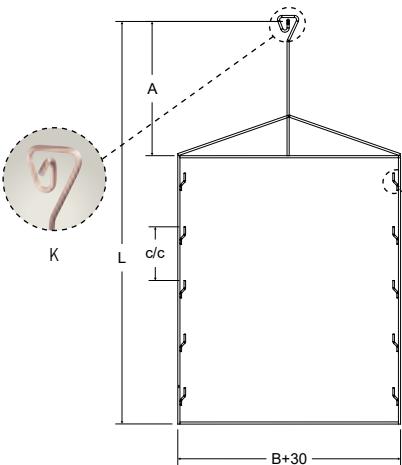
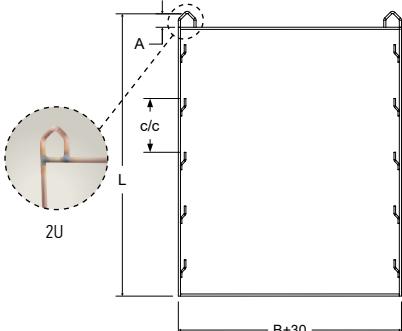
- » Inserts for both BH and BHL sockets that creates a link to use HQW D



Prod No.	Qty per box	Colour
HQW G20	150	Yellow

- » Protect grounding point and stabilize HQW D





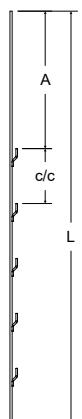
FRAMES

Prod No.	B, mm	L, mm	A, mm	c/c, mm	Ø, mm	Model
HCF 130067 M	700	1500	500	100	8	K
HCF 130081 M	700	1050	50	100	8	2U
HCF 130082 M	700	2000	500	150	8	K
HCF 130197 M	700	1550	50	150	8	2U
HCF 130405 M	700	2000	500	200	8	K
HCF 130406 M	700	1550	50	200	8	2U
HCF 19450 M	800	1500	500	100	8	K
HCF 21239 L	800	1500	500	200	10	K
HCF 25686 M	800	1050	50	100	8	2U
HCF 26240 M	800	1550	50	100	8	2U
HCF 29068 M	800	1550	50	200	8	2U
HCF 30454 M	800	2000	500	150	8	K



- » Frames for HCL, HQL or H11B
- » We also customize frames for optimal line utilization
- » Protect unused ears with cap GAQ M6X30

FRAME SIDES



Prod No.	L, mm	A, mm	c/c, mm
HCS EAR 1500X100	1500	500	100
HCS EAR 1500X150	1500	500	150
HCS EAR 1500X200	1500	600	200
HCS EAR 1500X300	1500	500	300
HCS EAR 2000X100	2000	500	100
HCS EAR 2000X150	2000	550	150
HCS EAR 2000X200	2000	500	200
HCS EAR 2000X300	2000	700	300

- » Frame sides to be used in pair
- » Can be used with HQL, H11B or HCL levels
- » Protect unused ears with cap GAQ M6X30

FLEXI-FRAME



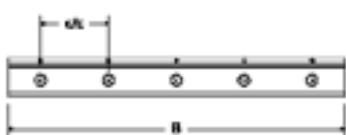
Prod No.	B, mm	A, mm	c/c, mm
H2B 800X100-500K90	800	500	100
H2B 900X100-500K90	900	500	100
H2B 1100X100-500K90	1100	500	100

- » Versatile H2B-top with anti-twist hook
- » For using with frame sides, hooks, HQS etc
- » Works in slopes
- » Note that appropriate levels always are 100 mm shorter than measure B
(for example H2B 900x100-500K90 fits HQL 800)



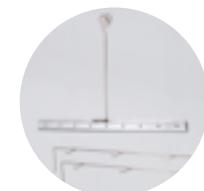
Prod No.	L, mm	A, mm	c/c, mm
HCF S1000X6X100	1000	82	100
HCF S1000X6X150	1000	82	150
HCF S1000X6X300	1000	82	300
HCF S1500X6X100	1500	82	100
HCF S1550X6X150	1550	82	150
HCF S2000X6X100	2000	82	100

- » To be used together with H2B-top, in pairs
- » Easy adaptable lengths and ear distances
- » Protect unused ears with GAQ M6x30

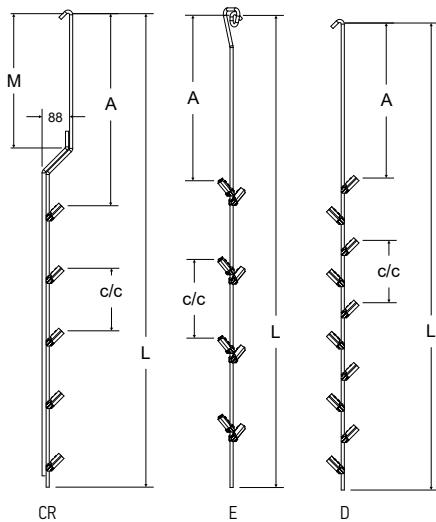


Prod No.	Qty per box	B, mm	c/c, mm	Hanging points
H2B 800X100 A	50	800	100	8
H2B 900X100 A	50	900	100	9
H2B 1100X100 A	50	1100	100	10

- » Open ends
- » Protected hanging points
- » Recommended maximum Ø 5,0 mm hooks



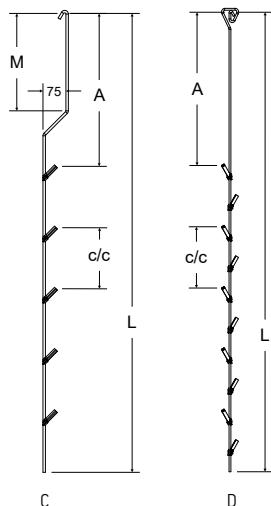
BH SHAFTS R65



Prod No.	L, mm	A, mm	M, mm	c/c, mm	Ø, mm	Model
HCS BH 10CR 41704	1500	500	317	150	10	CR
HCS BH 10CR 43552	1500	500	317	200	10	CR
HCS BH 10CR 41703	1500	500	317	250	10	CR
HCS BH 10E 35283	1530	615		250	10	E
HCS BH 10E 35286	1530	615		400	10	E
HCS BH 10D 41926	1500	500		150	10	D
HCS BH 12D 22087	1500	500		200	12	D
HCS BH 10D 41897	1500	500		250	10	D

- » Standard shaft with strong BH-sockets
- » We also customize shafts with sockets in any angle
- » For heavy duty, especially CR model (reinforced)
- » Very flexible together with all type of available inserts
- » Simple handling, transport and storage of hangers

BHL SHAFTS R66

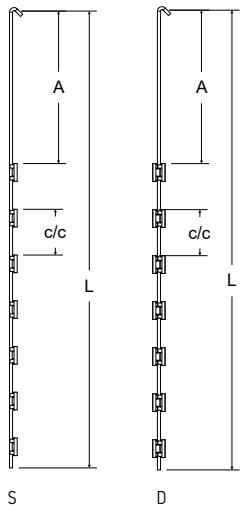


Prod No.	L, mm	A, mm	M, mm	c/c, mm	Ø, mm	Model
HCS BHL 8C 43190	1500	500	368	50	8	C
HCS BHL 8C 42024	1500	500	318	100	8	C
HCS BHL 8C 42023	1500	500	318	200	8	C
HCS BHL 8D 17281	1500	545		100	8	D
HCS BHL 8D 17497	1500	500		200	8	D

- » Light version of BH-shafts
- » We also customize shafts with sockets in any angle
- » Simple to handle and compact to store
- » Flexible system together with all available inserts

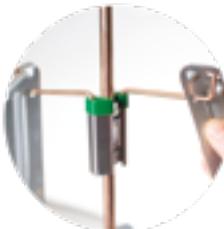
BH SHAFTS R58

 Design Patent

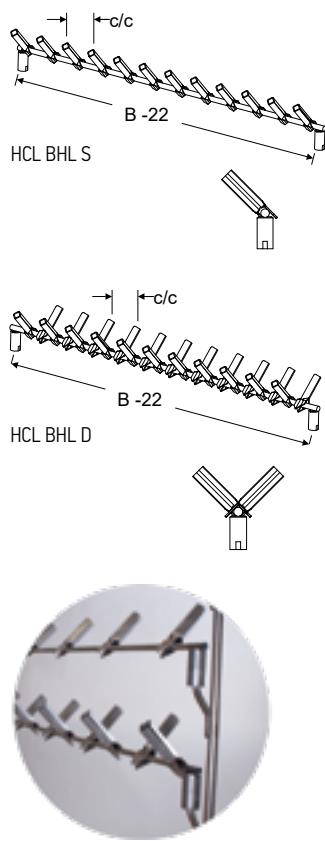


Prod No.	L, mm	A, mm	c/c, mm	Ø, mm	Angle	Model
HCS BH R58 31469	1500	500	100	10		S
HCS BH R58 31470	1500	500	100	10	90°	S
HCS BH R58 31826	1500	500	150	10		S
HCS BH R58 32277	1500	500	150	10	90°	S
HCS BH R58 32461	1500	500	200	10		S
HCS BH R58 33343	1500	500	200	10	90°	S
HCS BH R58 33346	1500	500	300	10		S
HCS BH R58 33469	1500	500	300	10	90°	S
HCS BH R58 33928	2000	500	100	10		S
HCS BH R58 34020	2000	500	100	10	90°	S
HCS BH R58 34028	2000	500	150	10		S
HCS BH R58 34731	2000	500	150	10	90°	S
HCS BH R58 34762	2000	500	200	10		S
HCS BH R58 35369	2000	500	200	10	90°	S
HCS BH R58 35370	2000	500	300	10		S
HCS BH R58 39359	2000	500	300	10	90°	S
HCS BH R58 42324	2000	500	100	10		D
HCS BH R58 42481	2000	500	100	10	90°	D

- » Standard sizes of shafts for HQC and other inserts
- » Strong design
- » Compact transport and storage of hangers

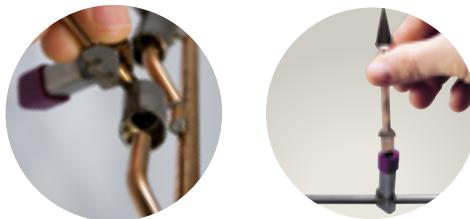


LEVELS / BHL



Prod No.	Qty per box	B, mm	Ø, mm	c/c, mm	Model	Qty of sockets
HCL BHL 12534	40	600	6	50	S	12
HCL BHL 23044	40	600	8	50	S	12
HCL BHL 12853	50	600	6	100	S	6
HCL BHL 23088	45	600	8	100	S	6
HCL BHL 12114	25	600	6	50	D	22
HCL BHL 23160	25	600	8	50	D	22
HCL BHL 12591	25	600	6	100	D	12
HCL BHL 23279	30	600	8	100	D	12
HCL BHL 12339	40	700	6	50	S	14
HCL BHL 23298	30	700	8	50	D	26
HCL BHL 11780	50	700	6	100	S	7
HCL BHL 21070	45	700	8	100	S	7
HCL BHL 12046	25	700	6	50	D	26
HCL BHL 20458	40	700	8	50	S	14
HCL BHL 11534	25	700	6	100	D	14
HCL BHL 21298	30	700	8	100	D	14
HCL BHL 11978	40	800	6	50	S	16
HCL BHL 21939	40	800	8	50	S	16
HCL BHL 12061	50	800	6	100	S	8
HCL BHL 22519	45	800	8	100	S	8
HCL BHL 12062	25	800	6	50	D	30
HCL BHL 22273	25	800	8	50	D	30
HCL BHL 17797	25	800	6	100	D	16
HCL BHL 22531	30	800	8	100	D	16
HCL BHL 22623	40	1000	8	50	S	20
HCL BHL 22823	45	1000	8	100	S	10
HCL BHL 22726	25	1000	8	50	D	38
HCL BHL 23115	30	1000	8	100	D	20
HCL BHL 25112	40	1200	8	50	S	24
HCL BHL 25671	45	1200	8	100	S	12
HCL BHL 26085	25	1200	8	50	D	46
HCL BHL 26499	30	1200	8	100	D	24

- » Socket gives optimal grounding
- » Standard widths
- » We also make special designed levels



MASKINGS FOR SOCKET / BHL



BHL G10



BHL G10 X

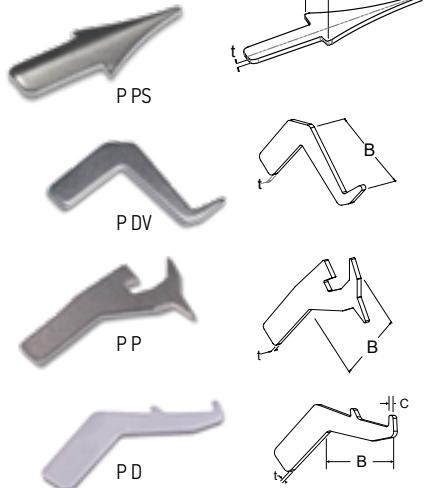
Prod No.	Qty per box	Colour
BHL G10	500	●
BHL G10 X	500	●

» Cap for protecting contact point in BHL socket



Design Patent

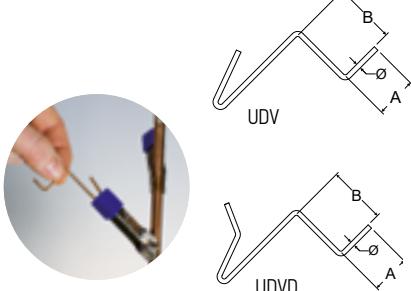
ARROW INSERTS / BHL



Prod No.	Qty per box	B, mm	C, mm	t, mm
BHL P16X1,25 PS	1000	16		1,25
BHL P16X2,0 PS	1000	16		2,0
BHL P22X1,25 PS	1000	22		1,25
BHL P22X2,0 PS	1000	22		2,0
BHL P30X2,0 DV	1000	30		2,0
BHL P33X2,0 P	1000	33		2,0
BHL P27X2,0 D	1000	27	1,7	2,0

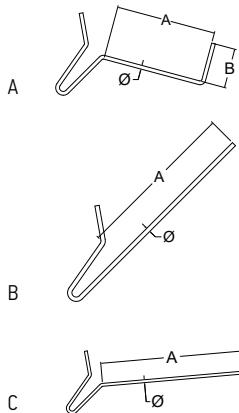
» Can be used for many different applications
 » Especially smart for different aluminium profiles
 » Strong and leave small hanging marks

HOOK INSERTS -UDV, -UDVD / BHL



Prod No.	Qty per box	A, mm	B, mm	Ø, mm
BHL S20X1,5 UDV	4000	13	20	1,5
BHL S20X2,0 UDV	4000	13	20	2,0
BHL S35X1,5 UDV	4000	13	35	1,5
BHL S35X2,0 UDV	4000	11	35	2,0
BHL S20X2,0 UDVD	2500	15	20	2,0
BHL S35X2,0 UDVD	2000	18	35	2,0

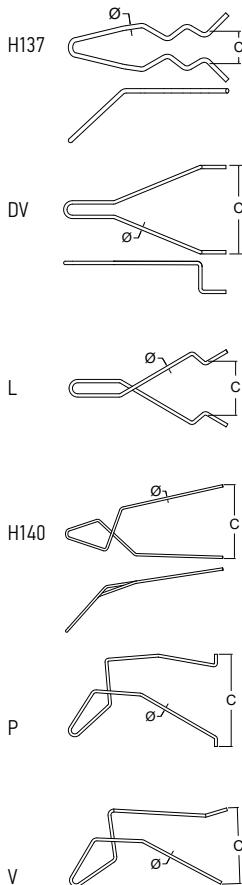
» UDVD version is made from spring wire



PROFILE YOKE INSERTS -A, -B, -C / BHL

Prod No.	Qty per box	A, mm	B, mm	Ø, mm
BHL S50X2,0 A20	1000	50	20	2,0
BHL S50X2,0 A45	1000	50	45	2,0
BHL S75X2,0 B	2000	75		2,0
BHL S125X2,0 B	1000	125		2,0
BHL S150X2,0 C140	1000	150		2,0

» Made from spring wire



YOKE INSERTS -U, -Y / BHL

Design Patent

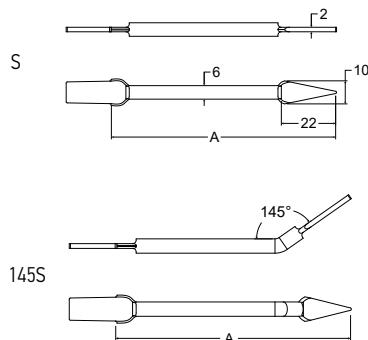
Prod No.	Qty per box	C, mm	Ø, mm
BHL U10X2,0 H137	750	10	2,0
BHL Y50X2,0 DV	500	50	2,0
BHL Y100X2,0 DV	500	100	2,0
BHL Y50X2,0 L	1100	50	2,0
BHL Y100X2,0 L	1000	100	2,0
BHL Y75X2,0 H140	200	75	2,0
BHL Y150X2,0 H140	250	150	2,0
BHL Y50X2,0 P	500	50	2,0
BHL Y50X2,0 V	500	50	2,0

» Coating object suspended with spring effect
» Made from spring wire



WIRE ARROWS / BHL

 Design Patent

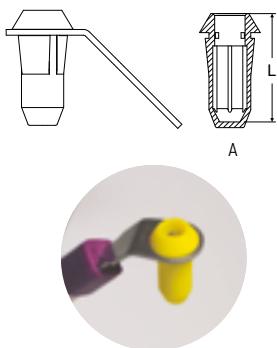


Prod No.	Qty per box	A, mm
BHL WA50X6 S	500	50
BHL WA100X6 S	500	100
BHL WA150X6 S	500	150
BHL WA50X6 145S	500	50
BHL WA100X6 145S	500	100
BHL WA150X6 145S	300	150

- » Stable hanging
- » Provide distance from the jig, avoid coating shadows

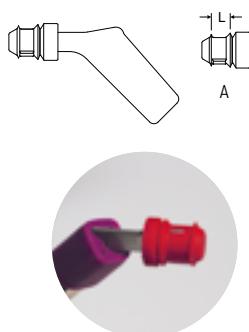
MASKING AND HANGING, HOLES & AXLES / BHL

 Design Patent



Prod No.	Qty per box	Fits	L, mm	Colour
GHA 08	200	M8		Yellow
GHA 08 A	500	M8	28,5	Yellow
GHA 10	200	M10		Brown
GHA 10 A	250	M10	28,5	Brown
GHA 12	100	M12		Red
GHA 12 A	250	M12	28,5	Red

- » Hang and mask simultaneously
- » Metric axles or holes
- » Grounding secured
- » Fit BHL system
- » Masking parts GHA/GHH xx A are sold separately



Prod No.	Qty per box	Fits	L, mm	Colour
GHH 06	500	M6		Blue
GHH 06 A	1000	M6	4,2	Blue
GHH 08	200	M8		Yellow
GHH 08 A	1000	M8	5,0	Yellow
GHH 10	200	M10		Brown
GHH 10 A	1000	M10	6,8	Brown
GHH 12	200	M12		Red
GHH 12 A	1000	M12	8,5	Red



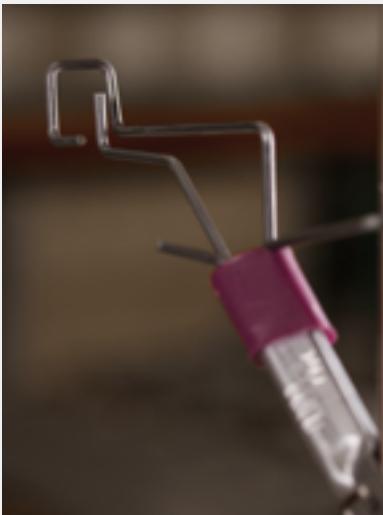
SMART EXAMPLE / BH & BHL



Profile hanging on BH R58 yoke insert BH S150x4,0 F93



Custom yoke insert for object without hanging hole



Custom double wire inserts



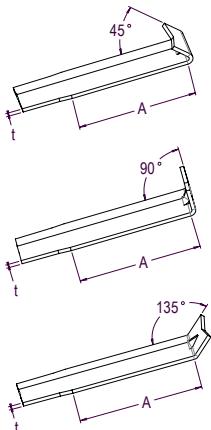
Profile hanging on arrow inserts BH P27X2,0 D

MASKINGS / BH



Prod No.	Qty per box	Colour
BH G20	500	green
BH G22	250	red
BH G22 X	250	orange

» Cap protects contact point for BH socket

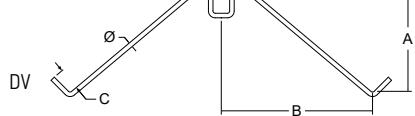


PROFILE INSERTS P - V / BH

Design Patent

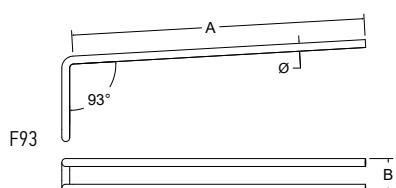
Prod No.	Qty per box	A, mm	t, mm
BH P19X1,5 45V	500	50	1,5
BH P19X1,5 90V	500	50	1,5
BH P19X1,5 135V	500	50	1,5

» Inserts specialized for aluminium profiles
» Thin but strong



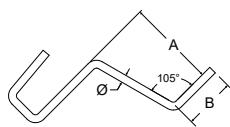
YOKE INSERTS BH R58 / BH

Prod No.	Qty per box	A, mm	B, mm	C, mm	Ø, mm
BH D25X3,0 DV	2000	8	25	15	3,0
BH D50X3,0 DV	1000	29	50	15	3,0
BH D100X3,0 DV	500	68	100	15	3,0
BH S150X4,0 F93	150	150	17		4,0

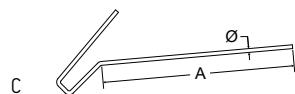


» Standard inserts for our BH-system
» Cheap, simple and quick
» Strong, made from spring wire

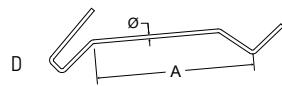
HOOK INSERTS UDV / BH



Prod No.	Qty per box	A, mm	B, mm	Ø, mm
BH S35X3,0 UDV	3000	35	20	3,0
BH S50X3,0 UDV	2000	50	20	3,0
BH S50X4,0 UDV	1700	50	20	4,0
BH S75X4,0 UDV	1500	75	20	4,0

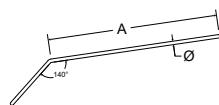


PROFILE YOKE INSERTS C-, D-, E140 / BH

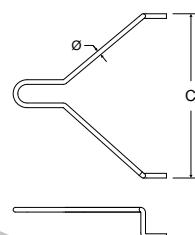


Prod No.	Qty per box	A, mm	B, mm	Ø, mm
BH S150X3,0 C140	250	150		3,0
BH S150X3,0 D140	250	125		3,0
BH S150X3,0 E140	200	150	50	3,0

» Made from spring wire



YOKE INSERTS Y - DV / BH

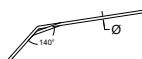
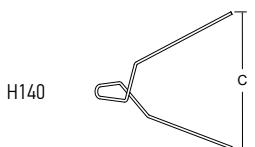
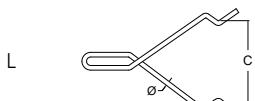
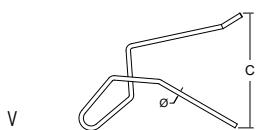
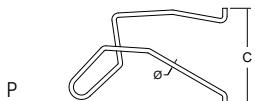


Prod No.	Qty per box	C, mm	Ø, mm
BH Y100X3,0 DV	300	100	3,0
BH Y200X3,0 DV	150	200	3,0

» Double hanging points for stable hanging



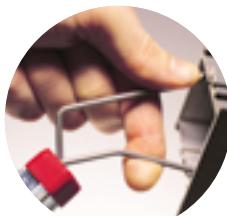
YOKE INSERTS Y / BH



Prod No.	Qty per box	C, mm	Ø, mm
BH Y50X3,0 P	250	65	3,0
BH Y75X3,0 V	400	80	3,0
BH Y50X3,0 L	250	50	3,0
BH Y150X3,0 H140	100	140	3,0

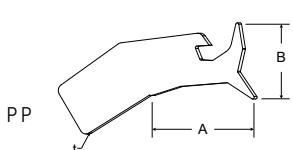
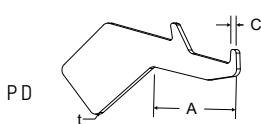
» Coating object suspended with spring effect

» Made from spring wire



ARROW INSERTS / BH

Design Patent



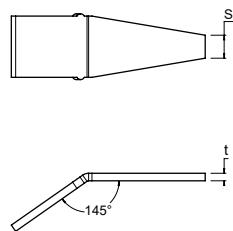
Prod No.	Qty per box	A, mm	B, mm	C, mm	t, mm
BH P27X2,0 D	500	22		1,7	2,0
BH P40X2,0 P	1000	30	22		2,0

» Smart designed inserts for mainly aluminum profiles

» Can also be used for other parts

» Strong and leave small hanging marks

ARROWS BENT P / BH



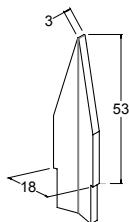
Prod No.	Qty per box	S, mm	t, mm
BH P15X2,0 S145	500	0	2,0
BH P15X2,0 145S6	500	6	2,0
BH P15X3,0 S145	500	0	3,0
BH P15X3,0 145S3	500	3	3,0
BH P15X3,0 145S6	500	6	3,0
BH P15X3,0 145S9	500	9	3,0

- » Stable hanging
- » Good earthing

ARROWS FLAT PS / BH

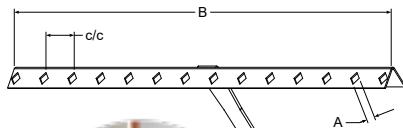


Prod No.	Qty per box	S, mm	t, mm
BH P15X2,0 PS	500	0	2,0
BH P15X2,0 PS6	500	6	2,0
BH P15X3,0 PS	500	0	3,0
BH P15X3,0 PS3	500	3	3,0
BH P15X3,0 PS6	500	6	3,0
BH P15X3,0 PS9	500	9	3,0



ARROW REINFORCED S / BH

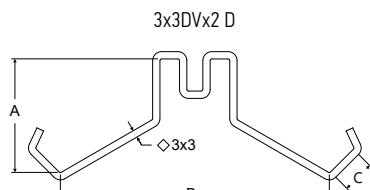
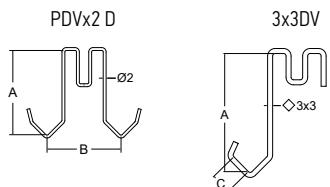
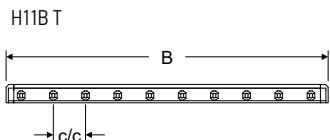
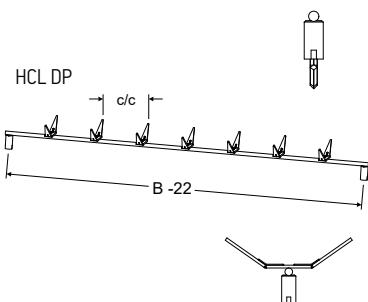
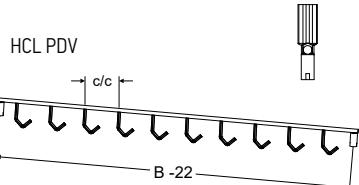
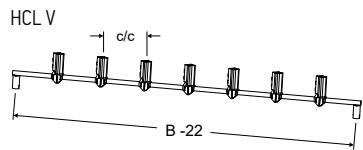
Prod No.	Qty per box
BH P16X53X3 S	500



WIRE HANGING LEVELS / BH

Prod No.	B, mm	c/c, mm	A, mm
BH WH 400-3	400	30	4,3x4,3
BH WH 400-4	400	30	5,6x5,6
BH WH 400-5	400	30	6,5x6,5

- » Levels fit together with BH-shafts (page 64)
- » Cut square holes hold wires in place
- » Compact hanging
- » Small hanging marks



E-COATING SOLUTIONS

Prod No.	Qty per box	B, mm	c/c, mm
HCL BHL 800X50 V	50	800	50
HCL BH 800X100 V	35	800	100
HCL 800X75 4X4 PDV	70	800	75
HCL 800X100 DP 14X3	20	800	100

- » Hanging solution with longlasting grounding
- » Good alternative for E-coating, made from square wire



Prod No.	Qty per box	B, mm	c/c, mm
H11B 700X50 T	100	700	50
H11B 800X50 T	100	800	50

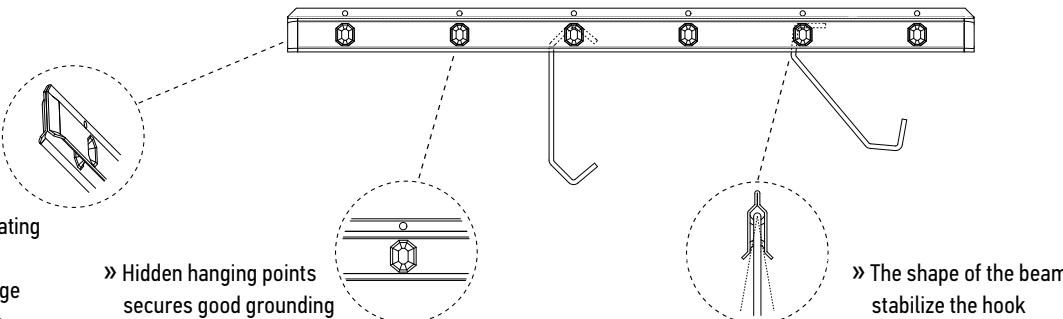
- » Hanging beam which is welded tight at the ends
- » Good solution for e-coating

Prod No.	Qty per box	A mm	B mm	C mm	Colour
BH G EC D	50				●
BHL EC50X2,0 PDVX2 D	500	58	51		
BH EC100-3X3DV	400	82		20	
BH EC150-3X3DVX2	250	63	150	20	

- » Ideal solution for E-coating, made from square wire
- » Masking cap creates an "air trap" and protects contact point during dipping

SUSPENSION BEAMS

Our suspension beams are designed as an economical and smart primary hanging level directly under the conveyor. The form and weldings are reinforcing the beam in all directions, and make it very strong in relation to the weight. With short distance between the hanging points you can create very flexible hanging options.

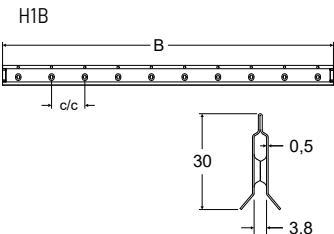


- » Tight ends prevent coating entering inside
- » The bent entrance edge guides the hook right

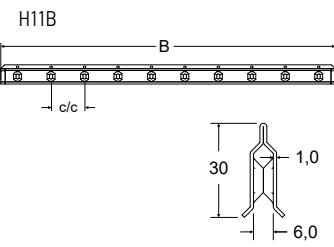
- » Hidden hanging points secures good grounding

- » The shape of the beam stabilize the hook

SUSPENSION BEAMS H1B/H11B



Prod No.	Qty per box	B, mm	c/c, mm	Hanging points
H1B 600X50	100	600	50	12
H1B 800X50	100	800	50	16
H1B 1000X50	100	1000	50	20
H1B 1200X50	100	1200	50	24



Prod No.	Qty per box	B, mm	c/c, mm	Hanging points
H11B 500X50	100	500	50	10
H11B 550X50	100	550	50	11
H11B 600X50	100	600	50	12
H11B 650X50	100	650	50	13
H11B 700X50	100	700	50	14
H11B 700X78	100	700	78	9
H11B 750X50	100	750	50	15
H11B 800X50	100	800	50	16
H11B 800X73	100	800	73	11
H11B 1000X50	100	1000	50	20
H11B 1200X50	100	1200	50	24



- » Hanging points protected
- » Recommended for maximum Ø 2,0 mm hooks (H1B) and Ø 4,0 mm hooks (H11B)
- » H1B fit HCF (frames)
- » Special design for different lengths (50-1500 mm) and c/c (23-75 mm)

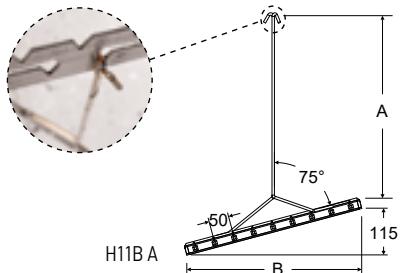
ADAPTER BH R58 H11B



Prod No.	Qty per box	\varnothing , mm
H1B BH-ADAPT	100	3

- » Make it possible to use H11B together with BH R58 shafts
- » Self locking 3mm sheet metal form

SHAFT BEAMS H11B



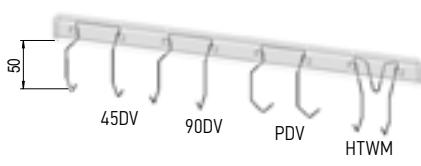
Prod No.	B, mm	A, mm
H1B 450X50-500 A	432	500

- » Inclined hanging beam
- » Both for 0° and 45° use
- » Allow better paint coverage

Prod No.	B, mm	A, mm
H1B 500X50-500	500	500
H1B 500X50-800	500	800
H1B 600X50-500	600	500
H1B 600X50-800	600	800

- » Both for 0° and 90° use
- » Use shorter hooks
- » Perfect in slopes

TWIN HOOKS FOR SUSPENSION BEAM H1B/H11B

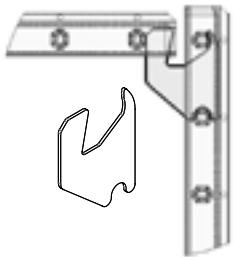


Prod No.	Qty per box	\varnothing , mm
HTW 50X1,5 PDV	1000	1,5
HTW 50X1,5 90DV	500	1,5
HTW 50X2,0 PDV	500	2,0
HTW 50X2,0 45DV	500	2,0
HTW 50X2,0 90DV	500	2,0
HTWM 50X1,5 90DV	500	1,5



- » Stable
- » Easy and fast mounting/dismounting
- » Fit H1B / H11B at c/c 50
- » Made from spring wire

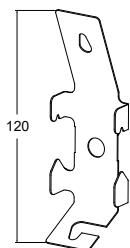
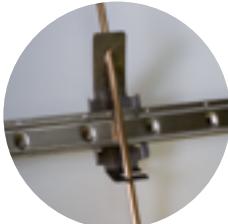
SUPPORT BRACKETS FOR SUSPENSION BEAM H1B/H11B



Prod No.	Qty per box
HKP	250

- » Quick lock of hanging beams
- » Use beams vertically
- » No tooling or welding

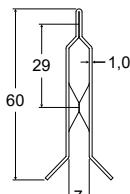
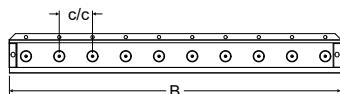
CLAMPS FOR SUSPENSION BEAM H1B/H11B



Prod No.	Qty per box
H1BM	150

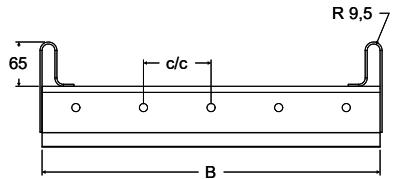
- » Quick lock of hanging beams to Ø 6,0 mm wire
- » No tooling or welding needed

SUSPENSION BEAMS H2B



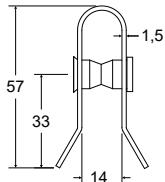
Prod No.	Qty per box	B, mm	c/c, mm	Hanging points
H2B 500X50	50	500	50	10
H2B 600X50	50	600	50	12
H2B 800X50	50	800	50	16
H2B 1000X50	50	1000	50	20
H2B 1200X50	50	1200	50	24

- » Protected hanging points
- » Recommended maximum Ø 5,0 mm hooks
- » Fit HCF (frames)
- » Special design for different lengths (50-2500 mm) and c/c (40-80 mm)

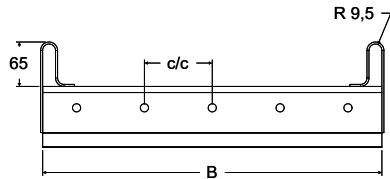


SUSPENSION BEAMS H25B

Prod No.	B, mm	c/c, mm	Hanging points
H25B 800X50	800	50	16
H25B 1000X50	1000	50	20
H25B 1200X50	1200	50	24

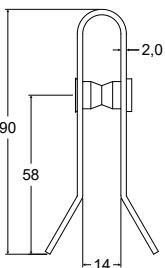


- » Protected hanging points
- » Recommended maximum Ø 8,0 mm hooks
- » Centered hanging points
- » We offer customized design

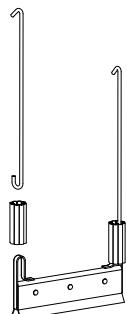


SUSPENSION BEAMS H3B

Prod No.	B, mm	c/c, mm	Hanging points
H3B 800X100	800	100	8
H3B 1000X100	1000	100	10
H3B 1200X100	1200	100	12



- » For heavy parts
- » Protected hanging points
- » Recommended maximum Ø 10,0 mm hooks
- » Centered hanging points
- » We offer customized design



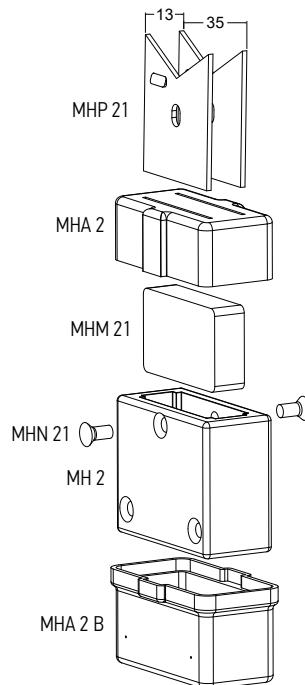
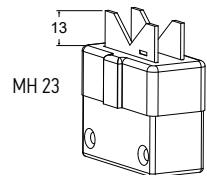
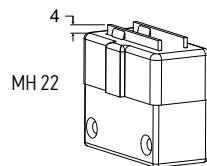
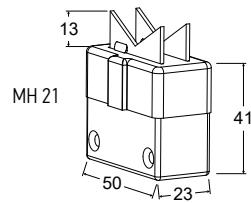
MASKING/HOOK SUSPENSION BEAM H25B/H3B



Prod No.

H3B SSF29/35 100	Masking to H3B
H3B P UV 500X8,0	Hook to H3B

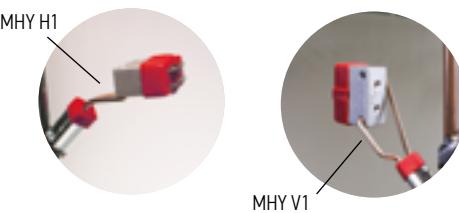
MAGNET HOLDER SYSTEM 2



Prod No.	Qty per box	Colour
MH 21	50	●
MH 22	50	●
MH 23	50	●

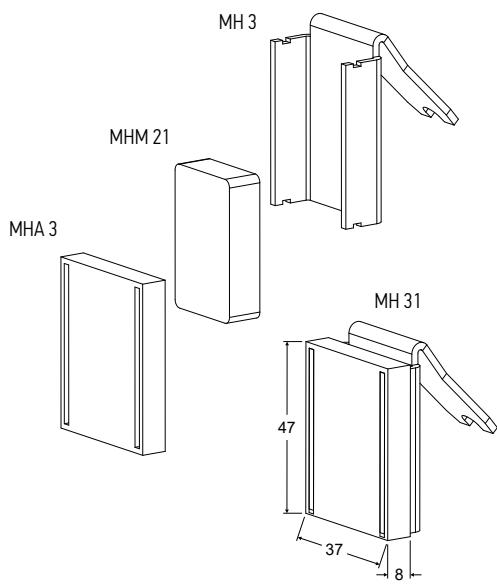
Prod No.	Qty per box	Colour
MH 2	100	
MHM 21	100	
MHA 2	100	●
MHA 2 B	50	
MHP 21	500	
MHP 22	500	
MHP 23	500	
MHN 21	1000	
MHY V1	250	
MHY H1	250	

- » Minimum hanging marks and cooling problems
- » Simple renewing
- » Secured grounding
- » Special jigs or fit BH socket
- » Pull force up to 0,5kg (MH 21), 6 kg (MH 22) and 3 kg (MH 23)
- » Always test actual application and in actual oven conditions



MAGNET HOLDER SYSTEM 3

 Design Patent



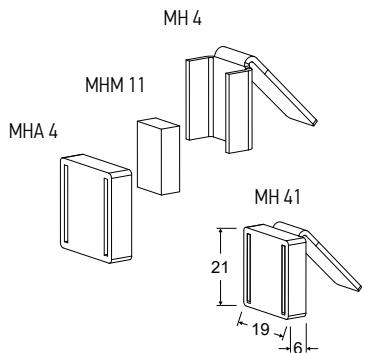
Prod No.	Qty per box	Colour
MH 31	50	Yellow
MH 3	100	
MHM 21	100	
MHA 3	100	Yellow

- » Fits BH socket or welded directly on a jig
- » Strong
- » Pull force up to 5 kg (MH 31)
- » Always test actual application and in actual oven conditions



MAGNET HOLDER SYSTEM 4

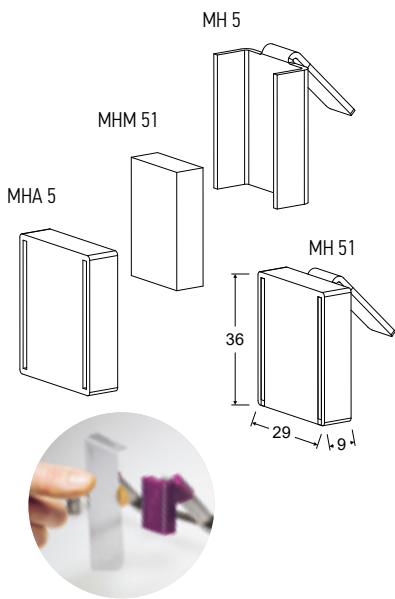
 Design Patent



Prod No.	Qty per box	Colour
MH 41	100	Blue
MH 4	250	
MHM 11	100	
MHA 4	500	Blue

- » Fits BHL socket or welded directly on a jig
- » Pull force up to 0,2 kg (MH 41)
- » Always test actual application and in actual oven conditions





MAGNET HOLDER SYSTEM 5

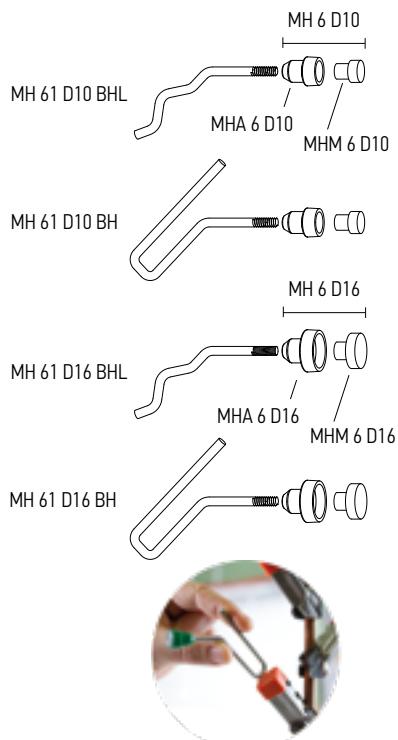
Design Patent

Prod No.	Qty per box	Colour
MH 51	50	■
MH 5	100	
MHM 51	100	
MHA 5	100	■

- » Fits BHL socket or welded directly on a jig
- » Pull force up to 1,5 kg (MH 51)
- » Always test actual application and in actual oven conditions

MAGNET HOLDER SYSTEM 6

Design Patent



Prod No.	Qty per box	Colour
MH 61 D10 BHL	25	■
MH 61 D10 BH	25	■
MH 61 D16 BHL	25	■
MH 61 D16 BH	25	■

Prod No.	Qty per box	Colour
MH 6 D10	250	■
MH 6 D16	250	■
MHM 6 D10	1000	
MHM 6 D16	250	
MHA 6 D10	1000	■
MHA 6 D16	500	■
MH 6 BHL 25X4,0 135	250	
MH 6 BH 35X4,0 135	250	

- » Magnet system with small, but very strong magnets
- » 2 different magnet sizes
- » Pull force up to 2 kg (MH 61 D10) and 6 kg (MH 61 D16)
- » Fits either to hanging system BH or BHL
- » Always test actual application and in actual oven conditions



SMART EXAMPLE / MAGNET HOLDER SYSTEMS



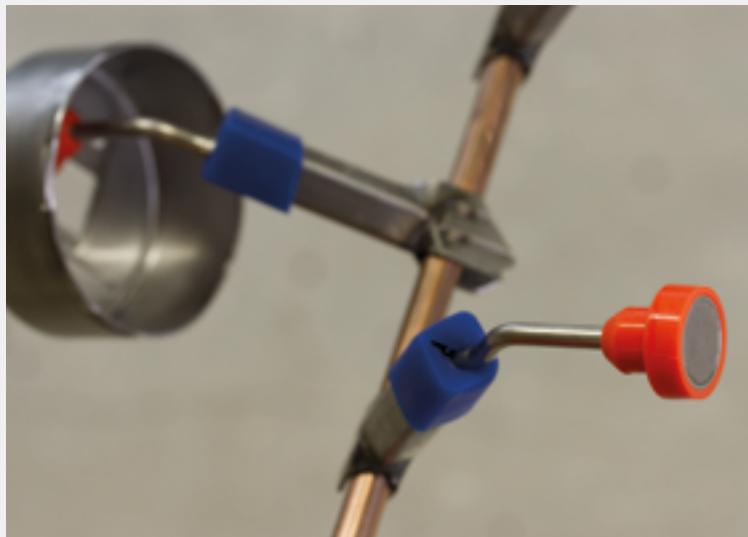
Profile hanging on MH 23



Horizontal coating application MH 31



Sheet metal without hole hanged on MH 51

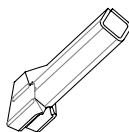


Object without hole hanged on MH 61 D16 BHL

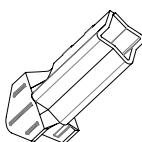
HANGER COMPONENTS

We try to build our hanging system around standard components as much as possible to give you a good and cost efficient service. This also means that we have a large range of components in stock which are available to order.

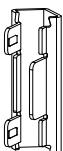
R66



R65



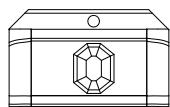
R58



HY



H11B



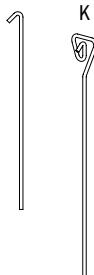
Below you will find a selection of hanger components.

SOCKETS

Design Patent

Prod No.

	Qty per box
BHL R66-6	750
BHL R66-8	750
BH R65-10	350
BH R65-12	350
BH R58-10	400
HY6X50-3,2X20	1000
H11B 50X50	300



STRAIGHT SHAFTS

Prod No.

HCS 1000X6,0
HCS 1000X8,0 K
HCS 1500X6,0
HCS 1500X10,0 K
HCS 2000X8,0 K
HCS 2000X10,0 K

EMPTY LEVELS



Prod No.

HCL W 600X8
HCL W 700X8
HCL W 800X8
HCL W 1000X8
HCL W 1200X8

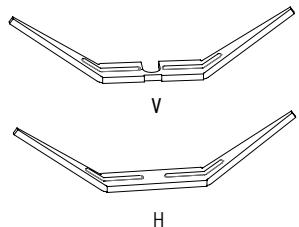
STRAIGHT WIRES



Prod No.

HCSW 714X8
HCSW 814X8

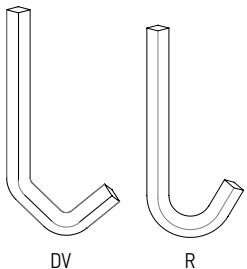
DOUBLE ARROWS



Prod No.	Qty per box
HCDP 14X2 S145V6	500
HCDP 14X3 S145V8	250
HCDP 14X2 S145H	500
HCDP 14X3 S145H	400



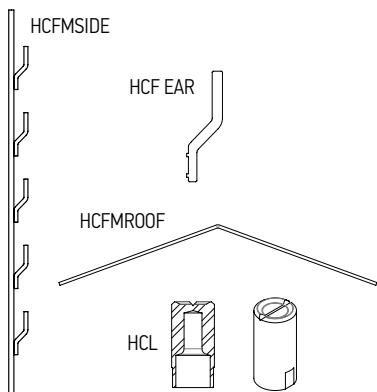
SQUARE WIRE HOOKS



Prod No.	Qty per box
HC 050X3X3 DV	2000
HC 050X4X4 DV	1500
HC 075X5X5 DV	1000
HC 050X3X3 R	2000
HC 050X4X4 R	1500
HC 075X5X5 R	1000



FRAME PARTS



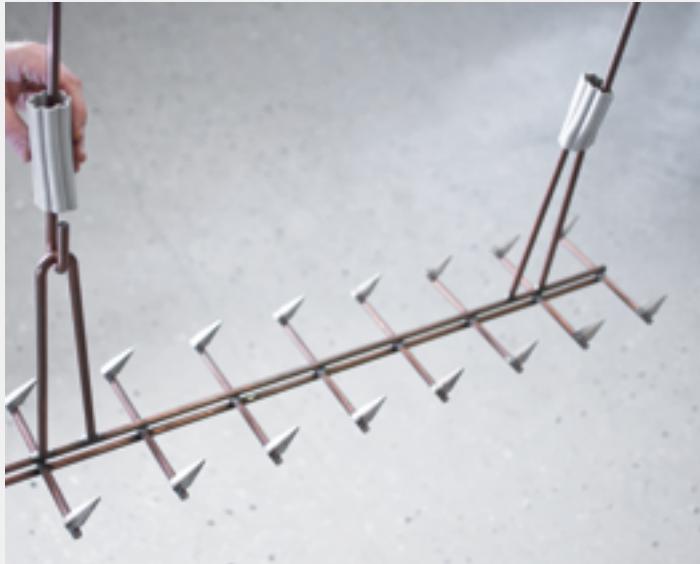
Prod No.	Qty per box
HCF EAR 65X6,0	500
HCFMSIDE1200X100	
HCFMSIDE1500X100	
HCFMROOF 830X150	
HCL 15X30-6,25	500



SMART EXAMPLE / CUSTOMIZED HANGERS



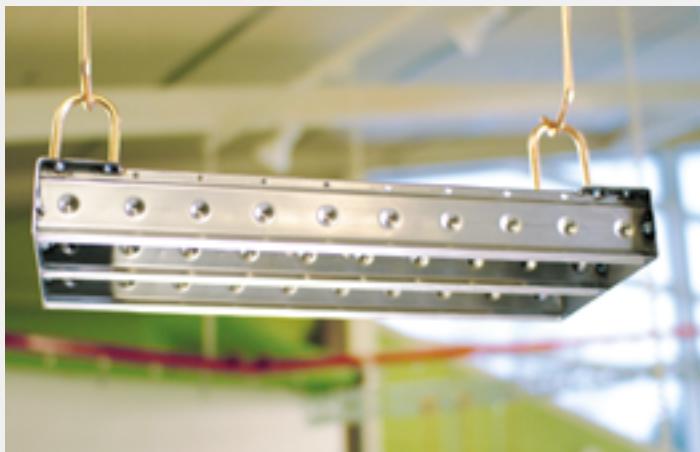
Heavy duty with exchangeable pins



E-coating jig with welded arrows



Reinforced BH shaft

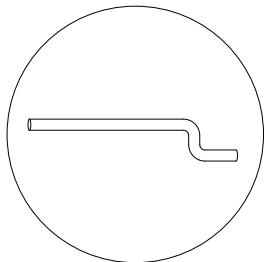


Rail system based on standard suspension beam H2B

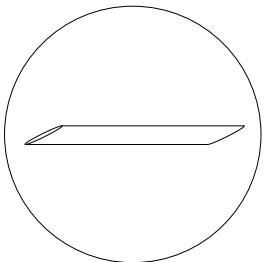
NON STOCKED ITEMS, HANGING SYSTEM

Here we show some old products which have been replaced by updated and improved products. Sometimes the old ones are preferable and therefore they are still available to order. Some of them are even available as stock items.

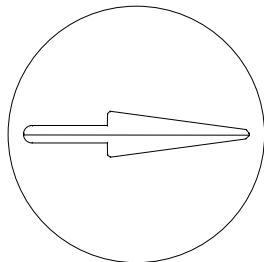
See www.hangon.com for more sizes and/or ask for a quotation.



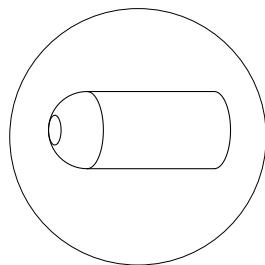
Socket jig DV-pins - **HH DV**



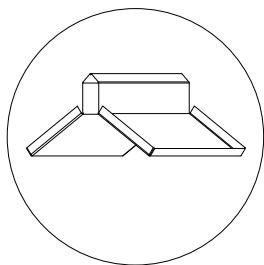
Socket jig pointed pins - **HH S**



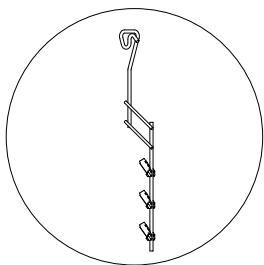
Arrows for socket jig - **HH P**



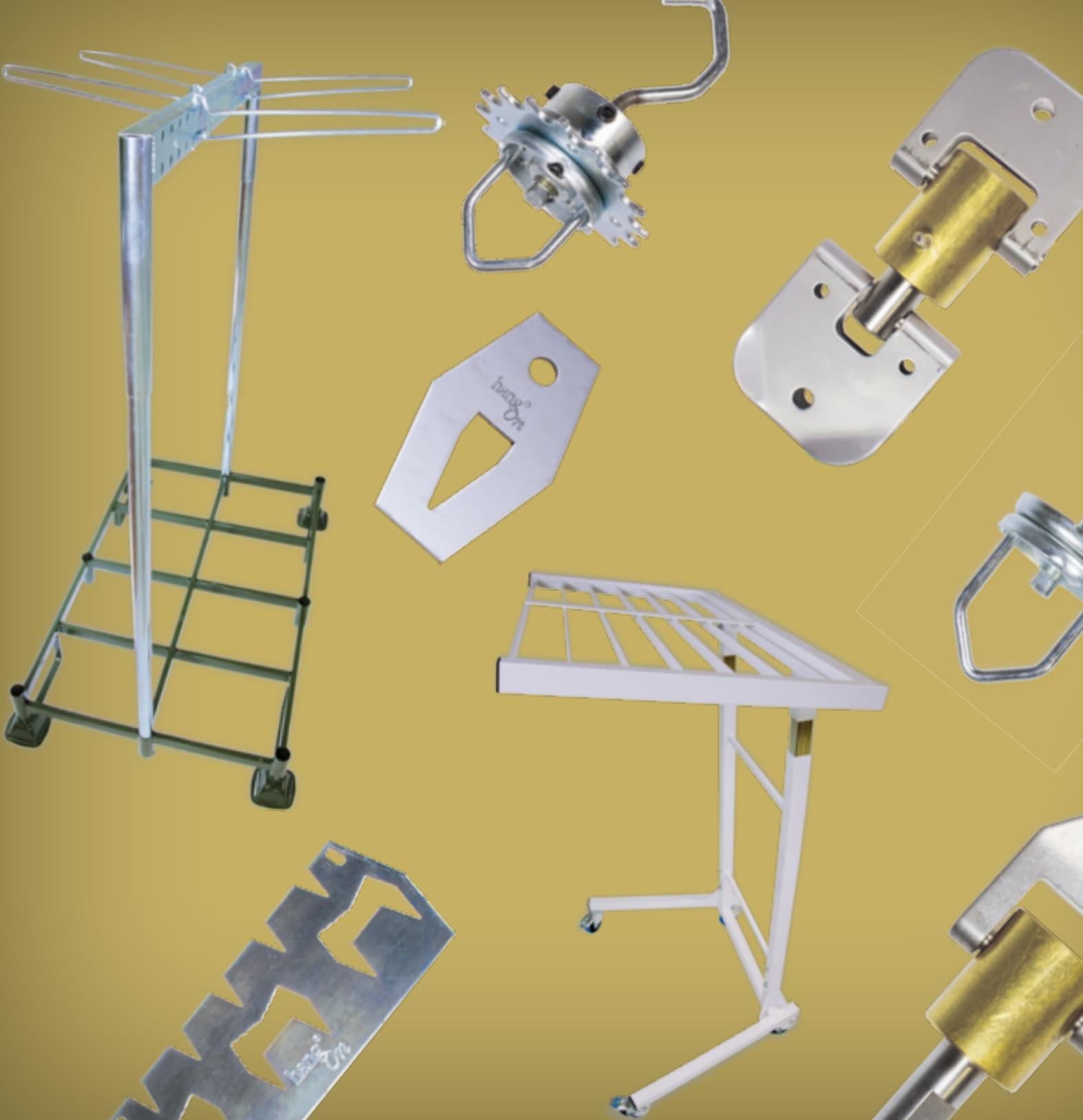
Socket jig masking sleeves - **HH G**



Waste collector for H2B - **H2BS**



BH/BHL shafts - **HCS BH/BHL S**



ACCESSORIES FOR HANGING

92 FT TRANSPORT/STORAGE SYSTEMS

94 FTR / FTM TRANSPORT/STORAGE SYSTEMS

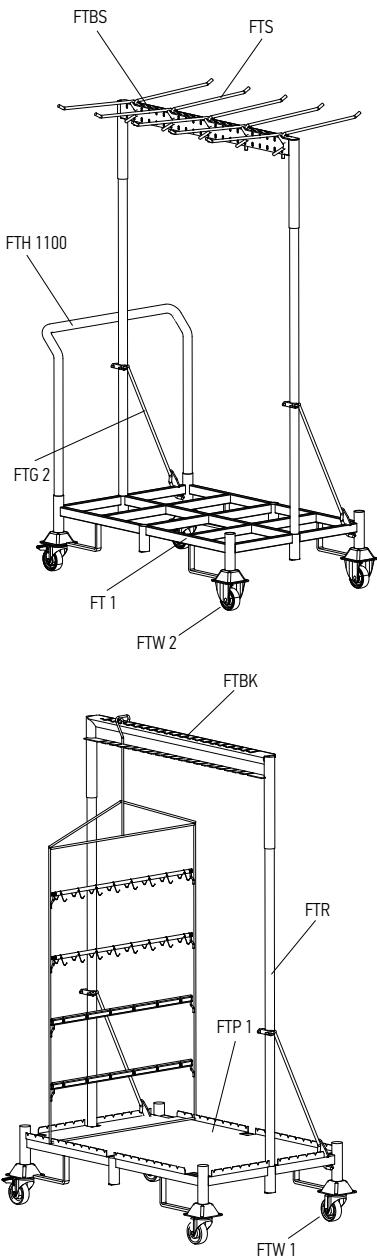
94 FV PRE-HANGING TROLLEYS

95 ROT ROTATIONAL DEVICES

96 LS / LE SWIVELS

96 HNR NOTCHED RAILS

TRANSPORT/STORAGE SYSTEMS



- » Racks for storage and transportation of jigs and hangers
- » Modular system adaptable for most demands
- » Heavy duty design, stackable when not in use
- » Can also be used in burn off process

Prod No.

FT 1
FTW 1*
FTW 2**
FTG 2
FTH 1100
FTP 1

* Set of 4 swiveling castors

** Set of 2 swiveling and 2 fixed castors

Prod No.

FTBS 800
FTBS 1200
FTBK 800
FTBK 1200

Prod No.

Prod No.	L, mm
FTR 1500	1500
FTR 1700	1700
FTR 1900	1900
FTR 2100	2100
FTR 2300	2300

Prod No.

Prod No.	L, mm
FTS 1	380
FTS 2	380
FTS 3	380
FTS 4	380
FTS 5	580
FTS 6	580
FTS 7	840
FTS 8	840
FTS 9	1230
FTS 10	1230



FTS 1



FTS 2



FTS 3 & 5



FTS 4 & 6



FTS 7 & 9



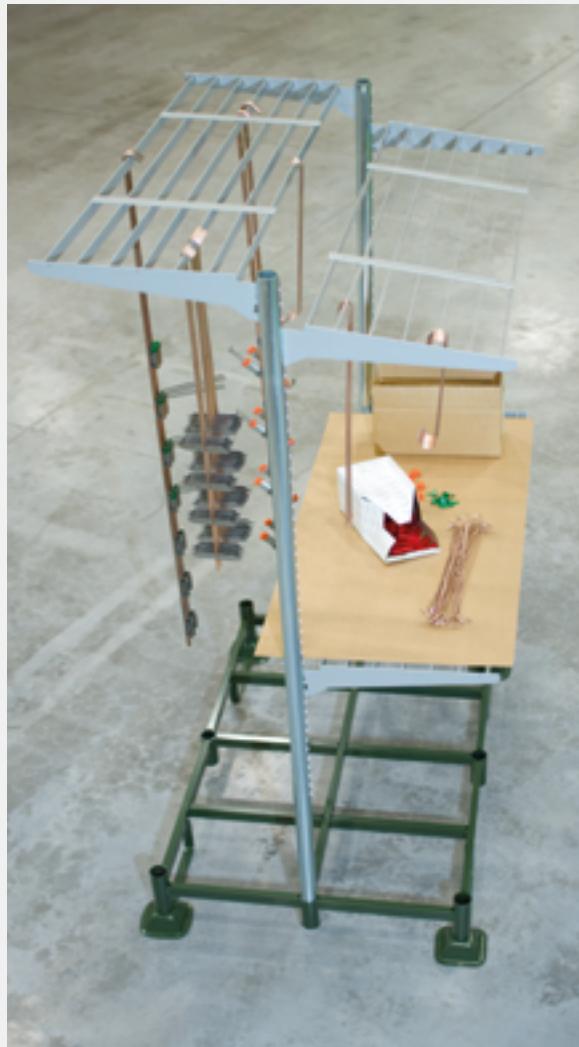
FTS 8 & 10



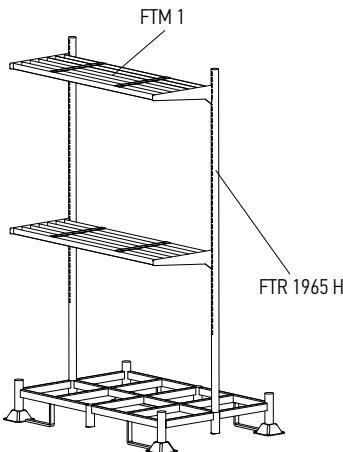
SMART EXAMPLE / TRANSPORT & STORAGE SYSTEMS



Prehanging station



Workstation using FTM 1 for storage, masking and/or prehanging



TRANSPORT/STORAGE SYSTEMS

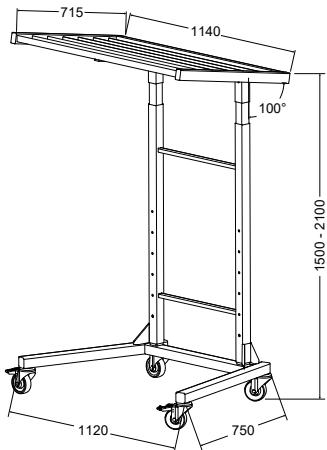
Prod No.

FTR 1965 H

FTM 1

- » FTM enables system components to be used as temporary work stations for masking or pre-hanging
- » FTR 1965 H is perforated on two sides, c/c 32 mm

PRE-HANGING TROLLEYS



Prod No.

FV 1A

A, mm

B, mm

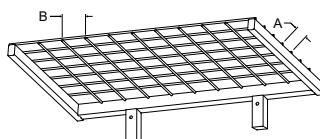
93

FV 1B

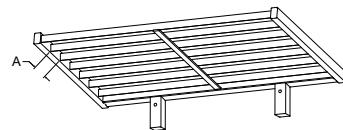
100

108

- » Robust and stable trolley on large castors
- » Height adjustable shelf provides optimal working height
- » Space saving design when not in use



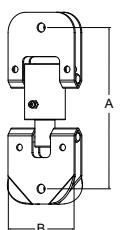
FV 1A



FV 1B

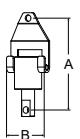


ROTATIONAL DEVICES



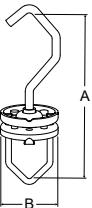
Prod No.	A, mm	B, mm	Recommended max weight
ROT 01	160	75	150 kg

- » Rotational device for permanent installation
- » Indexed hanging point in steps of 90° rotation
- » Heavy duty design in solid stainless steel and brass



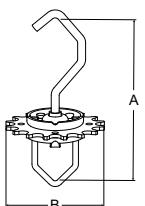
Prod No.	A, mm	B, mm	Recommended max weight
ROT 03	85	40	75 kg

- » Similar design and function as ROT 01 but for smaller loads
- » Indexed hanging point in steps of 45° or 90° rotation

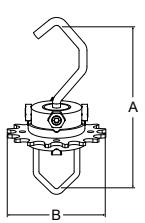


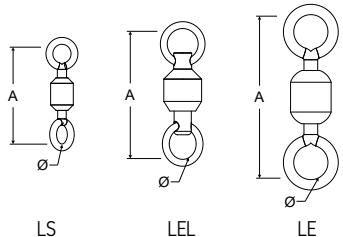
Prod No.	A, mm	B, mm	Recommended max weight
ROT 05	150	50	25 kg
ROT 05 K	150	87	25 kg
ROT 05 KS	150	87	25 kg

Prod No.	Length, mm
ROT SKENA	952



- » Rotational device in galvanized steel with ball bearing
- » Hook design for easy handling and temporary use
- » K- version is designed with a gear wheel for automatic rotation
- » KS-version comes with gear wheel and indexed stop per 90° rotation
- » For automatic rotation use standard chain or our rail (ROT SKENA)

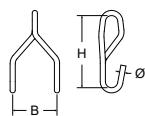
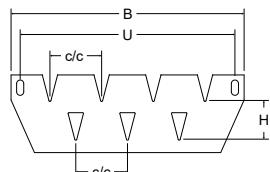
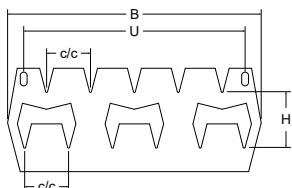




SWIVELS

Prod No.	Qty per box	A, mm	Ø, mm	For hooks Ø mm
LS	100	29	5,5	3,0-5,0
LEL	100	39	9,5	3,0-7,0
LE	100	48	10,0	6,0-9,0

- » Allows maximum axial movement for suspension hooks
- » LS can be supplied with or without fixed upper hook
- » LEL has ball bearings



NOTCHED RAILS

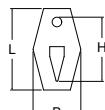
Prod No.	Qty per box	B, mm	U, mm	c/c, mm	H, mm
HNR 180X3,0 D45	50	170	135	45	57
HNR 270X3,0 D45	50	260	225	45	57
HNR 360X3,0 D45	50	350	315	45	57

Prod No.	Qty per box	B, mm	U, mm	c/c, mm	H, mm
HNR I 203	40	178	160	51	38
HNR I 254	50	229	211	51	38
HNR I 305	50	280	262	51	38

Prod No.	Qty per box	Ø, mm	B, mm	H, mm
HNR 70X5,0 43	100	5	43	70

- » Unique design
- » Two hanging levels
- » Continuous hanging points
- » HNR I especially designed for coating lines with slopes
- » For custom made design, ask for a quotation!

Prod No.	Qty per box	L, mm	B, mm	H, mm
HNR S85X3,0	100	85	50	67

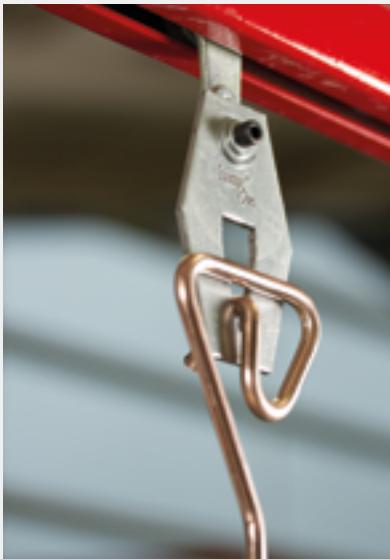




SMART EXAMPLE / NOTCHED RAILS



Three custom designed notched rails



Adapter for shaft with crown



Notched rails in slope application





MASKING FOR FLAT SURFACE

100	TX	MASKING TAPES
102	TMI	THICK VINYL TAPE FOR BLASTING
102	TS	SILICONE RUBBER TAPE
102	TGP	MASKING TAPE WITH PARTIAL ADHESIVE
103	TAT	TAPE DISPENSERS
104	ERX	DISCS WITH TARGET RINGS AND SLIT BACK
105	ERT	DISCS WITH TAB AND TARGET RINGS
105	ERD	WISHBONE DISCS WITH TARGET RINGS
106	ERS	DISCS WITH SLIT BACK
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108	TPR / TPP	TAPE TOOLS
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110	GMR	MAGNETIC ROUNDS
111	MP / MPD	MASKING PAPERS / DISPENSER FOR TAPE/PAPER
112		SHEET MATERIAL FOR CUSTOM SOLUTIONS

MASKING TAPES



We have a standard program of professional masking tape in stock which covers a wide variety of masking situations.

- » We cut on demand required quantity and width
- » Tape is always fresh and date marked
- » Available tape widths 3–600 mm

Prices:

The price of tape is charged per mm width per roll.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TG	220	50	40	66	●

Polyester tape for normal powder coating and similar situations.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
T0	220	50	40	66	○

Similar tape as TG, and specially good for 2-colour coating.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TR	220	50	50	66	●

Similar tape as TG, but a better alternative on uneven surfaces etc.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TB	220	25	40	66	●

A thin polyester tape, more flexible than the thicker ones.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TZ	80	130	20	33	○

Embossed vinyl tape, easy to tear by hand.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TC	220	70	40	50	○

Paper/polyester film which is very flexible and strong.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TK	260	25	40	33	●

Thin flexible polyimide film standing high temperatures.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TF	245	120	70	33	○

Glass cloth tape which stand high temperature, with good mechanical strength.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TE	100	230	100	50	○

Thick crepe tape with natural rubber adhesive, good for blasting.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TM	70	460	40	30	●

Thick vinyl tape mainly for blasting.



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TP	160	130	60	55	○

Crepe tape with rubber adhesive, mainly for wet-paint applications.

THICK VINYL TAPE FOR BLASTING



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll length metre	Colour
TMI 025	70	400	40	10	○
TMI 050	70	400	40	10	○

- » Thick vinyl tape for blasting
- » Spooled on a roll with only 32 mm diameter
- » Flexible for use also in tight spaces

SILICONE RUBBER TAPE



Prod No.	Width, mm	Roll length metre
TS 025	25	15

- » No adhesive, but sticks to its own surface by vulcanization
- » Wrap surface for masking
- » Homogeneous silicone rubber withstands 300°C

MASKING TAPE WITH PARTIAL ADHESIVE



Prod No.	Max temp °C	Film µm	Adhesive µm	Roll width mm	Roll length metre
TGP 075	220	50	40	75	66
TGP 100	220	50	40	100	66
TGP 150	220	50	40	150	66
TGP 200	220	50	40	200	66

- » Adhesive 10 mm each side
- » Can be used for 2-colour coating of profiles
- » Easy handling

TAPE DISPENSERS



Prod No.	Cut length, min-max, mm	Tape width, mm
TAT 80	50-999	7-80
TAT 60	5-999	6-60
TAT 50	20-999	7-50

- » Timesaving handsfree operation
- » New piece comes automatically when one is picked
- » For more features and spare parts in stock, ask for a quotation!



TAT 80



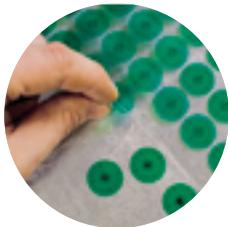
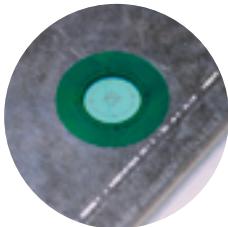
TAT 60



TAT 50

DISCS WITH TARGET RINGS AND SLIT BACK

 Design Patent



Prod No.	Qty per roll	Ø, mm
ERX 010	2000	10
ERX 012	2000	12
ERX 014	2000	14
ERX 015	2000	15
ERX 016	2000	16
ERX 018	1000	18
ERX 019	1000	19
ERX 020	1000	20
ERX 022	1000	22
ERX 023	1000	23
ERX 024	1000	24
ERX 025	1000	25
ERX 026	1000	26
ERX 027	1000	27
ERX 028	1000	28
ERX 030	1000	30
ERX 032	1000	32
ERX 034	1000	34
ERX 035	1000	35
ERX 036	1000	36
ERX 038	1000	38
ERX 040	500	40
ERX 042	500	42
ERX 044	500	44
ERX 046	500	46
ERX 048	500	48
ERX 050	500	50
ERX 052	500	52
ERX 055	500	55
ERX 056	500	56
ERX 060	500	60
ERX 064	500	64
ERX 065	500	65
ERX 068	500	68
ERX 070	500	70
ERX 072	500	72
ERX 076	500	76
ERX 080	500	80
ERX 085	500	85
ERX 090	500	90
ERX 095	500	95
ERX 100	500	100
ERX 110	250	110

- » Target rings for exact and time saving masking
- » Can also be delivered on jumbo rolls at lower cost
- » Slit back for easy removal of disc from liner
- » Max temperature 220°C

DISCS WITH TAB AND TARGET RINGS



Prod No.	Qty per roll	\varnothing , mm
ERT 020	1000	20
ERT 022	1000	22
ERT 025	1000	25
ERT 030	1000	30
ERT 032	1000	32
ERT 040	500	40
ERT 046	500	46
ERT 050	500	50
ERT 055	500	55
ERT 060	500	60
ERT 076	500	76
ERT 080	500	80
ERT 100	500	100

- » Easily removed after painting
- » Part of the disc without adhesive
- » Fast removal from liner
- » Max temperature 220°C

WISHBONE DISCS WITH TARGET RINGS



Prod No.	Qty per roll	\varnothing , mm
ERD 19	500	19
ERD 20	500	20
ERD 26	500	26
ERD 30	500	30
ERD 40	500	40
ERD 45	250	45
ERD 50	250	50
ERD 55	250	55
ERD 60	250	60
ERD 70	100	70
ERD 75	100	75
ERD 85	100	85

- » Two overlapping discs
- » Centerpart without adhesive for faster gripping and removing
- » Target rings \varnothing 30-85 mm
- » We have toolings for more sizes
- » Max temperature 220°C

DISCS WITH SLIT BACK

 Design Patent



Prod No.	Qty per roll	Ø, mm
ERS 006	2000	6
ERS 008	2000	8
ERS 009	2000	9
ERS 010	2000	10
ERS 011	2000	11
ERS 012	2000	12
ERS 013	2000	13
ERS 014	2000	14
ERS 015	2000	15
ERS 016	2000	16
ERS 018	1000	18
ERS 019	1000	19
ERS 020	1000	20
ERS 022	1000	22
ERS 023	1000	23
ERS 024	1000	24
ERS 025	1000	25
ERS 026	1000	26
ERS 027	1000	27
ERS 028	1000	28
ERS 030	1000	30
ERS 032	1000	32
ERS 034	1000	34
ERS 035	1000	35
ERS 036	1000	36
ERS 038	1000	38
ERS 040	500	40
ERS 042	500	42
ERS 044	500	44
ERS 045	500	45
ERS 046	500	46
ERS 048	500	48
ERS 050	500	50
ERS 052	500	52
ERS 055	500	55
ERS 056	500	56
ERS 060	500	60
ERS 064	500	64
ERS 065	500	65
ERS 068	500	68
ERS 070	500	70
ERS 072	500	72
ERS 075	500	75
ERS 076	500	76
ERS 080	500	80
ERS 085	500	85

DISCS WITH SLIT BACK

 Design Patent



Prod No.	Qty per roll	Ø, mm
ERS 090	500	90
ERS 095	500	95
ERS 100	500	100
ERS 110	250	110
ERS 120	250	120
ERS 130	250	130
ERS 140	150	140
ERS 150	150	150
ERS 160	150	160
ERS 170	150	170
ERS 180	100	180
ERS 190	100	190
ERS 200	100	200

- » Budget discs on slit back liner
- » Quick handling
- » Large volumes on jumbo rolls even cheaper
- » Max temperature 220°C

SQUARE LABELS WITH TARGET LINES

 Design Patent



Prod No.	Qty per roll	Size, mm
EF 010	2000	10x10
EF 015	2000	15x15
EF 020	1000	20x20
EF 025	1000	25x25
EF 030	1000	30x30
EF 040	500	40x40
EF 050	500	50x50

- » Square discs with orienting lines
- » Better precision and time saving
- » Max temperature 220°C

CREPE DISCS WITH SLIT BACK

 Design Patent



Prod No.	Qty per roll	Ø, mm
ERP 012	5000	12
ERP 018	4000	18
ERP 020	4000	20
ERP 022	2000	22
ERP 025	2000	25
ERP 028	2000	28
ERP 030	2000	30
ERP 032	2000	32
ERP 035	2000	35
ERP 040	1000	40
ERP 046	1000	46
ERP 050	500	50
ERP 055	500	55
ERP 060	500	60
ERP 070	500	70
ERP 080	500	80
ERP 100	500	100

- » For wet paint
- » Max 160°C
- » Slit back Ø 22-100 mm
- » We have toolings for more sizes
- » Large volumes on jumbo rolls even cheaper

TAPE TOOLS



Prod No.

TPR 1

- » Press tape in place with the TPR - roller
- » Secure tape adhesion since most tapes are pressure sensitive

Prod No.

TPP 1

- » For removal of tapes and discs after coating
- » Lift and pull in one operation



SMART EXAMPLE / CUSTOMIZED DISCS



Die cuts in set with print on a jumbo roll

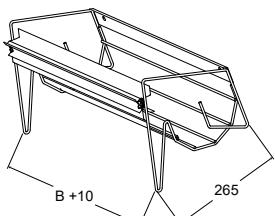


Die cuts in set with print and slit back



Discs with adhesive free tab

DISC DISPENSERS



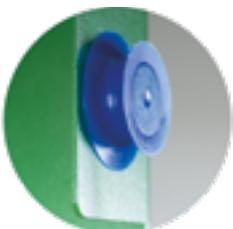
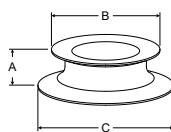
Prod No.	B, mm
ED 1	225
ED 2	500

- » Keep disc rolls in place
- » By pulling the liner, the discs come off automatically
- » Smart and cheap way to reduce time consumption
- » Maximum Ø 150 mm rolls

MAGNETIC ROUNDS

Design Patent

Prod No.	Qty per box	A, mm	B, mm	C, mm	Colour
GMR 1416	250	11	14	16	
GMR 2030	100	6	20	30	
GMR 3240	100	10,5	32	40	
GMR 4860	50	10,5	48	60	



- » Reusable round masking of a steel surface
- » Each product has two different sizes
- » Sharp rubber edges minimize coating edge

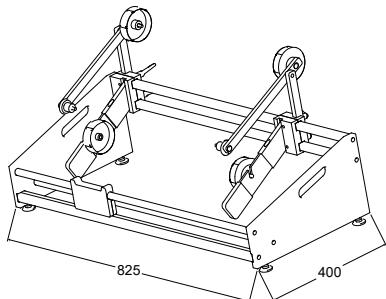
MASKING PAPERS



Prod No.	Width roll, mm	Area, m ² per roll	Roll length metre
MP 100	100	40	400
MP 200	200	80	400
MP 300	300	120	400
MP 400	400	160	400
MP 500	500	200	400
MP 600	600	240	400
MPS 600	600	120	200

- » High quality masking paper
- » Cost effective masking for large surfaces
- » MPS 600 stands normal pre-treatment and up to 220°C for a short time
- » We can cut special widths, ask for a quotation!

DISPENSER FOR TAPE/PAPER



Prod No.	Max width, mm
MPD 1	600

- » Cheap masking for large surfaces
- » "Automatic" application of tape on the paper
- » Apply a tape strip to both sides of the masking paper



SHEET MATERIAL FOR CUSTOM SOLUTIONS

From different kinds of sheet material we can develop custom masking solutions



- » We cut specific shapes inhouse with water jet, die-cut or cutting table
- » Different layers and/or grip can be glued together
- » For customized solutions, see page 112-113

RUBBER SHEETS, SOLID SILICONE



Prod No.	Thickness, mm
DSG 10	1
DSG 15	1,5
DSG 20	2
DSG 30	3
DSG 40	4
DSG 50	5
DSG 60	6

RUBBER SHEETS, FOAMED SILICONE



Prod No.	Thickness, mm	Tolerances, mm
DSS 20	2	±0,2
DSS 30	3	±0,3
DSS 40	4	±0,4
DSS 50	5	±0,5
DSS 60	6	±0,6
DSS 80	8	±0,8
DSS 100	10	±1,0
DSS 120	12	±1,2
DSS 150	15	±1,5
DSS 200	20	±2,0

RUBBER SHEETS, SOLID EPDM



Prod No.	Thickness, mm
DSE 10	1
DSE 20	2
DSE 30	3
DSE 40	4
DSE 50	5
DSE 60	6

MAGNETIC SILICONE RUBBER SHEET



Prod No.	Thickness, mm
DSM 10	1,0

» Similar physical properties as normal silicone rubber

MAGNETIC PLASTIC SHEET

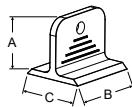


Prod No.	Thickness, mm
DPM 10	0,9

» For process temperature below 70°C

GRIPS

GRIP 1



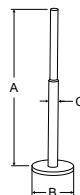
Prod No.	Qty per box	A, mm	B, mm	C, mm
GRIP 1	200	20	25	22
GRIP 2	1000	14	15x15	

GRIP 2



Prod No.	Qty per box	A, mm	B, mm	C, mm
GRIP 3	1000	55	14	3,2

GRIP 3

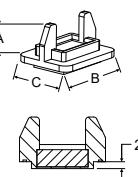


Prod No.	Qty per box	A, mm	B, mm	C, mm
MHM P11X1,0	200	13	18	12

» The grips simplify the handling of different masking products

» Can be glued to "any" standard or special masking product

MHM P11X1,0
+MHM 11





SMART EXAMPLE / CUSTOMIZED MASKINGS



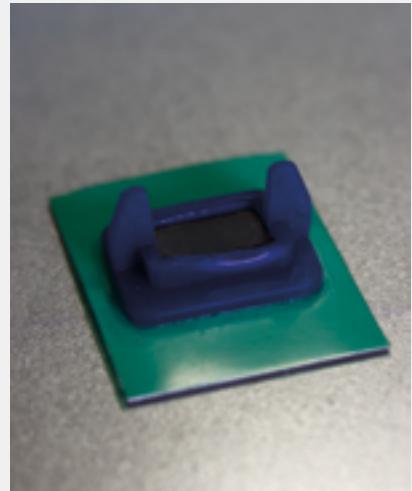
Plugs fixed to DPM masking



Glued rubber sheets in solid DSG and foamed silicone DSS with grip and glued MDF maskings with magnets



Solid silicone rubber sheets with silicone cap handle



Magnet handle MHM P11X1,0 on DPM



SMART EXAMPLE / CUSTOMIZED MASKINGS



Masking with grip cut in silicone rubber foam DSS



Combined hanging and masking in DSG

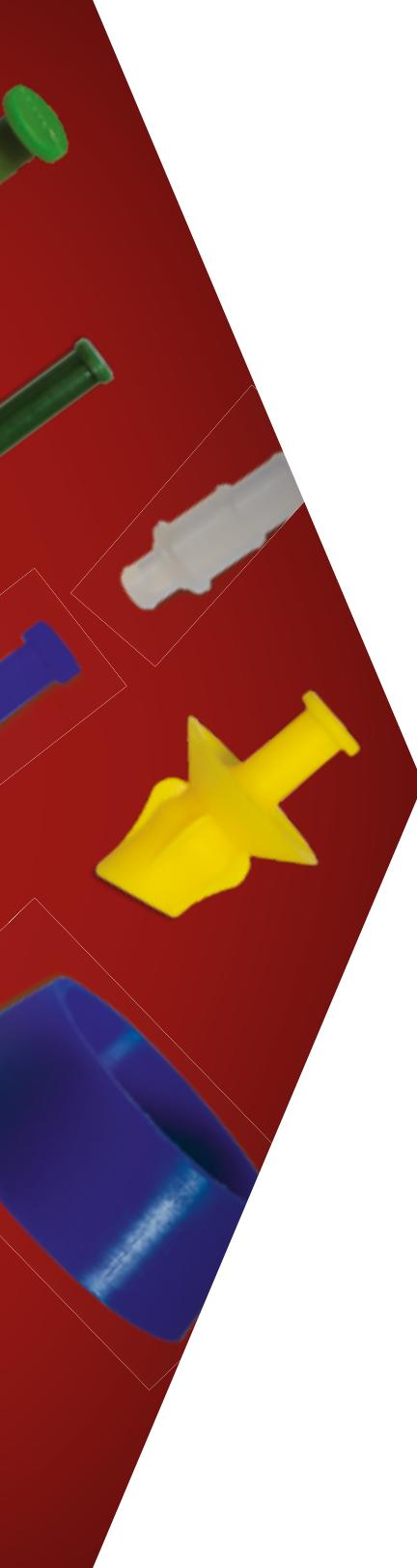


Masking DSG



Glued masking combination DSG, DSS and GRIP 3





MASKING FOR HOLES

118 GDF / GDF F DOUBLE FLANGE PLUGS / QUADRUPLE FLANGE PLUGS

119 GTM METRIC THREADED PLUGS

120 GDM METRIC CYLINDRICAL PULL PLUGS

121 GDM H METRIC HOLLOW CYLINDRICAL PULL PLUGS

121 GDP SINGLE SIDE DOUBLE FLANGE PLUGS

122 GBH / GKW SHALLOW HOLE PLUGS / FLANGED PLUGS

123 GVM / GGF VENTILATED PLUGS / PLUGS FOR COUNTERSINK HOLES

123 GKS CONICAL PLUGS WITH GRIP

124 GBM / GGM WASHER PULL PLUGS / METRIC PLUGS

125 GKR FLANGELESS PLUGS

126 GK CONICAL PLUGS

127 GKH HOLLOW CONICAL PLUGS

128 GKM / GMK CONICAL PLUGS MULTI / SOFT HOLLOW CONICAL PLUGS

129 GSH / GMS / GMU SMALL HOLE PLUGS / MOUSE TAILS / TRIPLE MULTIPLUGS

130 QB Q-BOLTS

131 GHH MASKING AND HANGING, HOLES

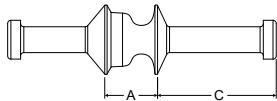
132 SH / GCH BUDGET MASKINGS, HOLES

133 SSR / SH RIBBED SILICONE RUBBER TUBINGS / MASKING PANELS

136 NON STOCKED ITEMS, MASKING FOR HOLES

DOUBLE FLANGE PLUGS

 Design Patent

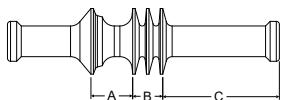


Prod No.	Qty per box	Fits	A, mm	C, mm	Colour
GDF 03	1000	M3	2,9	9,5	■
GDF 04	1000	M4	2,9	11,5	○
GDF 05	1000	M5	3,7	13,5	●
GDF 06	1000	M6	4,7	15,0	■
GDF 08	1000	M8	6,1	17,0	○
GDF 10	1000	M10	7,6	18,5	●
GDF 12	500	M12	9,6	21,5	■
GDF 14	200	M14	10,6	24,0	■
GDF 16	200	M16	12,3	26,5	●
GDF 20	100	M20	14,9	31,5	●

- » Designed for welding nuts and similar situations
- » Pull in place and entrance will be masked from both sides
- » Grip for easy handling

QUADRUPLE FLANGE PLUGS

 Design Patent

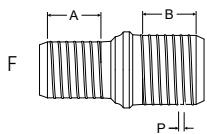
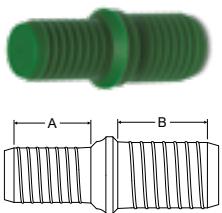


Prod No.	Qty per box	Fits	A, mm	B, mm	C, mm	Colour
GDF 03 F	1000	M3	2,4	1,7	15	■
GDF 04 F	1000	M4	2,5	2,3	15	○
GDF 05 F	1000	M5	3,2	2,7	16	●
GDF 06 F	1000	M6	4	3,3	17	■
GDF 08 F	1000	M8	5,2	4,2	18	○
GDF 10 F	500	M10	6,4	4,9	19	●
GDF 12 F	250	M12	8	5,6	21	■
GDF 14 F	250	M14	8,8	6,4	22	■
GDF 16 F	200	M16	10,4	6,4	24	●
GDF 20 F	100	M20	10,4	7,9	27	●

- » Designed for welding nuts and similar situations
- » Pull in place and entrance will be masked from both sides
- » Quadruple washers for flexible fitting
- » Grip for easy handling

METRIC THREADED PLUGS

 Design Patent

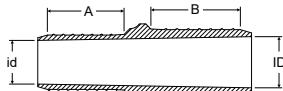


- » Cylindric plugs with sturdy design
- » Push in place and turn to use threads to fix position
- » Each plug fit 2 metric sizes
- » F-version for fine threads
- » Also available in EPDM material

Prod No.	Qty per box	Fits	A, mm	B, mm	Colour
GTM 0405	1000	M4/M5	5,6	6,4	●
GTM 0608	1000	M6/M8	8	10	■
GTM 0810	1000	M8/M10	10	12	■■
GTM 1012	500	M10/M12	12	14	■■■
GTM 1416	200	M14/M16	16	16	●
GTM 1820	100	M18/M20	20	20	●●
GTM 2430	25	M24/M30	24	28	○

Prod No.	Qty per box	A, mm	B, mm	P, mm	Colour
GTM 0608 F	1000	6	8	0,75/1,0	■■■
GTM 1012 F	500	10	10	1,25/1,25	■■
GTM 1416 F	200	10	12	1,25/1,5	●●
GTM 1820 F	100	12	12	1,5/1,5	●●●

Prod No.	Qty per box	Fits	A, mm	B, mm	Material
GTME 0405	1000	M4/M5	5,6	6,4	EPDM
GTME 0608	1000	M6/M8	8	10	EPDM
GTME 0810	1000	M8/M10	10	12	EPDM
GTME 1012	500	M10/M12	12	14	EPDM
GTME 1416	200	M14/M16	16	16	EPDM
GTME 1820	100	M18/M20	20	20	EPDM
GTME 2430	25	M24/M30	24	28	EPDM

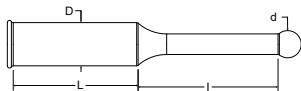


- » Hollow cost effective design
- » Also axle masking
- » Also available in EPDM material

Prod No.	Qty per box	Fits	id mm	ID mm	A mm	B mm	Colour
GTM 0405 H	1000	M4/M5	1	1,8	5,6	6,4	●
GTM 0608 H	1000	M6/M8	2,5	4,1	8	10	■
GTM 1012 H	500	M10/M12	5,7	7,2	12	14	■■
GTM 1416 H	200	M14/M16	8,8	10,6	16	16	●
GTM 1820 H	100	M18/M20	12	13,8	20	20	●●
GTM 2430 H	25	M24/M30	16,9	21,8	24	28	○

Prod No.	Qty per box	Fits	id mm	ID mm	A mm	B mm	Material
GTME 0405 H	1000	M4/M5	1	1,8	5,6	6,4	EPDM
GTME 0608 H	1000	M6/M8	2,5	4,1	8	10	EPDM
GTME 1012 H	500	M10/M12	5,7	7,2	12	14	EPDM
GTME 1416 H	200	M14/M16	8,8	10,6	16	16	EPDM
GTME 1820 H	100	M18/M20	12	13,8	20	20	EPDM
GTME 2430 H	25	M24/M30	16,9	21,8	24	28	EPDM

METRIC CYLINDRICAL PULL PLUGS



- » Designed for metric threads
- » Different lengths
- » End flange gives natural stop
- » Flange covers hole entrance
- » Grip for easy handling

Prod No.	Qty per box	Fits	D, mm	L, mm	d, mm	l, mm	Colour
GDM 2,8X15	1000	M3	2,8	15	1,8	25	■
GDM 2,8X30	1000	M3	2,8	30	1,4	40	■
GDM 3,3X15	1000		3,3	15	2,5	25	■
GDM 3,6X15	1000	M4	3,6	15	2,8	25	○
GDM 3,6X30	1000	M4	3,6	30	2,8	40	○
GDM 4,1X15	1000		4,1	15	3,0	25	●
GDM 4,7X15	1000	M5	4,7	15	3,6	25	■
GDM 4,7X30	1000	M5	4,7	30	3,6	40	■
GDM 5,2X15	1000	M6	5,2	15	3,8	25	■
GDM 5,2X30	500	M6	5,2	30	3,8	40	■
GDM 5,5X15	1000		5,5	15	3,8	25	■
GDM 6,0X15	1000		6	15	4,4	25	●
GDM 6,5X15	1000		6,5	15	4,7	25	○
GDM 7,1X15	500	M8	7,1	15	4,7	25	■
GDM 7,1X30	500	M8	7,1	30	4,7	40	■
GDM 7,9X15	500		7,9	15	5,5	25	■
GDM 8,5X15	500		8,5	15	5,8	25	■
GDM 8,8X15	500	M10	8,8	15	6,6	25	■
GDM 8,8X30	200	M10	8,8	30	6,6	40	■
GDM 10,5X15	200	M12	10,5	15	6,6	25	■
GDM 10,5X30	200	M12	10,5	30	6,6	40	■
GDM 11,2X15	200		11,2	15	7,2	25	○
GDM 12,5X30	200	M14	12,5	30	8,8	40	■
GDM 12,8X15	200		12,8	15	8,0	25	■
GDM 14,5X30	100	M16	14,5	30	11,2	40	■
GDM 15,5X30	100		15,5	30	9,4	40	●
GDM 16X30	100	M18	16	30	11,2	40	■
GDM 16,5X30	100		16,5	30	9,9	40	■
GDM 18X30	100	M20	18	30	11,2	40	●
GDM 18,5X30	50		18,5	30	10,9	40	○
GDM 20,5X30	50		20,5	30	11,9	40	■

METRIC CYLINDRICAL PULL PLUGS, EPDM

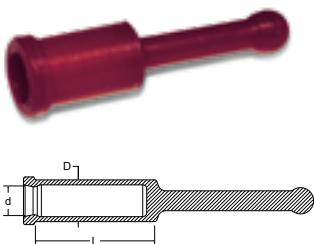


Prod No.	Qty per box	Fits	D, mm	L, mm	d, mm	l, mm	Material
GDME 2,8X30	1000	M3	2,8	30	1,8	40	EPDM
GDME 3,6X15	1000	M4	3,6	15	2,8	25	EPDM
GDME 3,6X30	1000	M4	3,6	30	2,8	40	EPDM
GDME 4,7X15	1000	M5	4,7	15	3,6	25	EPDM
GDME 5,2X15	500	M6	5,2	15	3,8	25	EPDM
GDME 5,2X30	500	M6	5,2	30	3,8	40	EPDM
GDME 7,1X15	500	M8	7,1	15	4,7	25	EPDM
GDME 7,1X30	250	M8	7,1	30	4,7	40	EPDM
GDME 8,8X30	200	M10	8,8	30	6,6	40	EPDM
GDME 10,5X30	100	M12	10,5	30	6,6	40	EPDM

hang
On

METRIC HOLLOW CYLINDRICAL PULL PLUGS

 Design Patent

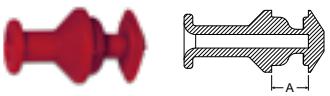


Prod No.	Qty per box	Fits	D, mm	L, mm	d, mm	Colour
GDM 8,8X15 H	500	M10	8,8	15	5,9	■
GDM 8,8X30 H	250	M10	8,8	30	5,9	■
GDM 10,5X15 H	500	M12	10,5	15	7,8	■
GDM 10,5X30 H	250	M12	10,5	30	7,8	■
GDM 12,5X30 H	200	M14	12,5	30	9,8	■
GDM 14,5X30 H	100	M16	14,5	30	10,8	■
GDM 16X30 H	100	M18	16	30	11,8	■
GDM 18X30 H	100	M20	18	30	13,8	●
GDM 26X30 H	50		26	30	19,8	■
GDM 31X30 H	25		31	30	25,8	■
GDM 36X30 H	25		36	30	29,8	○
GDM 41X40 H	20		41	40	34,8	■
GDM 46X40 H	10		46	40	39,8	■
GDM 46X60 H	10		46	60	39,8	■
GDM 51X50 H	10		51	50	42,8	■
GDM 56X50 H	25		56	50	46,5	■
GDM 62X60 H	5		62	60	51,8	■
GDM 72X70 H	5		72	70	59,8	■
GDM 83X80 H	2		83	80	70,8	●

- » Designed for metric threads
- » Different lengths
- » Hollow version for better flexibility and lower cost
- » Can also be used for axles

SINGLE SIDE DOUBLE FLANGE PLUGS

 Design Patent

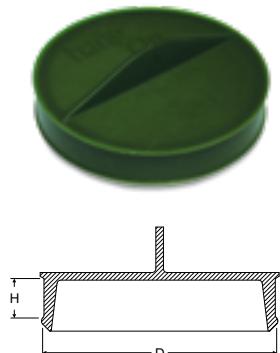


Prod No.	Qty per box	Fits	A, mm	Colour
GDP 08	500	M8	5,1	■
GDP 10	500	M10	6,3	■
GDP 12	500	M12	8,3	■

- » Designed for weldnuts and similar applications with access from only one side
- » Pushwire included to push the plug in place

SHALLOW HOLE PLUGS

 Design Patent



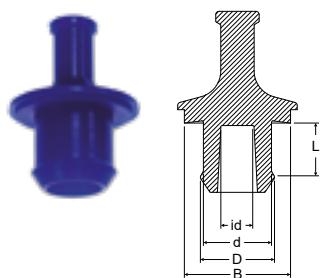
Prod No.	Qty per box	D, mm	H, mm	Colour
GBH 30X10	100	32	10	Yellow
GBH 35X10	100	37	10	Purple
GBH 40X10	50	42	10	White
GBH 45X10	50	47	10	Brown
GBH 50X10	50	52	10	Yellow
GBH 55X10	50	57	10	Blue
GBH 60X10	25	62	10	Red
GBH 65X10	25	67	10	Magenta
GBH 70X10	25	72	10	Green
GBH 75X10	25	77	10	Orange
GBH 80X10	20	82	10	Blue
GBH 85X10	20	87	10	Red
GBH 90X10	20	92	10	Grey
GBH 95X10	20	97	10	Yellow
GBH 100X15	10	102	15	Orange
GBH 110X15	10	112	15	Grey
GBH 120X15	10	122	15	Red
GBH 140X15	10	142	15	Green

» Cost effective design for large holes

» User friendly grip for easy handling

FLANGED PLUGS

 Design Patent



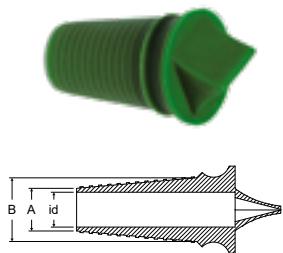
Prod No.	Qty per box	B mm	D mm	d mm	id mm	L mm	Colour
GKW 04X8	1000	8	3,7	3,3	0	2,8	White
GKW 05X9	1000	9	4,6	4,2	0	3,2	Green
GKW 05X10	1000	10	4,6	4,2	0	3,2	Green
GKW 06X9,5	1000	9,5	5,6	5,1	1,4	4	Blue
GKW 06X12	1000	12	5,9	5,4	1,4	4	Blue
GKW 08X9,5	1000	9,5	7,4	6,8	2,3	5,3	Yellow
GKW 08X13	1000	13	7,4	6,8	2,3	5,3	Yellow
GKW 08X16	500	16	7,4	6,8	2,3	5,3	Yellow
GKW 08X20	500	20	7,4	6,8	2,3	5,3	Yellow
GKW 08X25	500	25	7,4	6,8	2,3	5,3	Yellow
GKW 10X16	500	16	9,3	8,5	3,4	6,5	Brown
GKW 10X20	500	20	9,3	8,5	3,4	6,5	Brown
GKW 12X16	500	16	11,1	10,2	5	8,3	Red
GKW 12X24	250	24	11,1	10,2	5	8,3	Red
GKW 14X18	250	18	13	12	6,9	9	Blue
GKW 16X20	200	20	15	14	8,7	11	Green
GKW 16X30	100	30	15	14	8,7	11	Green
GKW 20X30	100	30	18,8	17,5	11,6	11	Black

» Shadow effect around hole

» Avoid paint ridges at the thread entrance

VENTILATED METRIC PLUGS

 Design Patent

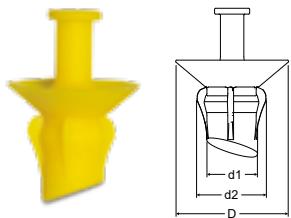


Prod No.	Qty per box	Fits	id, mm	A, mm	B, mm	Colour
GVM 0608	1000	M6-M8	2,9	3,7	8,3	●
GVM 1012	500	M10-M12	5,8	7,1	12,4	●
GVM 1416	200	M14-M16	9,8	11,7	16,2	●
GVM 1820	200	M18-M20	11,7	14,3	19,2	●
GVM 2224	100	M22-M24	16,0	18,6	24,5	●

- » Ventilate heated air
- » Conical and ribbed design fit different sizes
- » Avoid paint ridges at the thread entrance

PLUGS FOR COUNTERSINK HOLES

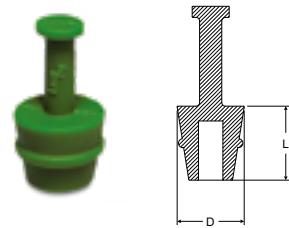
 Design Patent



Prod No.	Qty per box	D, mm	d1, mm	d2, mm	Colour
GGF 08	500	15	7,0	10,2	●
GGF 10	500	19	8,7	11,7	●
GGF 12	500	23	10,4	13,0	●

- » For countersink holes
- » Vertical ribs give flexibility in hole adaption

CONICAL PLUGS WITH GRIP

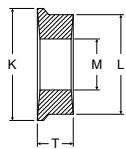
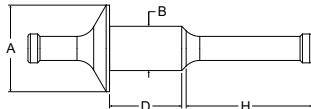


Prod No.	Qty per box	Fits	D, mm	L, mm	Colour
GKS 03	1000	M3	2,8	3,0	●
GKS 04	1000	M4	3,6	4,0	○
GKS 05	1000	M5	4,6	5,0	●
GKS 06	1000	M6	5,5	6,0	●
GKS 08	1000	M8	7,4	8,0	●
GKS 10	1000	M10	9,1	10,0	●
GKS 12	1000	M12	10,8	10,0	●
GKS 16	500	M16	14,8	12,0	●
GKS 20	250	M20	18,5	12,0	●

- » Push plug in place
- » Top surface in same level as masked product
- » Avoid paint ridges at the thread entrance

WASHER PULL PLUGS

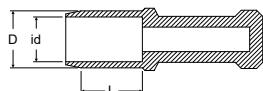
 Design Patent



- » Mask hole and surface around hole
- » Add the washer on back side to mask surface on side of hole
- » Washers have two different diameters
- » Grip for easy handling

Prod No.	Qty per box	Fits	A, mm	B, mm	D, mm	H, mm	Colour
GBM 03X15	1000	M3	10	2,9	15	20	●
GBM 04X15	1000	M4	10	3,8	15	20	○
GBM 05X15	1000	M5	12	4,5	15	20	●
GBM 06X15	500	M6	14	5,5	15	20	●
GBM 08X15	500	M8	16	7,4	15	20	●
GBM 10X15	250	M10	18	9,2	15	23	●
GBM 12X15	250	M12	20	11	15	24	●
GBM 14X15	100	M14	22	12,8	15	24	●
GBM 16X15	100	M16	24	14,9	15	24	●
GBM 18X20	50	M18	26	16,3	20	29	●
GBM 20X20	50	M20	28	18,4	20	29	●

Prod No.	Qty per box	Fits	K, mm	L, mm	M, mm	T, mm	Colour
GBMB 03X3	1000	M3	10	5,5	2,6	3,4	●
GBMB 04X3	1000	M4	10	7	3,4	3,4	○
GBMB 05X4	1000	M5	12	8	4,1	4,5	●
GBMB 06X4	1000	M6	14	10	5	4,6	●
GBMB 08X5	1000	M8	16	13	6,7	5,7	●
GBMB 10X5	1000	M10	18	16	8,2	5,8	●
GBMB 12X5	500	M12	20	18	10	5,8	●
GBMB 14X6	500	M14	22	20	11,6	6,8	●
GBMB 16X6	500	M16	24	22	13,7	6,8	●
GBMB 18X6	250	M18	26	24	15,1	6,9	●
GBMB 20X6	250	M20	28	26	17,2	6,9	●

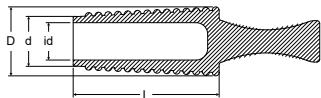


- » Hollow for flexibility and low cost
- » Grip for easy handling
- » Mask thread entrance

METRIC PLUGS

Prod No.	Qty per box	Fits	L, mm	D, mm	id, mm	Colour
GGM 05	500	M5	4,8	4,5	3,5	●
GGM 06	500	M6	5,7	5,3	4,2	●
GGM 08	500	M8	7,8	7,2	5,7	●
GGM 10	500	M10	8,8	9,1	7,2	●
GGM 12	250	M12	11,8	11	8,6	●
GGM 16	200	M16	16,0	14,9	11,7	●
GGM 20	100	M20	20,0	18,6	14,6	●

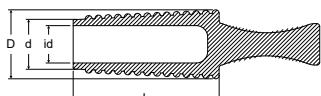
FLANGELESS PLUGS



- » Conical and hollow for flexibility
- » The soft ribs protect entrance well
- » Grip for easy handling
- » Avoid paint ridges at the thread entrance

Prod No.	Qty per box	d-D, mm	id, mm	L, mm	Colour
GKR 00402	500	2,0-4,0	0	19,0	■
GKR 00604	500	4,0-6,0	0	25,4	○
GKR 00806	500	6,0-8,0	0	25,4	●
GKR 01008	500	8,0-10,0	0	25,4	■
GKR 01108	200	8,0-10,3	4,1	25,4	■
GKR 01110	200	10,3-11,9	6,5	25,4	■
GKR 01210	200	10,0-12,0	6,5	25,4	■
GKR 01412	200	12,0-14,0	7,8	25,4	○
GKR 01512	200	11,9-14,3	8,0	25,4	■
GKR 01614	200	14,0-16,0	8,8	25,4	●
GKR 01615	200	14,3-15,9	8,8	25,4	■
GKR 01815	100	15,9-18,3	11,6	25,4	■
GKR 01816	100	16,0-18,0	9,5	25,4	■
GKR 01918	100	18,2-19,0	12,9	25,4	●
GKR 02018	100	18,0-20,0	12,0	25,4	■
GKR 02219	100	19,0-22,2	12,9	25,4	■
GKR 02220	50	20,0-22,5	14,2	25,4	○
GKR 02422	50	22,5-24,0	15,0	25,4	●
GKR 02522	50	22,2-25,4	16,0	25,4	■
GKR 02624	50	24,0-26,0	16,8	25,4	■
GKR 02826	50	26,0-28,0	19,0	25,4	■
GKR 02925	50	25,4-28,6	17,0	25,4	■
GKR 03128	50	28,6-31,7	20,8	25,4	■

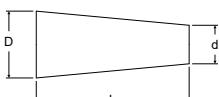
FLANGELESS PLUGS, EPDM



- » Cost effective
- » Good for blasting application
- » Less heat resistant than silicone rubber

Prod No.	Qty per box	d-D, mm	id, mm	L, mm
GKRE 00402	500	2,0-4,0	0	19,0
GKRE 00604	500	4,0-6,0	0	25,4
GKRE 00806	500	6,0-8,0	0	25,4
GKRE 01008	500	8,0-10,0	0	25,4
GKRE 01110	200	10,3-11,9	6,5	25,4
GKRE 01210	200	10,0-12,0	6,5	25,4
GKRE 01412	200	12,0-14,0	7,8	25,4
GKRE 01512	200	11,9-14,3	8,0	25,4
GKRE 01614	200	14,0-16,0	8,8	25,4
GKRE 01615	200	14,3-15,9	8,8	25,4
GKRE 01816	100	16,0-18,0	9,5	25,4
GKRE 01918	100	18,2-19,0	12,9	25,4
GKRE 02018	100	18,0-20,0	12,0	25,4
GKRE 02220	50	20,0-22,5	14,2	25,4
GKRE 02522	50	22,2-25,4	16,0	25,4

CONICAL PLUGS



- » Traditional conical plug
- » Standard plugs from silicone rubber
- » Different lengths

Prod No.	Qty per box	Fits	d-D, mm	L, mm	Colour
GK 0063X0625	1000		0,4-1,6	15,9	●
GK 0078X0750	1000		0,5-2,0	19,1	●
GK 0100X0625	1000		0,8-2,5	15,9	●
GK 0100X1000	1000		0,8-2,5	25,4	●
GK 0125X0625	1000	M3	1,6-3,2	15,9	●
GK 0187X0394	1000		2,8-4,7	10,0	○
GK 0187X0625	1000	M4	1,6-4,7	15,9	○
GK 0187X0750	1000		1,6-4,7	19,1	●
GK 0188X2200	1000		1,2-4,8	55,9	●
GK 0197X1100	1000		1,2-5,0	27,9	●
GK 0200X0750	1000		1,6-5,1	19,1	●
GK 0216X1500	1000		1,2-5,5	38,1	●
GK 0218X0250	1000		4,7-5,5	6,4	●
GK 0250X0750	1000	M5	3,2-6,4	19,1	●
GK 0250X1000	1000		3,2-6,4	25,4	●
GK 0343X0625	1000	M6	4,7-8,7	15,9	●
GK 0343X1000	1000		4,7-8,7	25,4	●
GK 0354X0984	1000		4,5-9,0	25,0	○
GK 0375X0500	1000		6,4-9,5	12,7	●
GK 0375X0750	1000	M8	6,4-9,5	19,1	●
GK 0375X1250	1000		3,2-9,5	31,8	●
GK 0393X0787	500		6,0-10,0	20,0	●
GK 0394X1890	500		5,0-10,0	48,0	○
GK 0437X1000	500	M10	6,4-11,1	25,4	●
GK 0438X0688	500		8,7-11,1	17,5	●
GK 0472X0748	500	M12	9,0-12,0	19,0	●
GK 0500X1000	500		7,9-12,7	25,4	●
GK 0500X2000	200		3,2-12,7	50,8	●
GK 0563X1000	200	M14	9,5-14,3	25,4	●
GK 0591X0787	250		11,0-15,0	20,0	●
GK 0594X1000	200		10,0-15,0	25,4	●
GK 0625X0813	200	M16	11,1-15,9	20,7	●
GK 0656X1000	200		12,7-16,7	25,4	○
GK 0669X1000	200	M18	13,0-17,0	25,4	●
GK 0687X1000	200		11,1-17,4	25,4	○
GK 0748X1000	200	M20	14,0-19,0	25,4	●
GK 0787X1000	200		16,0-20,0	25,4	●
GK 0812X1000	100		15,9-20,6	25,4	●
GK 0938X1000	100		18,0-23,8	25,4	●
GK 0990X0795	100		22,4-25,1	20,2	○
GK 1024X1000	100		20,0-26,0	25,4	○
GK 1220X1181	50		25,0-31,0	30,0	○

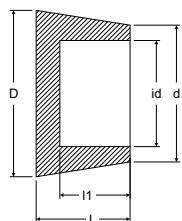
CONICAL PLUGS, EPDM



- » Cost effective
- » Good for blasting applications
- » Less heat resistant than silicone rubber

Prod No.	Qty per box	Fits	d-D, mm	L, mm
GKE 0250X0750	1000	M5	3,2-6,4	19,1
GKE 0343X0625	1000	M6	4,7-8,7	15,9
GKE 0375X0750	1000	M8	6,4-9,5	19,1
GKE 0437X1000	500	M10	6,4-11,1	25,4
GKE 0472X0748	500	M12	9,0-12,0	19,0
GKE 0500X1000	500		7,9-12,7	25,4
GKE 0563X1000	200	M14	9,5-14,3	25,4
GKE 0594X1000	200		10,0-15,0	25,4
GKE 0625X0813	200	M16	11,1-15,9	20,7
GKE 0669X1000	200	M18	13,0-17,0	25,4
GKE 0748X1000	200	M20	14,0-19,0	25,4
GKE 0938X1000	100		18,0-23,8	25,4
GKE 1024X1000	100		20,0-26,0	25,4

HOLLOW CONICAL PLUGS

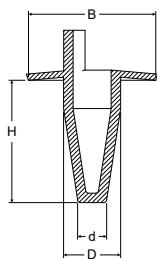


- » Conical plugs
- » Hollow for better flexibility
- » Can also be used as caps
- » Cost saving design

Prod No.	Qty per box	d-D, mm	L, mm	id, mm	l1, mm	Colour
GKH 1063	100	23-27	25,4	12,5	19	○
GKH 1100	100	24-28	25,4	13,0	19	●
GKH 1181	50	28-30	25,4	14,5	19	■
GKH 1260	50	26-32	25,4	15,5	19	■
GKH 1338	50	27-34	25,4	17,0	19	●
GKH 1456	50	30-37	25,4	19,9	19	●
GKH 1535	50	31-39	25,4	21,8	19	○/●
GKH 1614	25	33-41	25,4	25,0	19	●
GKH 1693	25	36-43	25,4	26,0	19	●
GKH 1772	25	37-45	25,4	28,7	19	●
GKH 1810	25	38-46	25,4	30,0	19	○
GKH 1968	25	42-50	25,4	31,6	19	●
GKH 2086	25	45-53	25,4	36,0	19	■
GKH 2205	20	48-56	25,4	39,8	19	■
GKH 2480	20	50-63	25,4	45,4	19	●
GKH 2520	10	54-64	25,4	49,0	19	●
GKH 2677	10	58-68	25,4	51,0	19	○/●
GKH 2953	10	62-75	25,4	57,0	19	●
GKH 3010	10	73-77	25,4	53,6	16	○/●
GKH 3543	5	75-90	39,0	62,5	30	●
GKH 4055	5	83-103	39,0	71,5	30	●
GKH 5000	10	89-127	50,8	78,0	30	○
GKH 5511	1	110-140	50,0	95,0	35	●
GKH 6299	1	130-160	50,0	110,0	35	■
GKH 7480	1	163-190	50,0	143,2	35	●

CONICAL PLUGS MULTI

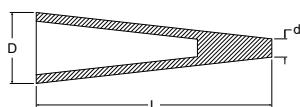
 Design Patent



Prod No.	Qty per box	Fits	D-d, mm	H, mm	B, mm	Colour
GKM 08	1000	M8	7,3-4,0	20	11,3	Yellow
GKM 08B	500	M8	7,3-4,0	20	17	Yellow
GKM 10	1000	M10	9,1-4,5	20	13,1	Brown
GKM 10B	500	M10	9,1-4,5	20	21	Brown
GKM 12	500	M12	10,8-6,0	20	14,8	Red
GKM 11,8	500		11,8-7,0	20	15,8	Purple
GKM 14	500	M14	12,5-8,0	25	16,5	Blue
GKM 14B	200	M14	12,5-8,0	25	23	Blue
GKM 13,1	200		13,1-9,0	25	17,1	Orange
GKM 16	250	M16	14,5-10,5	25	18,5	Green
GKM 16B	200	M16	14,5-10,5	25	31	Green
GKM 20	200	M20	18,0-13,0	25	22	Black
GKM 20B	100	M20	18,0-13,0	25	38	Black
GKM 22	200	M22	20,0-14,0	25	24	Yellow
GKM 24B	50	M24	21,0-15,0	15	33	Blue
GKM 30,5	100		30,5-24,0	25	34,5	White
GKM 34,3	50		34,3-28,0	25	38,3	Black
GKM 47,1	25		47,1-40,0	25	51,1	Red
GKM 53,6	25		53,6-47,0	25	57,6	Blue

- » Fit metric threads
- » Mask washer surface around holes
- » Grip for removal
- » Hollow and conical making it flexible

SOFT HOLLOW CONICAL PLUGS

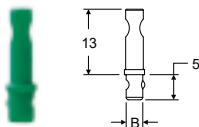


Prod No.	Qty per box	d-D, mm	L, mm	Colour
GMK 0206	1000	1,8-6,2	38,9	Grey
GMK 0415	200	3,8-14,8	49,0	Brown
GMK 1430	50	13,8-30,5	74,5	White

- » Conical and hollow for flexibility
- » Fit many diameters and forms of holes

SMALL HOLE PLUGS

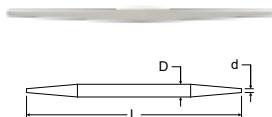
 Design Patent



Prod No.	Qty per box	B, mm	Colour
GSH M2,5	1000	2,1	Orange
GSH M3	1000	2,5	Pink
GSH M4	1000	3,3	White
GSH M5	1000	4,2	Green

- » Silicone rubber plugs for small holes
- » Time saving handling

MOUSE TAILS

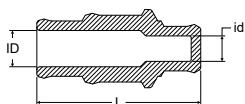


Prod No.	Qty per box	D, mm	d, mm	L, mm	Colour
GMS 079	1000	2,0	0,6	33,8	Brown
GMS 080	1000	2,0	0,6	52,8	Yellow
GMS 100	1000	2,5	0,8	52,8	Green
GMS 125	1000	3,2	1,0	50,8	Blue

- » Tiny tail in silicone rubber
- » For small holes or other openings

TRIPLE MULTIPLUGS

 Design Patent

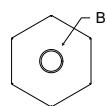
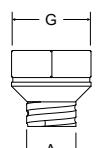


Prod No.	Qty per box	Fits	ID, mm	id, mm	L, mm	Colour
GMU 040506	1000	M4/M5/M6	2	2	15,5	Blue
GMU 081012	500	M8/M10/M12	5,7	4	25,8	Blue
GMU 141618	200	M14/M16/M18	9,5	7,5	37,1	Blue

Prod No.	Qty per box	Fits	ID, mm	id, mm	L, mm	Material
GMUE 040506	1000	M4/M5/M6	2	2	15,5	EPDM
GMUE 081012	500	M8/M10/M12	5,7	4	25,8	EPDM
GMUE 141618	200	M14/M16/M18	9,5	7,5	37,1	EPDM

- » Each plug fit three different thread sizes
- » Also cap function

Q-BOLTS

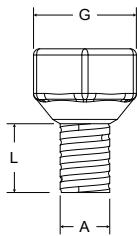


Prod No.	Qty per box	A	G, mm	B, mm	Colour
QB 03	1000	M3	6	M4	●
QB 04	1000	M4	7	M4	○
QB 05	1000	M5	8	M4	●
QB 06	200	M6	10	M4	●
QB 08	200	M8	13	M4	●
QB 10	200	M10	16	M4	●
QB 12	100	M12	18	M5	●
QB 14	50	M14	24	M6	●
QB 16	50	M16	24	M6	●
QB 20	50	M20	30	M8	●
QB 22	20	M22	32	M8	●
QB 24	20	M24	36	M8	●
QB G1/8	200	G1/8	16	M6	●
QB G1/4	50	G1/4	20	M6	●
QB G3/8	20	G3/8	26	M6	●
QB G1/2	20	G1/2	28	M6	●
QB G3/4	10	G3/4	33	M6	●
QB G1	10	G1	40	M6	○
QB M8X0,75	200	M8x0,75	13	M4	●
QB M10X1,0	200	M10x1,0	16	M4	●

» Fit threaded holes

» Tight masking and protection of entrance, ideal for e-coating

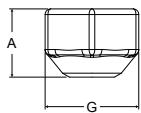
» Threaded hole in the top of the Q-bolt to accept eyebolts (MS) for hanging and earthing



Prod No.	Qty per box	A, mm	G, mm	L, mm	Colour
QBB 03	1000	M3	9,5	2,5	●
QBB 04	1000	M4	11,0	3,0	○
QBB 05	750	M5	11,9	4,0	●
QBB 06	500	M6	13,9	4,0	●
QBB 08	250	M8	16,8	3,5	●
QBB 10	150	M10	20,5	5,0	●
QBB 12	100	M12	22,5	5,0	●

» Q-bolt without hanging hole

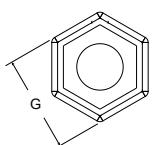
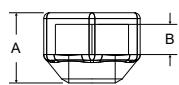
Q-BOLTS



Prod No.	Qty per box	G, mm	A, mm	Colour
QBN 03	1000	9,5	7,5	●
QBN 04	1000	11,0	8,1	○
QBN 05	1000	11,9	9,1	●
QBN 06	1000	13,9	10,2	●
QBN 08	500	16,8	12,3	●
QBN 10	150	20,5	13,4	●
QBN 12	100	22,5	14,3	●

» Assembled hexagon nut protected by a silicone rubber masking

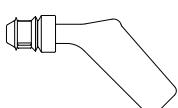
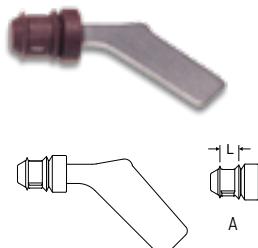
» Can be used together with a threaded bolt or bar



Prod No.	Qty per box	G, mm	A, mm	B, mm	Colour
QBB 03 A	1000	9,5	7,5	1,9	●
QBB 04 A	1000	11,0	8,1	2,6	○
QBB 05 A	1000	11,9	9,1	3,4	●
QBB 06 A	1000	13,9	10,2	3,8	●
QBB 08 A	500	16,8	12,3	5,2	●
QBB 10 A	150	20,5	13,4	6,2	●
QBB 12 A	100	22,5	14,3	7,2	●

» Silicone rubber cap for hexagon bolt-head or nut

» Assemble your own Q-bolt with the thread length you need



MASKING AND HANGING, HOLES

Prod No.	Qty per box	Fits	L, mm	Colour
GHH 06	500	M6		●
GHH 06 A	1000	M6	4,2	●
GHH 08	200	M8		●
GHH 08 A	1000	M8	5,0	●
GHH 10	200	M10		●
GHH 10 A	1000	M10	6,8	●
GHH 12	200	M12		●
GHH 12 A	1000	M12	8,5	●

» Hang and mask simultaneously

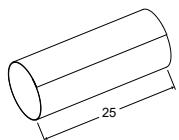
» For metric holes

» Grounding secured

» Fit BHL system

» Masking parts GHH xx A are sold separately

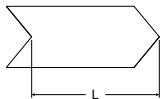
BUDGET MASKINGS, STEEL CYLINDER



Prod No.	Qty per box	Fits
SH 04	20000	M4
SH 05	12000	M5
SH 06	12000	M6
SH 08	7500	M8
SH 10	4500	M10
SH 12	3000	M12

- » Masking of metric holes
- » Made from thin spring steel
- » Make it possible to still use the hole for hanging (earthing)
- » Low cost solution

BUDGET MASKINGS, FOAM PIECES

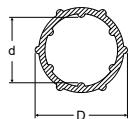


Prod No.	Qty per box	Fits	L, mm	Colour
GCH 06	1000	M6	20	●
GCH 08	500	M8	20	●
GCH 10	500	M10	25	●
GCH 12	500	M12	25	●

- » Foam silicone rubber
- » Designed primarily for metric threads
- » Cut from extruded material giving wider tolerance
- » Low cost solution

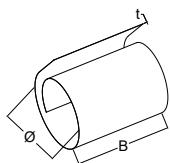
RIBBED SILICONE RUBBER TUBINGS

 Design Patent



Prod No.	Qty per box	L, mm	d/D, mm	Colour
SSR 0306X30	1000	30	2,7x5,3	■
SSR 0408X35	500	35	3,6x7,0	■
SSR 0510X40	500	40	4,6x9,0	■
SSR 0612X45	200	45	5,4x11,0	■
SSR 0814X50	200	50	7,1x13,0	■
SSR 1016X60	100	60	8,9x15,2	■

- » Low friction for easy handling
- » Can be used for both hole and axle maskings



L~3,5xØ



MASKING PANELS

Prod No.	Ø-Ø, mm	B, mm	t, mm
SH 30	10-30	40	0,05
SH 60	30-60	40	0,10
SH 160	30-60	100	0,10

- » Flexible masking for big holes
- » Still possible to hang in the hole with good earthing
- » For actual price, ask for a quotation!



SMART EXAMPLE / CUSTOMIZED MASKING FOR HOLES



Combined hanging and masking



Masking for complex geometry



Hang and mask in a jig by contact point integrated in the masking



SMART EXAMPLE / CUSTOMIZED MASKING FOR HOLES



Push plug, here applied with PUSHER tool



Mutiple flange plug

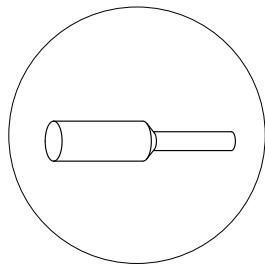


Double flange plug

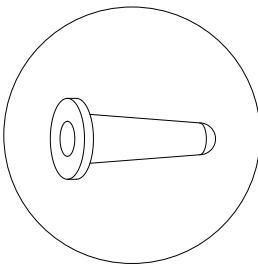
NON STOCKED ITEMS, MASKING FOR HOLES

Here we show some old products which have been replaced by updated and improved products. Sometimes the old ones are preferable and therefore they are still available to order. Some of them are even available as stock items.

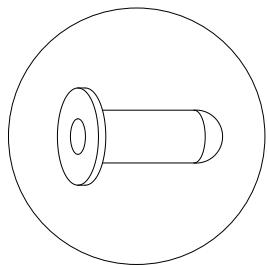
See www.hangon.com for more sizes and/or ask for a quotation.



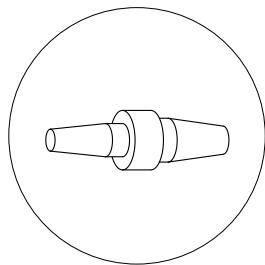
Cylindrical pull plugs - **GD**



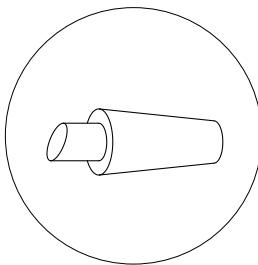
Conical flange plugs - **GKF**



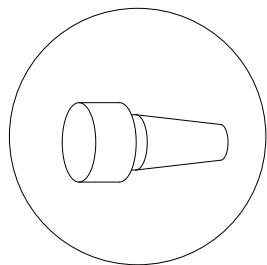
Washer caps - **GF**



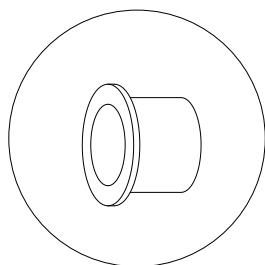
Washer plugs - **GKB/GKBS**



Cylindrical plugs with sloping edge - **GG**



Single-sided conical washer plugs - **GEKB**



Tube inserts - **GR**

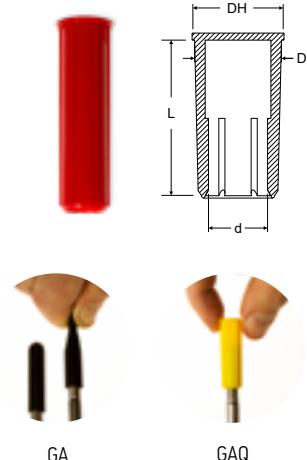


MASKING FOR AXLES

140	GAQ	CAPS
142	GAP	CAPS WITH ENTRANCE LIP
144	GAP S	CAP FOR OIL NIPPLE
144	GAE	CAPS, EPDM
145	GA	CAPS
147	GHA	MASKING AND HANGING, AXLES
147	GAF	FLAT CONNECTION CAPS
147	PUSHER	MASKING TOOL
148	SSR / SSF	RIBBED SILICONE RUBBER TUBINGS / STARTUBES
149	SS	SILICONE RUBBER TUBINGS
150	SP / SU	FOAM SILICONE RUBBER PROFILES / U- PROFILES
151	SK	CUTTING TOOL
151	GCA / SA	BUDGET MASKINGS, AXLE
154		NON STOCKED ITEMS, MASKING FOR AXLES

GAQ - CAPS

 Design Patent



Prod No.	Qty per box	Fits	d, mm	D, mm	L, mm	DH, mm	Colour
GAQ M3X15	1000	M3	2,8	5,8	15	6,2	●
GAQ M3X25	1000	M3	2,8	5,8	25	6,2	●
GAQ M4X20	1000	M4	3,8	7,1	20	7,5	○
GAQ M4X30	1000	M4	3,8	7,1	30	7,5	○
GAQ M5X25	1000	M5	4,7	8,4	25	8,8	●
GAQ M5X35	500	M5	4,7	8,4	35	8,8	●
GAQ M6X30	500	M6	5,7	9,7	30	10,1	●
GAQ M6X42	500	M6	5,7	9,7	42	10,1	●
GAQ M8X20	500	M8	7,6	12,2	20	12,8	●
GAQ M8X35	250	M8	7,6	12,2	35	12,8	●
GAQ M8X42	250	M8	7,6	12,2	42	12,8	●
GAQ M8X56	250	M8	7,6	12,2	56	12,8	●
GAQ M10X40	200	M10	9,4	14,8	40	15,5	●
GAQ M10X70	100	M10	9,4	14,8	70	15,5	●
GAQ M12X40	200	M12	11,3	17,5	40	18,1	●
GAQ M12X80	100	M12	11,3	17,5	80	18,1	●
GAQ M14X40	100	M14	13,2	20,0	40	20,8	●
GAQ M14X80	50	M14	13,2	20,0	80	20,8	●
GAQ M16X40	100	M16	15,1	22,6	40	23,5	●
GAQ M16X80	50	M16	15,1	22,6	80	23,5	●

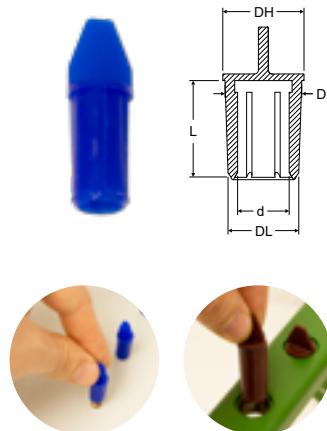
» Quick, 2 times faster handling compared to standard cap GA

» Cost efficient

» Ventilated, does not blow off in the curing oven so easily

GAQ - CAPS WITH GRIP

 Design Patent



Prod No.	Qty per box	Fits	d mm	D mm	L mm	DL mm	DH mm	Colour
GAQ M4X12 H	1000	M4	3,8	7,0	12	6,6	7,5	○
GAQ M5X7 H	1000	M5	4,7	8,3	7	7,8	8,8	●
GAQ M5X15 H	1000	M5	4,7	8,3	15	7,8	8,8	●
GAQ M6X11 H	1000	M6	5,7	9,6	11	8,9	10,1	●
GAQ M6X18 H	1000	M6	5,7	9,6	18	8,9	10,1	●
GAQ M8X8 H	1000	M8	7,6	12,1	8	11,2	12,8	●
GAQ M8X15 H	500	M8	7,6	12,1	15	11,2	12,8	●
GAQ M8X22 H	500	M8	7,6	12,1	22	11,2	12,8	●
GAQ M10X10 H	500	M10	9,4	14,6	10	13,5	15,5	●
GAQ M10X18 H	250	M10	9,4	14,6	18	13,5	15,5	●
GAQ M10X25 H	250	M10	9,4	14,6	25	13,5	15,5	●
GAQ M12X25 H	200	M12	11,3	17,2	25	15,8	18,1	●

» Quick, 2 times faster handling compared to standard cap GA

» The grip makes it easier to use the masking also in holes

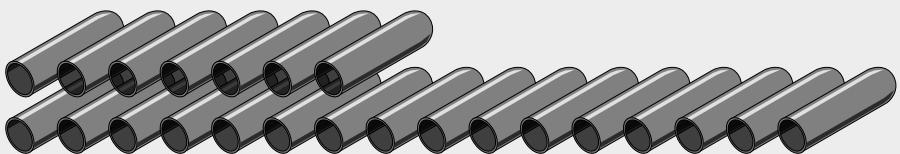
» Cost efficient

» Ventilated, does not blow off in the curing oven so easily

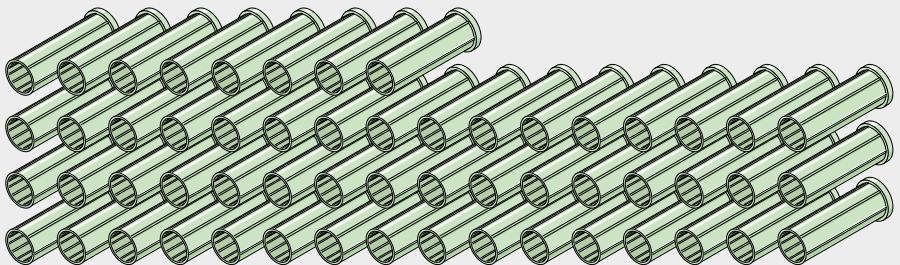
SMART COST REDUCTION / STANDARD GA vs GAQ



30 sec



30 sec



2 TIMES FASTER = 50% TIME SAVING

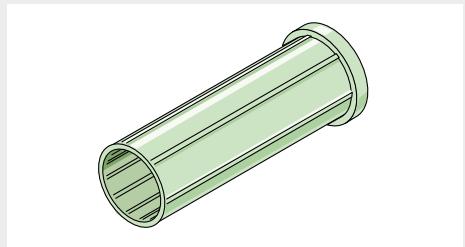
To mount and dismount a GA masking from an axle can be a relatively difficult task and takes time. The ribs inside GAQ solves that problem.

www.hangon.com/en/calculation_GAQ



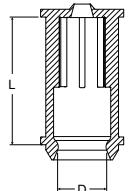
GAQ OFFERS FRICTION REDUCTION AND VENTILATED MASKING

Masking with ribs – the reason behind most ribs is to reduce friction, thus speeding up handling. Trapped air which is heated builds pressure, and the ribs allow the air to ventilate.



CAPS WITH ENTRANCE LIP

 Design Patent

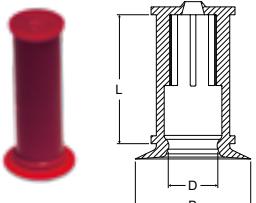


Prod No.	Qty per box	Fits	L, mm	D, mm	Colour
GAP 04X20	500	M4	20	3,2	
GAP 05X25	500	M5	25	4,2	○
GAP 05X50	200	M5	50	4,2	●
GAP 06X11,5	500	M6	11,5	5,2	●
GAP 06X14	500	M6	14	5,2	●
GAP 06X18	500	M6	18	5,2	●
GAP 06X25	500	M6	25	5,2	●
GAP 06X50	200	M6	50	5,2	●
GAP 08X25	500	M8	25	7,2	■
GAP 08X50	200	M8	50	7,2	■
GAP 10X15	500	M10	15	9,2	■
GAP 10X25	200	M10	25	9,2	■
GAP 10X40	100	M10	40	9,2	■
GAP 10X50	100	M10	50	9,2	■
GAP 12X25	200	M12	25	11,2	■
GAP 12X50	100	M12	50	11,2	■
GAP 14X25	200	M14	25	13,2	●
GAP 14X50	100	M14	50	13,2	●
GAP 16X25	100	M16	25	15,2	●
GAP 16X50	50	M16	50	15,2	●
GAP 18X25	50	M18	25	17,2	■
GAP 18X50	25	M18	50	17,2	■
GAP 20X25	50	M20	25	19,2	●
GAP 20X50	25	M20	50	19,2	●
GAP 20X70	25	M20	70	19,2	●
GAP 22X25	100	M22	25	21,2	■
GAP 22X50	50	M22	50	21,2	■
GAP 30X25	50		25	29,5	●
GAP 30X50	25		50	29,5	●
GAP 32X30	50		30	31,0	●
GAP 33X46	25		46	32,0	●
GAP 35X50	25		50	34,5	■
GAP 40X50	20		50	39,5	■
GAP 50X50	10		50	49,5	■

- » Easy slide on and off
- » Trapped air can be ventilated
- » Caps are stabilized by internal ribs
- » Grip for easy removal

CAPS WITH ENTRANCE LIP AND WASHER

 Design Patent

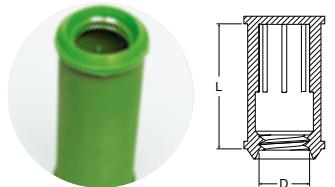


- » Same properties as normal GAP
- » Washer function added

Prod No.	Qty per box	Fits	L, mm	D, mm	B, mm	Colour
GAP 04X20 B	500	M4	20	3,2	9	○
GAP 05X25 B	500	M5	25	4,2	10	●
GAP 05X50 B	200	M5	50	4,2	10	●
GAP 06X25 B	500	M6	25	5,2	12	●
GAP 06X50 B	200	M6	50	5,2	12	●
GAP 08X15 B	500	M8	15	7,2	16	●
GAP 08X25 B	200	M8	25	7,2	16	●
GAP 08X50 B	200	M8	50	7,2	16	●
GAP 10X25 B	200	M10	25	9,2	20	●
GAP 10X50 B	100	M10	50	9,2	22	●
GAP 12X25 B	200	M12	25	11,2	22	●
GAP 12X50 B	100	M12	50	11,2	24	●
GAP 14X25 B	100	M14	25	13,2	22	●
GAP 14X50 B	100	M14	50	13,2	28	●
GAP 16X25 B	100	M16	25	15,2	30	●
GAP 16X50 B	50	M16	50	15,2	30	●
GAP 18X25 B	50	M18	25	17,2	30	●
GAP 18X50 B	25	M18	50	17,2	34	●
GAP 20X25 B	50	M20	25	19,2	37	●
GAP 20X50 B	25	M20	50	19,2	36	●
GAP 30X50 B	25		50	29,5	39	●
GAP 35X50 B	25		50	34,5	46	●
GAP 40X50 B	20		50	39,5	50	●
GAP 50X50 B	10		50	49,5	60	●
GAP 52,5X50 B	10		50	51,5	86	○

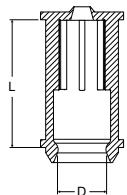
CAPS WITH THREADED ENTRANCE

 Design Patent



- » Ideal for e-coating
- » Tight design
- » Threads to make it tight
- » Grip for easy removal

Prod No.	Qty per box	Fits	L, mm	D, mm	Colour
GAP 06X11 T	500	M6	11	6	●
GAP 06X25 T	500	M6	25	6	●
GAP 06X50 T	200	M6	50	6	●
GAP 08X15 T	500	M8	15	8	●
GAP 08X25 T	500	M8	25	8	●
GAP 08X50 T	200	M8	50	8	●
GAP 10X18 T	200	M10	18	10	●
GAP 10X25 T	200	M10	25	10	●
GAP 10X50 T	100	M10	50	10	●
GAP 12X25 T	200	M12	25	12	●
GAP 12X50 T	100	M12	50	12	●
GAP 14X25 T	100	M14	25	14	●
GAP 14X50 T	100	M14	50	14	●
GAP 16X50 T	50	M16	50	16	●
GAP 18X50 T	50	M18	50	18	●
GAP 20X50 T	25	M20	50	20	●

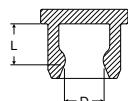


- » Cost effective
- » Good for blasting application
- » Less heat resistant than silicone rubber

CAPS WITH ENTRANCE LIP, EPDM

Design Patent

Prod No.	Qty per box	Fits	L, mm	D, mm
GAPE 05X25	500	M5	25	4,2
GAPE 06X25	500	M6	25	5,2
GAPE 08X25	500	M8	25	7,2
GAPE 10X25	200	M10	25	9,2
GAPE 12X25	200	M12	25	11,2
GAPE 14X25	200	M14	25	13,2
GAPE 16X25	100	M16	25	15,2
GAPE 18X25	50	M18	25	17,2
GAPE 20X25	50	M20	25	19,2
GAPE 22X25	100	M22	25	21,2

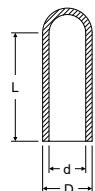
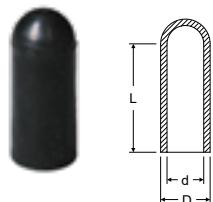


CAP FOR OIL NIPPLE

Design Patent

Prod No.	Qty per box	L, mm	D, mm	Colour
GAP 06X5 S	200	7,5	6,9	●

- » Fits standard oil nipple

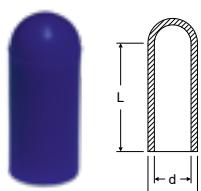


- » Cost effective
- » Good for blasting application
- » Less heat resistant than silicone rubber

CAPS, EPDM

Prod No.	Qty per box	d, mm	D, mm	L, mm
GAE 0100X100	1000	2,5	5,1	25,4
GAE 0140X100	1000	3,6	6,6	25,4
GAE 0148X100	1000	3,8	6,8	25,4
GAE 0180X100	1000	4,6	7,6	25,4
GAE 0223X100	500	5,7	8,7	25,4
GAE 0234X100	500	5,9	8,9	25,4
GAE 0295X100	200	7,5	10,5	25,4
GAE 0375X100	200	9,5	12,5	25,4
GAE 0406X100	200	10,3	13,3	25,4
GAE 0456X150	200	11,6	14,2	38,0
GAE 0625X150	100	15,9	18,9	38,0
GAE 0687X150	50	17,4	20,4	38,0
GAE 0750X150	50	19,1	22,1	38,0
GAE 0812X150	50	20,6	23,6	38,0
GAE 0970X150	25	24,6	27,6	38,0

CAPS

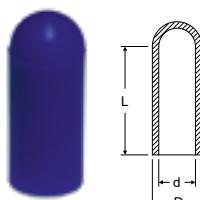


Prod No.	Qty per box	d, mm	D, mm	L, mm	Colour
GA 0035X050	1000	0,9	3,4	12,7	○
GA 0062X075	1000	1,6	3,8	19,1	●
GA 0070X100	1000	1,8	4,0	25,4	○
GA 0080X075	1000	2,0	5,0	19,1	●
GA 0093X075	1000	2,4	5,0	19,1	●
GA 0100X050	1000	2,5	5,1	12,7	○
GA 0100X100	1000	2,5	5,1	25,4	○
GA 0109X050	1000	2,8	5,8	12,7	●
GA 0109X075	1000	2,8	5,4	19,1	●
GA 0125X050	1000	3,2	5,8	12,7	●
GA 0125X100	1000	3,2	5,8	25,4	●
GA 0140X050	1000	3,6	6,6	12,7	○
GA 0140X100	1000	3,6	6,6	25,4	○
GA 0148X050	1000	3,8	6,8	12,7	●
GA 0148X0750	1000	3,8	6,8	19,1	●
GA 0148X100	1000	3,8	6,8	25,4	●
GA 0156X050	1000	4,0	7,0	12,7	○
GA 0156X100	1000	4,0	7,0	25,4	●
GA 0172X050	1000	4,4	7,4	12,7	●
GA 0172X100	1000	4,4	7,4	25,4	●
GA 0172X150	500	4,4	7,4	38,0	●
GA 0180X100	1000	4,6	7,6	25,4	●
GA 0187X050	1000	4,7	7,7	12,7	○
GA 0187X075	1000	4,7	7,8	19,1	○
GA 0187X100	1000	4,7	7,7	25,4	○
GA 0197X050	1000	5,0	8,0	12,7	●
GA 0218X100	500	5,5	8,5	25,4	●
GA 0223X075	1000	5,7	8,7	19,1	●
GA 0223X100	500	5,7	8,7	25,4	●
GA 0223X150	500	5,7	8,7	38,0	●
GA 0234X0500	1000	5,9	9,0	12,7	○
GA 0234X100	500	5,9	8,9	25,4	○
GA 0234X150	500	5,9	8,9	38,0	●
GA 0250X100	500	6,4	9,4	25,4	●
GA 0260X100	500	6,6	9,6	25,4	●
GA 0281X100	200	7,1	10,1	25,4	●
GA 0295X050	1000	7,5	10,5	12,7	●
GA 0295X0750	500	7,5	10,5	19,1	●
GA 0295X100	200	7,5	10,5	25,4	●
GA 0295X150	200	7,5	10,5	38,0	●
GA 0312X100	200	7,9	10,9	25,4	○
GA 0312X150	200	7,9	10,9	38,0	●
GA 0340X100	200	8,6	11,6	25,4	●
GA 0355X150	200	9,0	12,0	38,0	●

- » Standard caps from silicone rubber
- » Huge range of stocked items
- » Can also be used for holes
- » More sizes, see www.hangon.com



CAPS

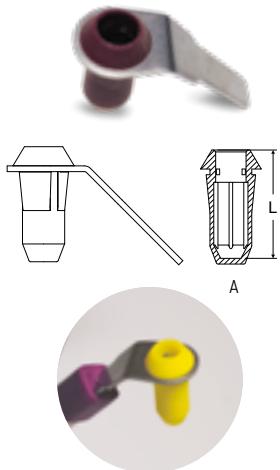


- » Standard caps from silicone rubber
- » Huge range of stocked items
- » Can also be used for holes
- » More sizes, see www.hangon.com

Prod No.	Qty per box	d, mm	D, mm	L, mm	Colour
GA 0366X150	200	9,3	12,3	38,0	●
GA 0375X075	500	9,5	12,6	19,1	○
GA 0375X100	200	9,5	12,5	25,4	○
GA 0375X150	200	9,5	12,5	38,0	●
GA 0406X100	200	10,3	13,3	25,4	○
GA 0437X100	200	11,1	14,1	25,4	●
GA 0456X150	200	11,6	14,2	38,0	○
GA 0468X100	200	11,9	14,9	25,4	○
GA 0468X150	200	11,9	14,9	38,0	○
GA 0480X150	200	12,2	15,2	38,0	●
GA 0500X150	100	12,7	15,6	38,0	○
GA 0535X150	100	13,6	16,2	38,0	○
GA 0562X080	250	14,3	17,3	20,3	○
GA 0562X150	100	14,3	17,3	38,0	○
GA 0600X150	100	15,2	18,0	38,0	○
GA 0625X150	100	15,9	18,9	38,0	○
GA 0625X250	50	15,9	18,9	63,5	○
GA 0687X062	50	17,4	20,4	15,9	○
GA 0687X100	100	17,4	20,5	25,4	○
GA 0687X150	50	17,4	20,4	38,0	○
GA 0730X150	50	18,5	21,5	38,0	○
GA 0750X150	50	19,1	22,1	38,0	○
GA 0750X350	25	19,1	22,1	88,9	○
GA 0780X150	50	19,8	22,8	38,0	○
GA 0812X150	50	20,6	23,6	38,0	○
GA 0875X1000	100	22,2	25,3	25,4	○
GA 0875X150	50	22,2	25,2	38,0	○
GA 0937X150	50	23,8	26,8	38,0	○
GA 0970X150	25	24,6	27,6	38,0	○
GA 0970X400	25	24,6	27,6	101,6	○
GA 1000X150	25	25,4	28,4	38,0	○
GA 1000X200	25	25,4	28,4	50,8	○
GA 1062X150	25	27,0	30,0	38,0	○
GA 1062X200	25	27,0	30,0	50,8	○
GA 1125X150	25	28,6	31,6	38,0	○
GA 1187X150	25	30,1	33,1	38,0	○
GA 1250X150	25	31,8	34,8	38,0	○
GA 1350X175	25	34,3	37,3	44,5	○
GA 1380X100	25	35,1	38,1	25,4	○
GA 1500X100	25	38,1	41,1	25,4	○
GA 1500X175	20	38,1	41,1	44,5	○
GA 1625X200	10	41,3	44,3	50,8	○
GA 1750X200	10	44,5	47,5	50,8	○
GA 1875X200	10	47,6	50,6	50,8	○
GA 2000X100	25	50,8	53,8	25,4	○
GA 2000X200	10	50,8	53,8	50,8	○
GA 2105X200	10	53,5	56,5	50,8	○

MASKING AND HANGING, AXLES

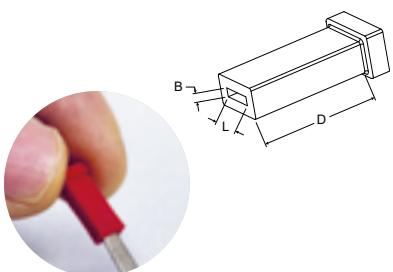
 Design Patent



Prod No.	Qty per box	Fits	L, mm	Colour
GHA 08	200	M8		■
GHA 08 A	500	M8	28,5	■
GHA 10	200	M10		■
GHA 10 A	250	M10	28,5	■
GHA 12	100	M12		■
GHA 12 A	250	M12	28,5	■

- » Hang and mask simultaneously
- » For metric axles
- » Grounding secured
- » Fit BHL system
- » Masking parts GHA xx A are sold separately

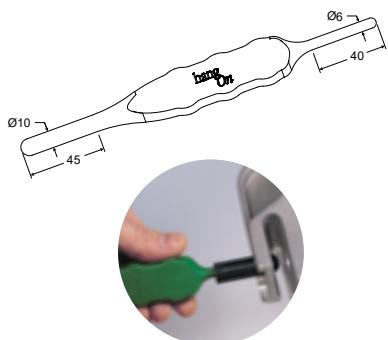
FLAT CONNECTION CAPS



Prod No.	Qty per box	L x B, mm	D, mm	Colour
GAF 28X08	1000	2,8x0,8	11,0	■
GAF 48X08	1000	4,8x0,8	11,0	■
GAF 63X08	1000	6,3x0,8	11,0	■

- » Special caps for flat connections
- » Grip for easy removal

MASKING TOOL

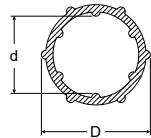


Prod No.
PUSHER 1

- » Tool for pushing masking products into holes
- » Save time and increase precision

RIBBED SILICONE RUBBER TUBINGS

 Design Patent

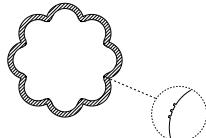


Prod No.	Qty per box	L, mm	d/D, mm	Colour
SSR 0306X30	1000	30	2,7x5,3	●
SSR 0408X35	500	35	3,6x7,0	●
SSR 0510X40	500	40	4,6x9,0	●
SSR 0612X45	200	45	5,4x11,0	●
SSR 0814X50	200	50	7,1x13,0	●
SSR 1016X60	100	60	8,9x15,2	●

Prod No.	Roll length, m	d/D, mm	Colour
SSR 0306	25	2,7x5,3	●
SSR 0408	25	3,6x7,0	●
SSR 0510	25	4,6x9,0	●
SSR 0612	25	5,4x11,0	●
SSR 0814	25	7,1x13,0	●
SSR 1016	25	8,9x15,2	●

- » Low friction for easy handling
- » Available both on roll and pre-cut standard length
- » Both for hole and axle maskings
- » Cost for cutting, ask for a quotation!

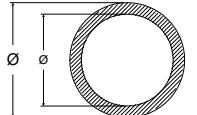
STARTUBES



Prod No.	Roll length, m	Fits Ø, mm	Colour
SSF 03/05	25	3-5	●
SSF 05/07	25	5-7	●
SSF 07/09	25	7-9	○
SSF 09/11	25	9-11	●
SSF 11/13	25	11-13	●
SSF 13/17	25	13-17	●
SSF 15/20	25	15-20	○
SSF 17/22	25	17-22	○
SSF 23/28	10	23-28	●
SSF 29/35	5	29-35	●
SSF 36/45	5	36-45	●

- » The special form reduces friction
- » Fit on different diameters
- » Supplied in full rolls or cut into pieces
- » Cost for cutting, ask for a quotation!

SILICONE RUBBER TUBINGS

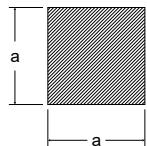
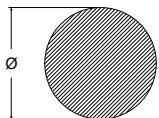


Prod No.	Ø/Ø, mm	Roll length, m
SS 01/03	1/3	25
SS 02/04	2/4	25
SS 03/06	3/6	25
SS 04/07	4/7	25
SS 05/08	5/8	25
SS 06/09	6/9	25
SS 07/10	7/10	25
SS 08/11	8/11	25
SS 09/12	9/12	25
SS 10/13	10/13	25
SS 11/14	11/14	25
SS 12/15	12/15	25
SS 13/16	13/16	25
SS 14/18	14/18	25
SS 15/19	15/19	25
SS 16/20	16/20	25
SS 17/21	17/21	25
SS 18/22	18/22	25
SS 19/23	19/23	25
SS 20/24	20/24	25
SS 22/26	22/26	25
SS 24/28	24/28	25
SS 25/29	25/29	25
SS 26/30	26/30	25
SS 30/34	30/34	25
SS 35/38	35/38	25
SS 40/43	40/43	25
SS 45/48	45/48	25
SS 50/53	50/53	25

- » Silicone tubing supplied in full rolls or cut into pieces
- » Size tolerances for extruded products wider than pressed parts
- » Cost for cutting, ask for a quotation!



FOAM SILICONE RUBBER PROFILES

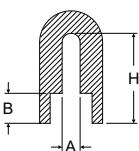


Prod No.	Roll length, m	\varnothing , mm	Tolerances, mm
SP 020	25	2	$\pm 0,2$
SP 030	25	3	$\pm 0,3$
SP 040	25	4	$\pm 0,4$
SP 050	25	5	$\pm 0,5$
SP 060	25	6	$\pm 0,6$
SP 070	25	7	$\pm 0,7$
SP 080	25	8	$\pm 0,8$
SP 090	25	9	$\pm 0,9$
SP 100	25	10	$\pm 1,0$
SP 120	25	12	$\pm 1,2$
SP 160	25	16	$\pm 1,6$
SP 180	25	18	$\pm 1,8$
SP 200	25	20	$\pm 2,0$
SP 250	25	25	$\pm 2,5$
SP 300	25	30	$\pm 3,0$

Prod No.	Roll length, m	$a \times a$, mm	Tolerances, mm
SP 100-100	25	10 x 10	$\pm 1,0$
SP 120-120	25	12 x 12	$\pm 1,2$
SP 200-200	25	20 x 20	$\pm 2,0$

- » Flexible material to fit different openings
- » Supplied in full rolls or cut into pieces
- » Circular and quadratic form
- » Cost for cutting, ask for a quotation!

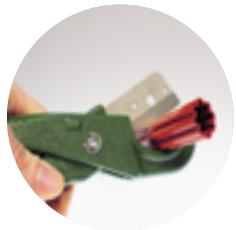
U-PROFILES



Prod No.	Roll length, m	A, mm	H, mm	B, mm
SU 010050	25	1,0	5	2
SU 010100	25	1,0	10	3
SU 012050	25	1,2	5	2
SU 012060	25	1,2	6	2
SU 015100	25	1,5	10	3
SU 015150	25	1,5	15	3
SU 020100	25	2,0	10	3
SU 020130	25	2,0	13	3
SU 030100	25	3,0	10	3

- » Products made to cover edges
- » Supplied in full rolls or cut into pieces
- » Shadow flange (B) avoid paint ridges
- » Cost for cutting, ask for a quotation!

CUTTING TOOL

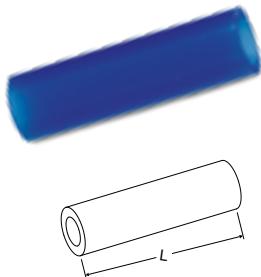


Prod No.

SK 70

» Cutting tool for tubes and profiles

BUDGET MASKINGS, SILICONE TUBINGS



Prod No.	Qty per box	Fits	L, mm	Colour
GCA 03	1000	M3	20	■
GCA 04	1000	M4	20	○
GCA 05	1000	M5	25	●
GCA 06	1000	M6	30	■
GCA 08	500	M8	35	■
GCA 10	200	M10	40	■
GCA 12	200	M12	45	■

- » Silicone rubber
- » Designed primarily for metric threads
- » Cut from extruded material giving wider tolerance
- » Budget masking

BUDGET MASKINGS, STEEL CYLINDER



Prod No.	Qty per box	Fits
SA 04	20000	M4
SA 05	12000	M5
SA 06	8000	M6
SA 08	6500	M8
SA 10	4000	M10
SA 12	3000	M12

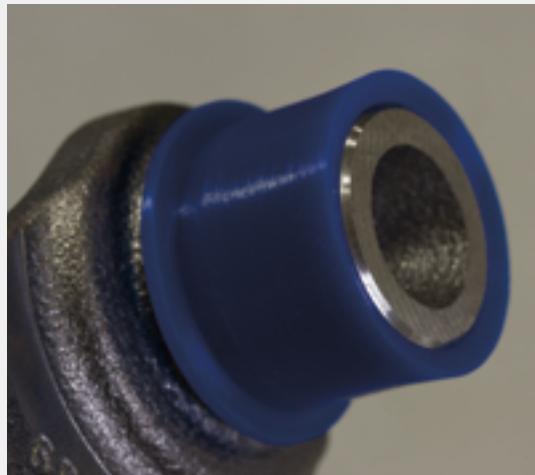
- » Masking of metric axles
- » Made from thin spring steel
- » Low cost solution



SMART EXAMPLE / CUSTOMIZED MASKING FOR AXLES



Cap with handle



Tight axle masking for dip process



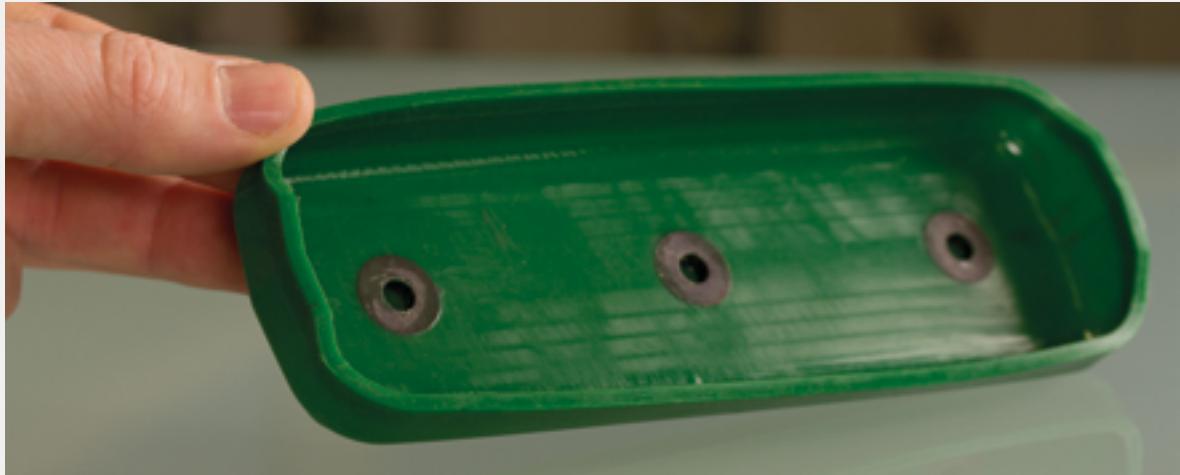
Tube end masking



Cap with handle for blasting process



SMART EXAMPLE / CUSTOMIZED MASKING FOR AXLES



Cap with molded magnets



Tight axle masking

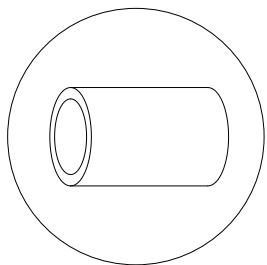


Large cap for blast protection

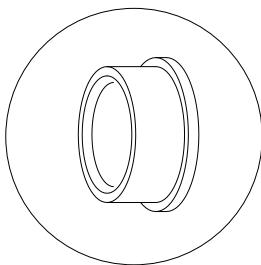
NON STOCKED ITEMS, MASKING FOR AXLES

Here we show some old products which have been replaced by updated and improved products. Sometimes the old ones are preferable and therefore they are still available to order. Some of them are even available as stock items.

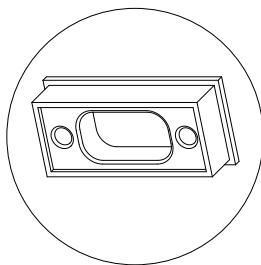
See www.hangon.com for more sizes and/or ask for a quotation.



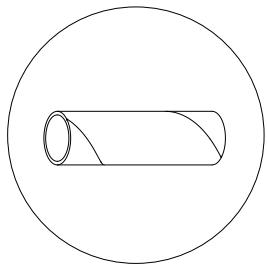
Flat caps - **GAA**



Easy use caps - **GAL**



Circuit board caps - **GAR**



Paper tubes - **TU**



HANDLING

158 KOP TEST PANEL SETS WITH PROTECTIVE FILM

158 PPA SINGLE TEST PANELS ALUMINIUM

159 PP COLOUR MATCH PANELS

159 HQS JIGS FOR PANELS

160 MLF / DKK SPACER PADS

160 TST PROTECTION TAPE

161 GGB / NS RUBBER BANDS / PROTECTIVE NET TUBINGS

161 CE TAPE THERMOMETERS

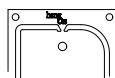
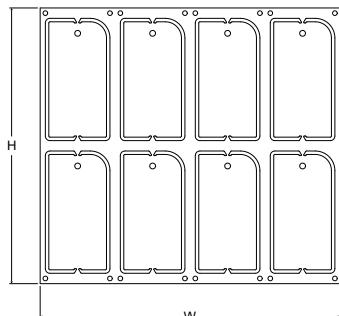
162 HNB IDENTITY PLATES

162 CGT CONVEYOR GROUND TEST

164 NON STOCKED ITEMS, HANDLING

TEST PANEL SETS WITH PROTECTIVE FILM

 Design Patent



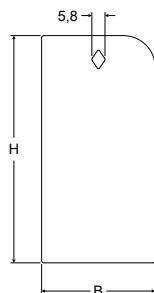
Prod No.	Qty sets per		WxHxT, mm	g/set	Material
	box	Panels per set			
KOP 50X100 2A	200	2	65x239x0,8	30	Alu 5005
KOP 50X100 4A	100	4	130x239x0,8	60	Alu 5005
KOP 50X100 8A	50	8	260x239x0,8	120	Alu 5005
KOP 50X100 2S	200	2	65x239x0,8	86	Steel DC 01
KOP 50X100 4S	100	4	130x239x0,8	172	Steel DC 01
KOP 50X100 8S	50	8	260x239x0,8	344	Steel DC 01
KOP 75X150 2A	100	2	90x339x0,8	61	Alu 5005
KOP 75X150 4A	50	4	180x339x0,8	122	Alu 5005
KOP 75X150 8A	25	8	360x339x0,8	244	Alu 5005
KOP 100X150 2A	75	2	115x339x0,8	80	Alu 5005
KOP 100X150 6A	25	6	330x339x0,8	240	Alu 5005

- » PE film protects A-side from corrosion, scratches and fingerprints
- » Panel A and B-side recognized with top right rounded corner
- » No edge effects with paint build up thanks to the air gap between panel and frame
- » No hanging marks as panels are hung in the frame vertically or horizontally
- » Standard panel sets available in 2, 4, 6 or 8 pieces per frame
- » Meets quality standards
- » Possible to get embossed logo
- » User friendly packaging

SINGLE TEST PANELS ALUMINIUM

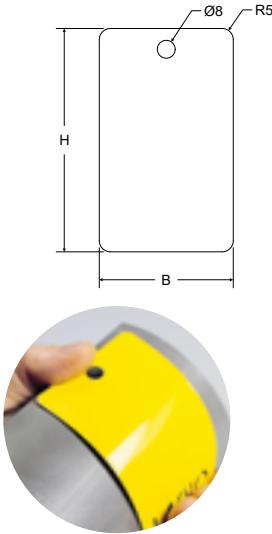
Prod No.	Qty per box	BxH, mm	Material
PPA 50X100	100	50x100	Alu 5005
PPA 60X100	100	60x100	Alu 5005
PPA 100X150	100	100x150	Alu 5005

- » Low cost version of our test panels in single form
- » Adopted for quality standards
- » Special shaped hanging hole enable stable hanging
- » Thickness 0,8 mm



hang
On

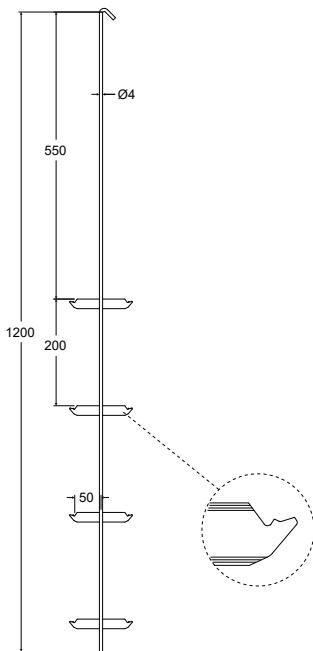
COLOUR MATCH PANELS



Prod No.	Qty per box	BxH, mm	Material
PP 60X100	100	60x100	Spring steel
PP 100X150	100	100x150	Spring steel
PP 100X220	100	100x220	Spring steel

- » Panels for colour matching
- » Round corners
- » Low weight, easy to send in an envelope
- » Spring sheet material, flexible to bend over rounded forms
- » Thickness 0,10 mm

HQS PJ



JIGS FOR PANELS

Prod No.
HQS 1200X200X4 PJ

- » Special HQS-hanger designed to hold all our test panels in single form
- » Secure stable hanging of PPA

SPACER PADS - FRICTION



Prod No.	Qty per box	LxBxT, mm	Colour
MLF 50X25X3	2000	50x25x3	●

- » High friction spacer pads
- » Strong friction on both sides
- » Stop products from sliding

SPACER PADS - CORK



Prod No.	Qty per box	LxB, mm	Thickness, mm
DKK 18184	6000	18x18	4
DKK 202010	4500	20x20	10
DKK 202014	3000	20x20	14

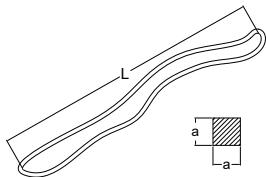
- » Pads made of natural cork with 2 mm foam material on one side
- » Fix the pad with vacuum effect by pressing the foam side lightly onto the surface

PROTECTION TAPE



Prod No.	Length of roll, metre
TST	33

- » TST is a removable protection tape in PVC for sensitive surfaces
- » TST has 'Removable' printed on the tape film
- » Rolls cut into any width



RUBBER BANDS

Prod No.	Qty per box	L x a x a, mm
GGB 10	100	240x3x3
GGB 20	100	480x3x3
GGB 30	100	580x3x3

- » Transport protection in natural rubber which you wrap around the object
- » Ideal for large objects
- » Stay fixed with distance effect and friction

PROTECTIVE NET TUBINGS



Prod No.	Qty metre/roll	Min Ø mm
NS 12	25	7
NS 20	25	12
NS 40	25	25
NS 72	25	45
NS 110	25	70

- » Thermoplastic net tubing for transport protection
- » Supplied in rolls but can also be cut to fixed length
- » Cost for cutting, ask for a quotation!

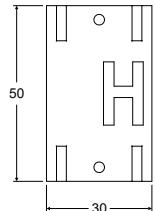
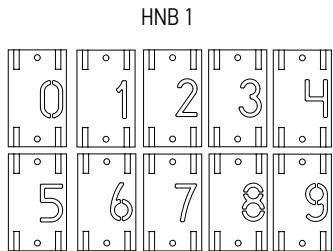


TAPE THERMOMETERS

Prod No.	Qty per set	Temperature °C	Interval
CE 54,4-104	10	54,4-104	10
CE 110-160	10	110-160	10
CE 166-216	10	166-216	10
CE 193-254	10	193-254	10

- » Self-adhesive disposable thermometers measuring maximum temperature
- » Available in several temperature zones
- » Quality certified

IDENTITY PLATES



Prod No.	Pcs/set	Plate sign sequence
HNB 1	10	0-9
HNB 2	100	00-99

Prod No.	Pcs/set	Plate sign
HNB S 0-9	10	0-9
HNB S A-Z	10	A-Z

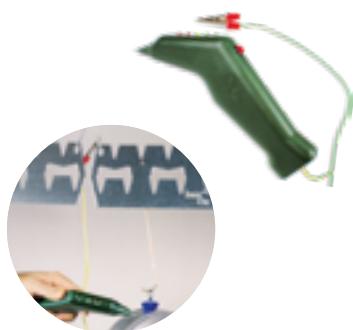
Example:

HNB S-3 - 10 pcs of plates with digit 3

HNB S-R - 10 pcs of plates with letter R

- » Galvanized identity plates for hangers
- » Available both in numbers 0-99 and letters A-Z, which gives unlimited combinations
- » Numbers available in set either by number series (0-9) or set number by number
- » Plate is in size 30x50 mm and designed with welding lumps
- » Thickness 2 mm

CONVEYOR GROUND TEST



Prod No.
CGT II

- » Easy to use to test the grounding to the coated object
- » Connect a cable clip to a good earth point
- » Point the nose on to the object to be coated and push the button
- » 5 lights from red to green will indicate your contact status, $10k\Omega$ - $100M\Omega$



SMART EXAMPLE / HANDLING



HQS 1200X200X4 PJ designed for test panels



Protection film for coated surfaces



Test panels (KOP) with your embossed company logotype

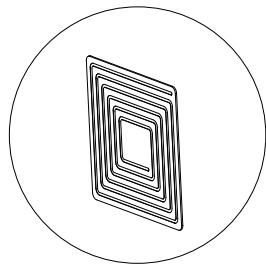


Custom designed spacer pads MLF

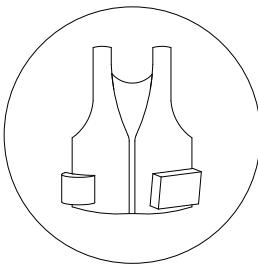
NON STOCKED ITEMS, HANDLING

Here we show some old products which have been replaced by updated and improved products. Sometimes the old ones are preferable and therefore they are still available to order. Some of them are even available as stock items.

See www.hangon.com for more sizes and/or ask for a quotation.



Spacer pads - ML



Flexvest - FL





WORK SMART & EFFICIENTLY

HangOn can help you reduce costs, make coating processes more efficient and improve the profitability of your coating business.

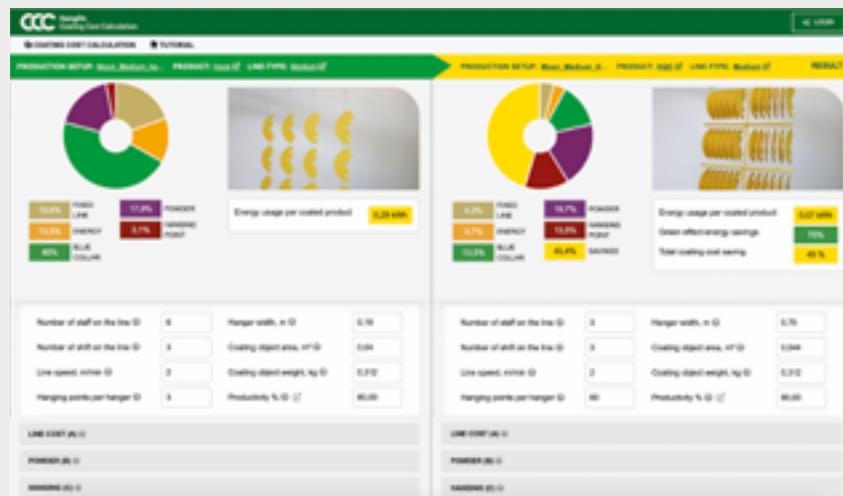
Each facility is unique but with our experience and know-how we can make some reliable proposals. Small efforts can make a big difference.

On the following pages, we present some smart possibilities for hanging and masking. How to calculate savings effect on coating cost and how to work with our process for custom solutions.

Please contact us if you want to learn more, or get a specific solution for your particular needs!

CALCULATE YOUR ENERGY SAVINGS

Try our Coating Cost Calculation tool – HangOn CCC

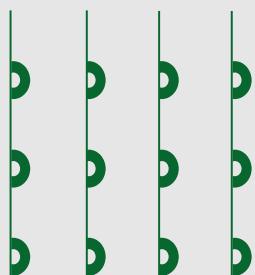


What would happen if you changed your hanging system? Or hired another staff member? Or worked 2 shifts instead of 3?

Small changes can have a bigger affect than we imagine, especially in the long run. Are you curious about how you could make your coating line more efficient? How you could lower your energy usage, save money or even increase profit? We have built an online tool to help you with precisely that. Put in your own numbers and it will tell you how the changes would affect your production.

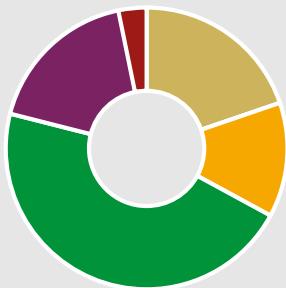
Check it out at ccc.hangon.com

HOOKS



Hanging points / conveyor meter:

16



19,6 % Fixed line

13,5 % Energy

46 % Blue collar

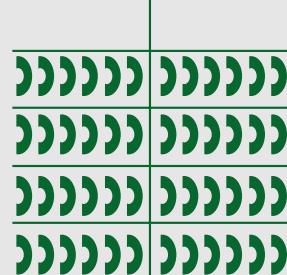
17,9 % Powder

3,1 % Hanging point

0,29 kWh

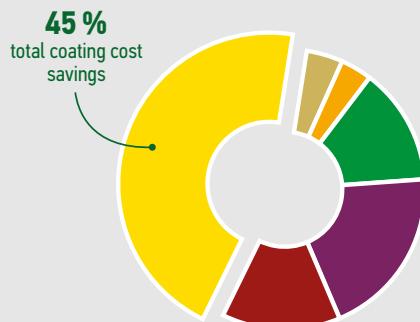
Energy usage per coated product

HQC



Hanging points / conveyor meter:

80



4,3 % Fixed line

3,7 % Energy

13,5 % Blue collar

19,7 % Powder

13,5 % Hanging point

45,4 % Savings



0,29 kWh

Energy usage per coated product



0,07 kWh

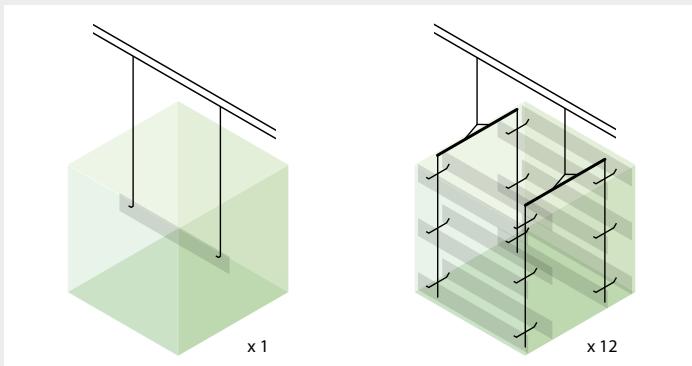
Energy usage per coated product



SMART HANGING

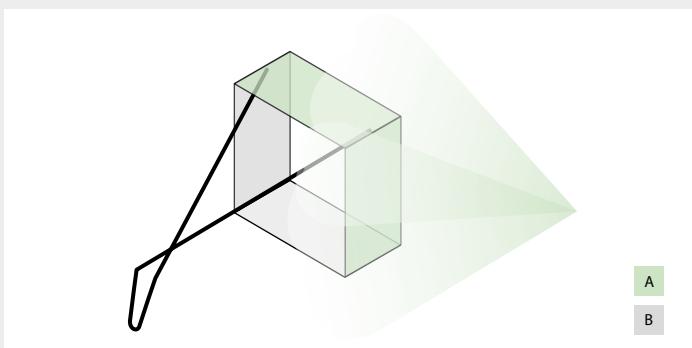
Find unused space and fill it to full capacity by increasing hanging density

- Identify reasons for gaps and use a hanging system that eliminates gaps.
- Use full height, for instance by pre-hanging small parts on hangers that utilize full coating height, such as HQS.
- Use depth. Slim and airy parts hung at full depth can increase capacity, by using for example HCS, H11B.



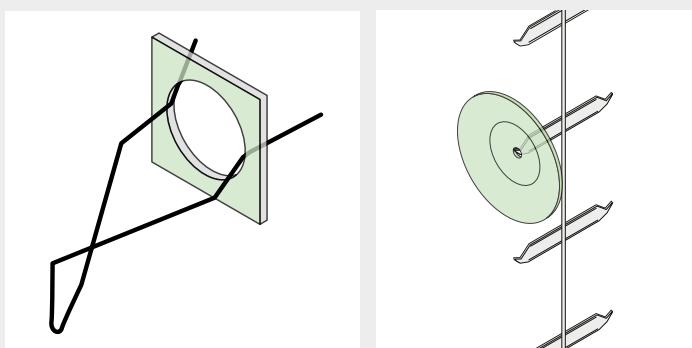
Handle hanging marks

- Remember that many parts have an A and a B side, a natural back or surfaces that do not have to be coated 100%. Use hanging methods that save coating and minimize hanging marks, such as BHL Y, ROB.
- Use hanging products that leave minimal hanging marks. Hang on as thin material as possible, for instance sheet arrows with sharp edges or thin spring wires, such as HQL.



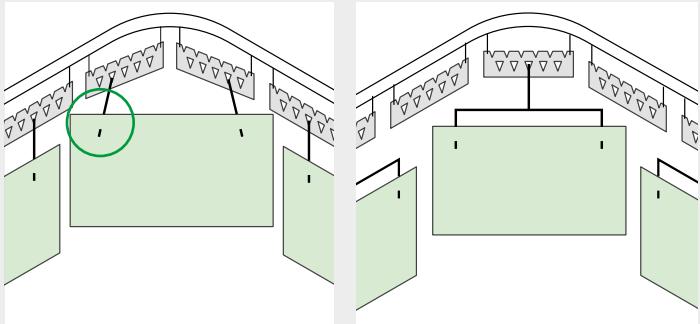
Make sure hanging is stable and offers good contact

- Use tension hanging – for instance with spring wire insert, BHL Y.
- Find more than one contact surface, for instance by hanging on two or more hooks or by using arrows or metal sheets that in one go offer several contact points and thus stabilize hanging.
- Remember that good contact is generally created by hanging on sharp edges, such as arrows and HQS.



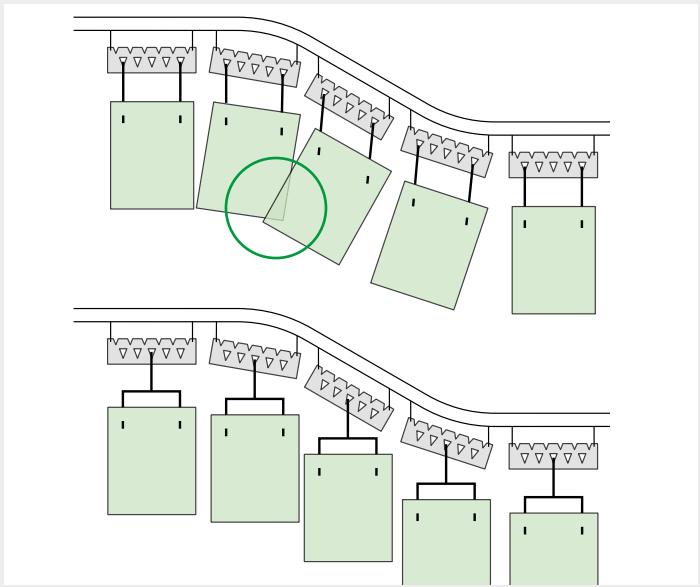
Handle problems with curves

- Avoid tension from strained hooks by having a suspended beam between the conveyor and item – or use swivels or rotational devices, for instance ROT 03.



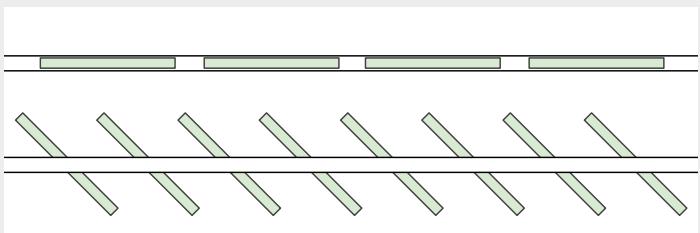
Handle problems with slopes

- Avoid problems with slopes by one point hanging, for instance shafted suspension beams or frames, H11B, HCF.



Handle density

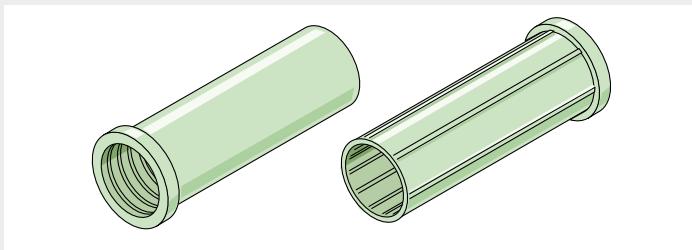
- One way of solving the problem and also getting higher density in the coating line is to use 45° angled hooks or suspension beams on 45° angled shafts (figure shows line from above)



SMART MASKING

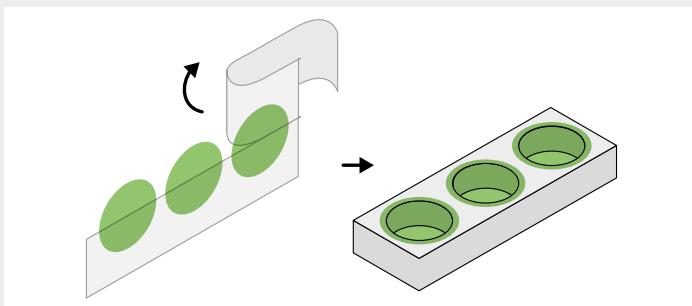
Friction reduction

- Mask with ribs – the reason behind most ribs is to reduce friction, thus speeding up handling, such as GAQ, SSR, GTM.



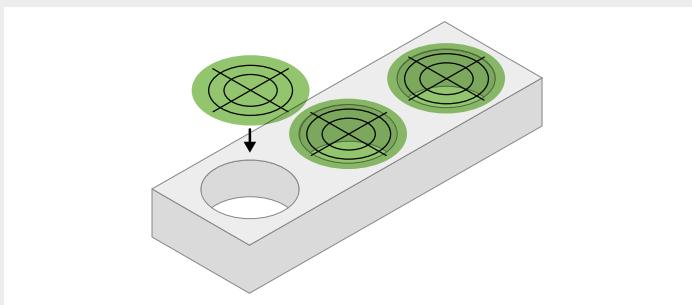
Slitback

- Bear in mind that slitback makes discs a lot quicker to detach and use. Use discs such as ERX or ERS.



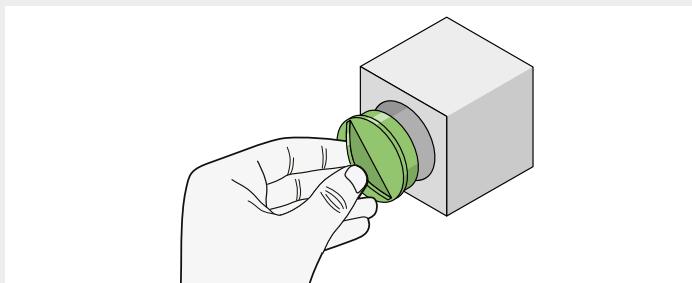
Target rings

- To work with discs printed with target rings are a lot easier to centre over holes, compared to discs without print. Use discs such as ERX.



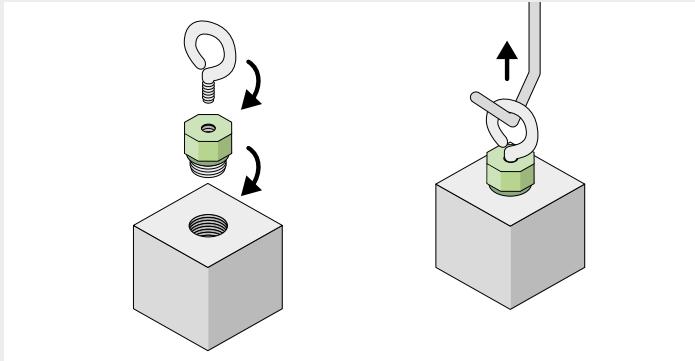
Grip

- Choose plugs and masking with proper grip which make work faster and more ergonomical, such as GBH, GKW.



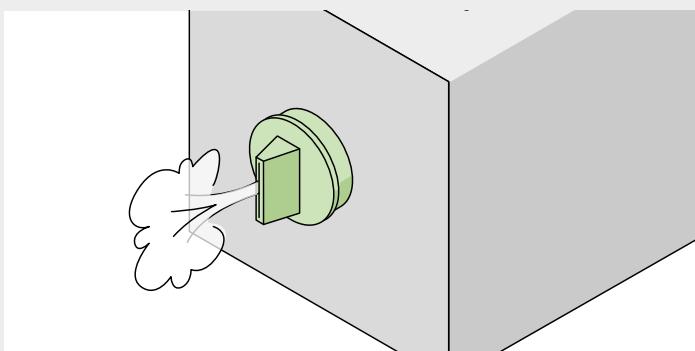
Hang and mask simultaneously

- GHH, GHA and QB make it possible to do two things at the same time.



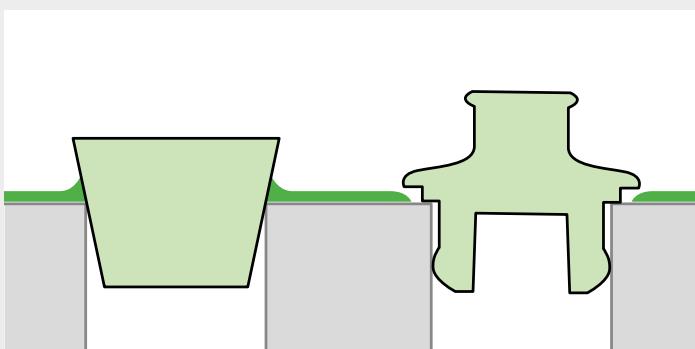
Use ventilated masking to avoid trapped hot air

- Trapped hot air expands and builds up pressure which can push normal maskings out of place. By using our ventilated maskings you can avoid this effect with e.g. GAP, GAQ or GVM.



Minimize coating edges

- The transition between coated and masked surfaces can sometimes be quite sharp – one way of avoiding this problem is to shade the transition zone with e.g. GKW.



“SMART SOLUTIONS ENABLED AUTOMATION AND HIGHER EFFICIENCY”

Pål Abrahamsson
Technical Manager, Lindab



Customized solutions from HangOn allowed Lindab to automate most of its coating process and increase density by a factor of eight.

“I have great respect for HangOn’s know-how and ability, and appreciate their humble and knowledgeable approach when conducting business”, says Pål Abrahamsson, Technical Manager at Lindab in Sweden.

Lindab Profil AB

manufacture rainwater systems. The company is part of an international group that develops, manufactures, markets and distributes products and systems for simplified construction and improved indoor climate.

www.lindab.com



Lindab Profil AB has collaborated with HangOn for more than 20 years. Initially they only purchased standardized hooks. Today, specialized hangers and select masking are provided to all Lindab Group coating facilities.

"In 2009, when planning a new powder-coating line for rainwater system components, HangOn developed a hanging method with specially designed shafts for multi-hanging. It increased hanging density three to eight times, depending on component size. This meant that most of the process could be automated, saving time and money", says Pål Abrahamsson.

"The old lines ran 24 hours a day, with the new line one extended shift is enough. It is larger but the real difference is the smart hanging system."

In 2014–2015, Lindab s.r.o. in The Czech Republic wanted to improve the hanging method for small components. HangOn delivered yet another smart solution, making it possible to pre-hang components on frames. This increased density by 70 % and two/three shifts could be reduced to a single long shift.

In 2016, Lindab Götene AB started a powder-coating line and got in touch with HangOn who quickly provided several solutions for shaft hanging of heating and cooling panels maximizing density. "HangOn is a reliable partner for efficient hanging solutions. Our relationship with the family goes way back. We know that HangOn offers great products, technical capacity, fast deliveries and high flexibility. As soon as challenges arise, we contact them, and if necessary they develop special tools. They are skilled and experienced, have the know-how and respond quickly, and know us well."

"The future holds great potential. We aim to optimize the products we already use. More components will be hung, and more automation is necessary." ■



GENERAL CONSIDERATIONS



PRE-TREATMENT DRAINAGE

Objects may need to be positioned to allow liquids to flow easily and quickly. For dip pre-treatment take lift forces and air pockets into consideration.



COATING PROCESS

Type of coating system, pre-treatment and temperature exposure



ERGONOMICS

Find the simplest possible hanging and masking method to reduce personal strain for staff. Use smart tools such as TPR.



LOGISTICS

How are goods transported throughout the coating process? Type of conveyor or cargo carrier? What happens before and after coating? Perhaps reduced handling can make the process more efficient?



QUANTITY

Number per batch, per year and total.



PLANT CROSS SECTION

What is the maximum goods size? Free space to conveyor/notched rail, type of cargo carrier/notched rail, potential slit openings.



CURVES & SLOPES

Smallest curve radius, smallest slope radius, largest slope angle



PHYSICAL PRODUCT

Weight, dimensions, A/B surfaces, possible hanging holes, versions.



TIME FRAMES

How fast do you need a solution? Prototypes and serial production.



BUDGETS

Target cost per coated object? How much can be invested?

HANGING CONSIDERATIONS



HANGING DIRECTION

Does the object need to be positioned in a specific way to enable efficient and simple coating?



HANGING DENSITY

Objects per conveyor metre/cargo carrier?



A/B SURFACES

Specify which surfaces are to be fully coated (A) and those that will not be coated (B).



HANGING MARKS

Where are hanging marks acceptable? How big a mark is acceptable?



SECURE GROUNDING

Make sure that the object is securely grounded to potential-free earth every time to ensure even coating and coating savings for electrostatic coating.

MASKING CONSIDERATIONS



DEGREE OF MASKING

Sometimes some splashes are acceptable on part of or on a whole non-coated surface.



SOFT/SHARP EDGES

Between the masked and coated surface a more or less sharp edge can occur.



RECYCLABILITY

Do you want to recycle masking material or not? This is often a matter of quality assurance.



TOLERANCES

A masked surface has geometric position and measurement tolerances.



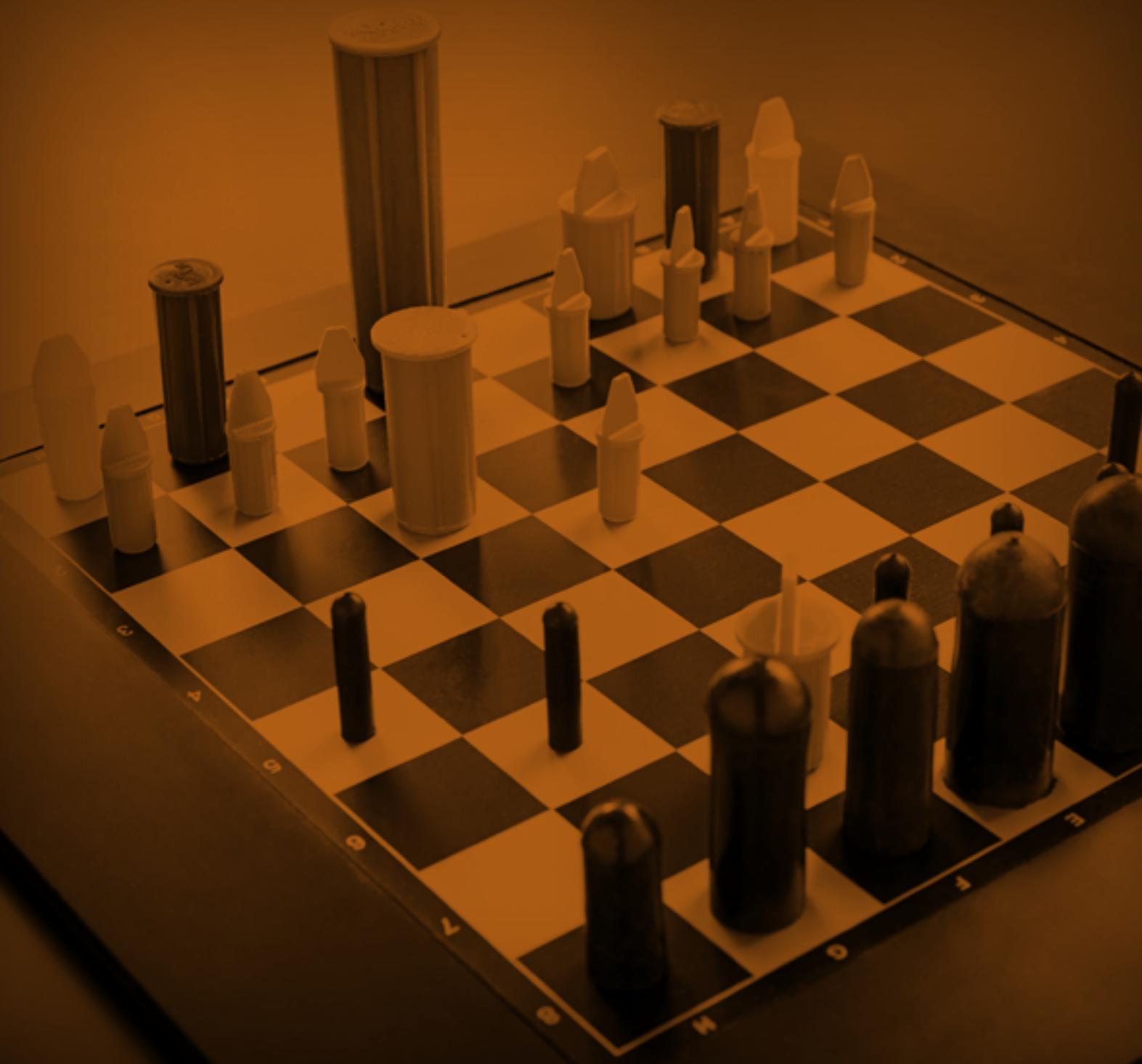
ACCEPTANCE OF FLAKES

When reusing masking products old coating flakes may remain and contaminate later batches.



APPLICATION/REMOVAL

Take into consideration how masking products are used, both for application and removal.





MATERIAL KNOW-HOW

Because HangOn produces both hanging and masking products a lot of different materials are used. We will here present User guide material and corresponding physical properties.

USER GUIDE MATERIAL

It can be a complicated task to choose hanging and masking products to be used in a surface treatment process. Our many years of experience have taught us to consider following factors regarding material properties.

WEIGHT

- » Consider that the static weight can be doubled or more when hanging in slopes and curves.
 - » Wire hooks are stretched by bending and if reformed later, this might cause cracking.
 - » Burn off, blasting, or penetration by strong chemicals etc might reduce material strength.
-

CHEMICALS

- » Most materials used in HangOn products withstand normal pre-treatment chemicals.
 - » If the actual hook material does not withstand chemicals, the first coating will probably be sufficient protection.
-

BLASTING

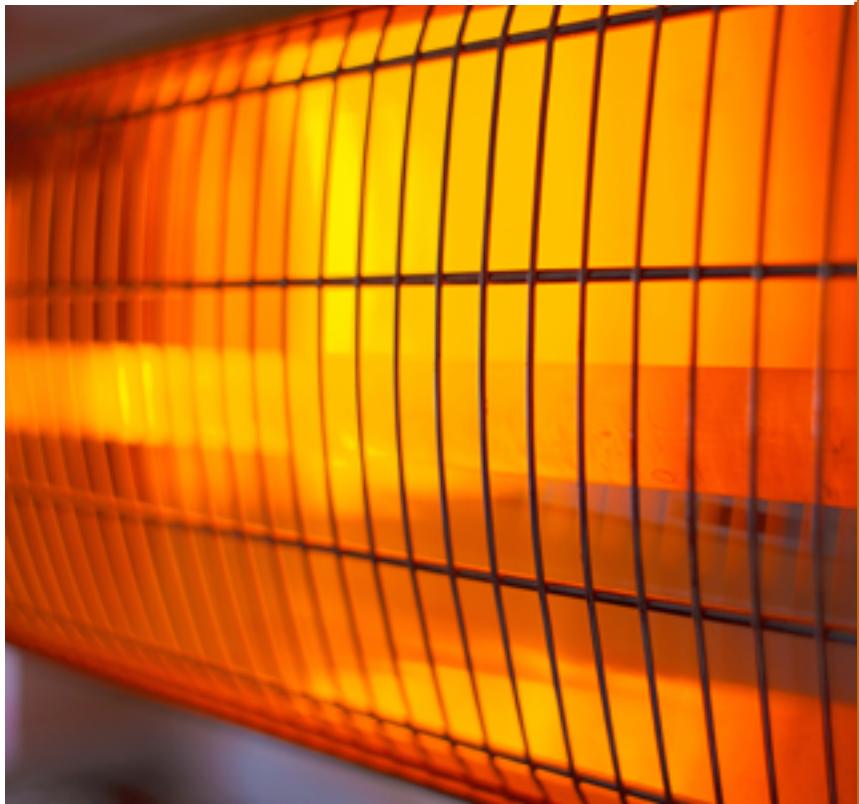
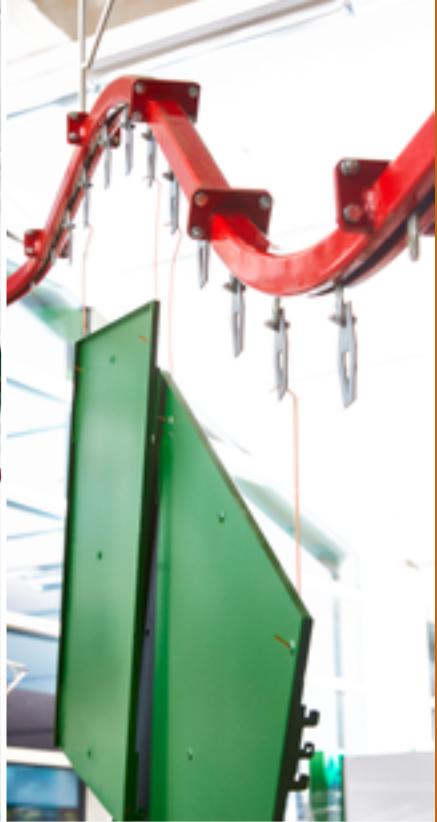
- » Most HangOn materials withstand mild blasting.
 - » In more aggressive blasting thicker materials last longer – example of masking materials for blasting are EPDM and glass fibre.
-

TEMPERATURE

- » Oven max temperature, temperature curve, object surface temperature, time, and how a masking product is positioned all have an impact on the final result.
-

OUR RECOMMENDATION:

- » Ask your HangOn contact for an opinion.
- » Always test the product in actual use.



RUBBER & PLASTICS

	HangOn	Intermittent max temp (°C)	Continuous max temp (°C)	Tensile strength (MPa)	Elongation at break (%)
Silicone rubber	Q	315	230	8	400
GE silicone rubber	QGE	315	230	10	500
EPDM rubber	EPDM	125*	100	12	300
SBR rubber	SBR	100	90	14	500
Natural rubber	NR	90	80	21	500
Thermoplastic elastomer	TPE	150	135	8	500
Polyamide	PA6	160	70	50	
Polyamide 6.6	PA6.6	200	90	60	
Polyamide 6.6-15 % glass fibre	PA6.6-15	240**	120	100	
Polypropylene	PP	150	110	35	
Polyethylene, low density	PELD	70	50	8	
Polyvinyl chloride, flexible	PVC	150	100	50	20

* In powder coating some materials can be used just once, for example EPDM which has a top temperature resistance of 125°C but can actually stand temperatures up to approx. 200°C. EPDM plugs get harder but do not melt.

** Thermoplastics like PA actually start melting at approx. 160°C but can be stabilized in some different ways, for example with a mixture of glass fibres.



SHEET METAL

	HangOn	Tensile strength (MPa)	SS	DIN	W-nr	EN	AISI
DC 01	DC01	270-410	1142	ST12 ST02	1.0330	EN 10130:2006	A 366 (1012) 1008
Ymagine D1	Ymagine	335-425	x	x	x	x	x
DX51D Z275 MAC	Pre Zink	270-500	1151-10	DX51D (ST 02 Z)	1.0226	EN 10346:2009	
EN-AW 1050A H14	Alu 1050	110-150	4007	Al99.5; AA1050-H14	3.0255	EN-AW 1050A H14	
EN-AW 5005A H12	Alu 5005	125-165	4106		3.3315	EN-AW 5005A H12	
1.4301	Stainless steel	520-700	2333	X 5 CrNi 18 10	1.4301	EN 10028-7	

Compression set	Hardness (ShA)	Alcalis	Acids	UV	Abrasion	Tear	Density (g/cm³)	Water absorption (24 h, 20°C)
13% (22 h @ 175°C)	30-80	D	C	A	E	E	1,18	0
25% (22 h @ 175°C)	30-80	D	C	A	E	E	1,18	0
20% (22 h @ 125°C)	40-80	D	A	B	C	D	1,25	0
20 % (22 h @ 70°C)	40-80	D	D	D	C	D	1,25	<0,1
20% (22 h @ 70°C)	40-80	E	D	D	A	C	1,2	<0,1
35% (22 h @ 70°C)	50-95	D	B	E	C	B	0,95	<0,1
70 (ShD)	A	D	B				1,13	9
80 (ShD)	A	D	B				1,13	8
90 (ShD)	A	D	B				1,23	6
55 (ShD)	B	A	E				0,91	<0,1
50 (ShD)	C	C	E				0,92	<0,1
70 (ShA)	D	D	B				1,45	<0,1

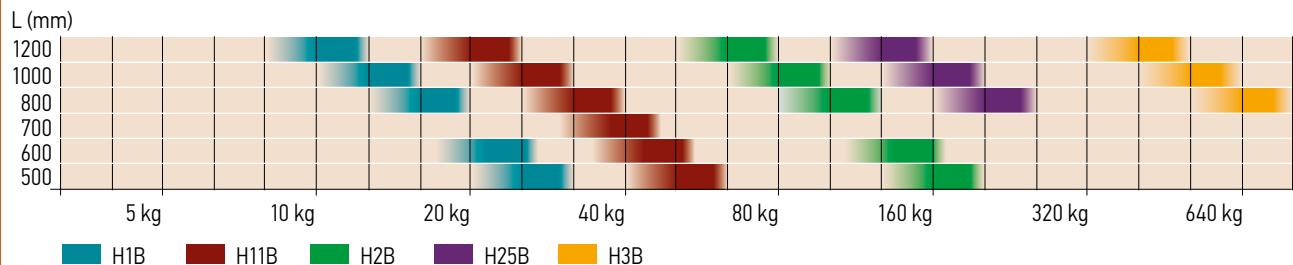
A = Excellent, B = Very good, C = Good, D = Fair, E = Poor



WIRE

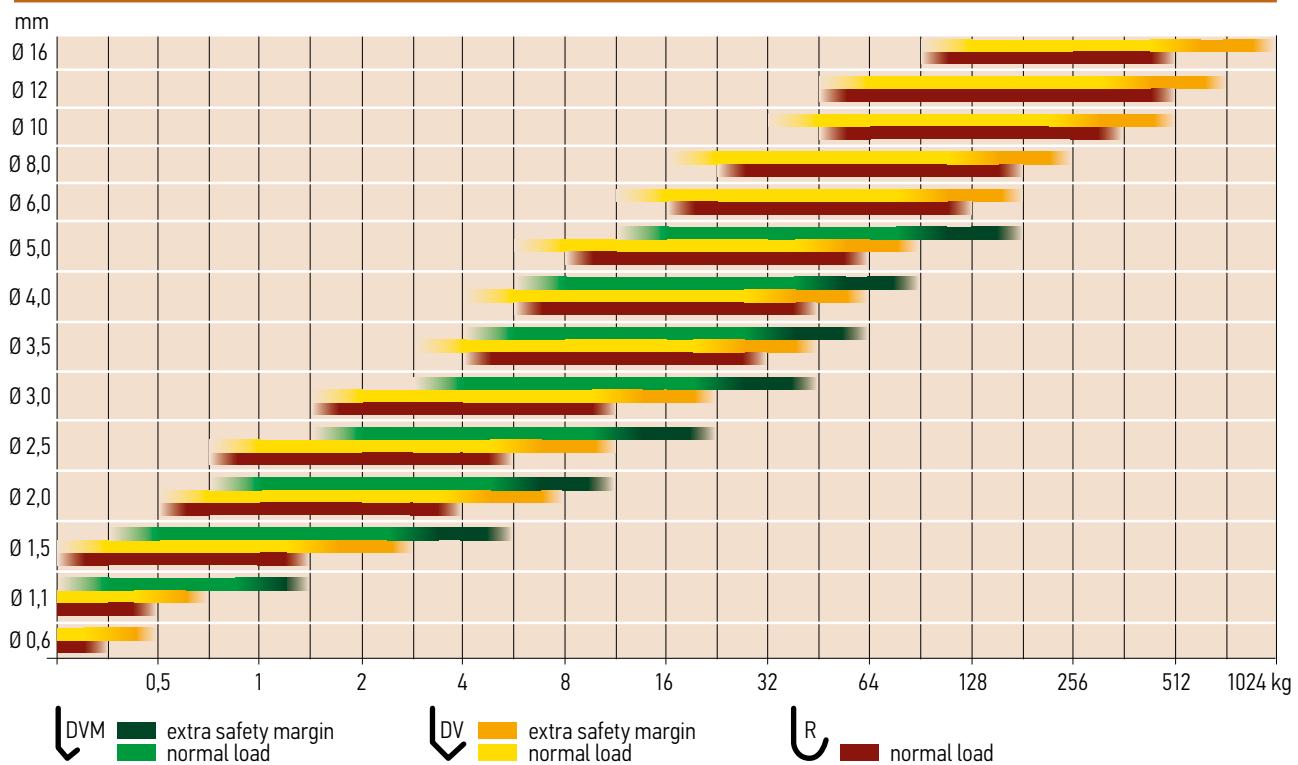
	HangOn	\varnothing -dependent Tensile strength (MPa)	SS	DIN	W-nr	EN	AISI
Steel copper drawn	A	450-1000	1311/1312	ST37-2	1.0036/38	10025	1008
Steel	B	450-1000	1311/1312	ST37-2	1.0036/38	10025	1008
Spring wire class A (copper drawn)	C	1200-1700			1.0586	10016-2	1050
Spring wire class B (phosphated)	D	1500-2000				10204	1080
Stainless steel	E	600-900	2333		1.4308	58E	304
Stainless steel, acid resistant	E1	700-1000	2347		1.4401	58J	316
Steel zinc-plated	F	450-1000	1311/1312	ST37-2	1.0036/38	10025	1008
Copper wire (galvanic process)	G	300-400					
Stainless steel, high temperature	H	700-1000			1.4841		314
Construction steel	I	600-1000	2172	ST52	1.0841		5120

LOAD TABLE, SUSPENSION BEAMS



Pull test of suspension beam.

LOAD TABLE, HOOKS



SOME FACTS ABOUT LOAD CAPACITY

The load capacity of a single hook is dependent on many things, the most important are the material, wire diameter and orthogonal distance. An approximate formula true for a single hook:

$$M_{max} \approx \sigma_s \frac{\theta^3}{99,5e}$$

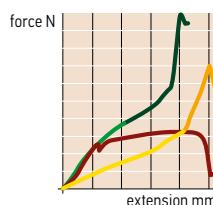
M_{max} = load where irreversible deformation starts (kg)

σ_s = bending strength $\approx 0,8 \times$ Tensile strength (MPa)

e = distance (mm)



Typical dynamic behaviour of standard hooks when loaded is that maximum load, the load where the wire starts to be permanently deformed (yield stress) is the same for DV and R but approximately double for DV M. Then DV and DV M describe a "concave" load-extension line before the load falls or drops off, while R looks more like a convex figure.



Due to the shape of the hook the load capacity after exceeding the irreversible deformation limit and safety margin are very different. R hooks have a low margin and DV much higher. DV/DVM shape is therefore a safer choice.

■ DVM hook ■ DV hook ■ R hook



THE COMPLETE HANDBOOK RANGE IS IN OUR SAMPLE SHOP

Our compact sample shop contains the complete handbook range. For a fee we can send you samples in amounts of your choice.



CONTACTS



HangOn AB
Industrivägen 7
SE-335 73 Hillerstorp
Sweden

Tel: +46 370 373 373

info@hangon.com
order@hangon.com

www.hangon.com



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THIS IS HANGON

HangOn is a partner who helps customers to find smart solutions for hanging, masking and handling which increase the efficiency and profitability in their coating process.

We develop and produce in our own factories and distribute our products to more than 40 countries around the world.

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