

... for a smooth material flow



- stainless steel pipe bends for pneumatic conveyors
- pipe couplings DVK-HD® high pressure
- tubes

immediately - from stock



hs

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Company profile



Thomas Haag
General Manager



Dipl.-Ing. (FH) Wolfgang Michel
Wolfgang Michel

Dear esteemed client,
Thanks to increasing our stock we are now in a position to deliver pipe bends, couplings, branch pipes, reducers and tubes in all common dimensions – at short notice.

Orders reaching us before 11.00 am will be dispatched on the very same day! Our quick delivery response and our flexibility guarantee your success even for custom-made parts. Like this you can optimise your delivery periods and lighten the load on your purchasing department.

We are putting our long-term experience and our knowledge of the pneumatic conveyor construction market at your disposal at any time and would gladly advise you on any queries that might arise.

With best regards

Thomas Haag
General Manager

Wolfgang Michel
Sales Manager

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Article on stock: Pipe coupling DVK-HD® high pressure

Pressure and vacuum coupling DVK-HD® high pressure

- resistant to pressure up to max. 12 bar
- resistant to vacuum up to max. 0.8 bar
- metal casing of aluminium AlMgSi 0,5 F22
- massive aluminium clamps double secured
- screws M 12 with massive threaded bars
- circular version, therefore very easy to mount
- length from 100, 150, 200 mm – or longer
- for outer tube diameter **60,3 to 154,0 mm**

gasket:

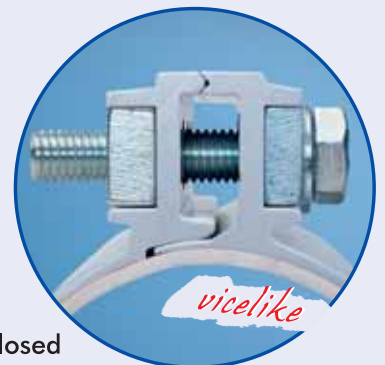
- white EPDM gasket termoresistant from -30°C to +120°C food-safe



- registered design
- TÜV-tested
- patent applied for



open



closed

- no welding works necessary – therefore safe and hazard-free
- easily to be dismantled – connecting pieces and tubes can be reused
- with stainless steel grounding strip for electrical conductivity

Suspension for pipe coupling DVK-HD® high pressure



Tension indications DVK-HD® high pressure length 150 mm with white EPDM gasket

diametre in mm	max. overpressure	max. vacuum	pressure resistance	max. tightening torque	article number
60.3	18 bar	0.8 bar	12 bar	80 Nm	406036H06
70	18 bar	0.8 bar	12 bar	80 Nm	407036H06
75	18 bar	0.8 bar	12 bar	80 Nm	407536H06
76.1	18 bar	0.8 bar	12 bar	80 Nm	407636H06
80	16 bar	0.8 bar	12 bar	80 Nm	408036H06
82	12 bar	0.8 bar	8 bar	80 Nm	408236H06
84	12 bar	0.8 bar	8 bar	80 Nm	408436H06
85	12 bar	0.8 bar	8 bar	80 Nm	408536H06
88.9	12 bar	0.8 bar	8 bar	80 Nm	408836H06
90	10 bar	0.8 bar	7 bar	80 Nm	409036H06
100	10 bar	0.8 bar	7 bar	80 Nm	410036H06
101.6	10 bar	0.8 bar	7 bar	80 Nm	410136H06
104	10 bar	0.8 bar	7 bar	80 Nm	410436H06
106	8 bar	0.8 bar	7 bar	80 Nm	410636H06
108	10 bar	0.8 bar	7 bar	80 Nm	410836H06
110	8 bar	0.8 bar	7 bar	80 Nm	411036H06
114.3	9 bar	0.8 bar	6 bar	80 Nm	411436H06
125	4 bar	0.8 bar	2 bar	80 Nm	412536H06
129	4 bar	0.8 bar	2 bar	80 Nm	412936H06
133	3 bar	0.8 bar	1.5 bar	80 Nm	413336H06
139.7	2,5 bar	0.8 bar	1.5 bar	80 Nm	413936H06
154	2,5 bar	0.8 bar	1.5 bar	80 Nm	415436H06



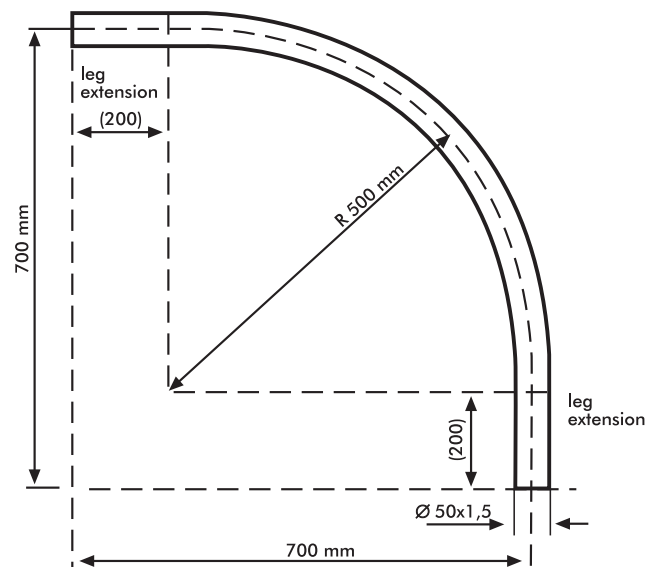
Pipe bends and tubes for pneumatic conveyors



We specialise in thin-walled pipe bends with large bending radii, especially for pneumatic conveyors. The tubes are cold-bent on a CNC-mandrel machine without pleats.

Our quality management guarantees minimal ovality, an optically aesthetic surface, no starting-off bulges, no scratches and grooves as well as deburred ends.

outer diameter: 38.0 mm – 154.0 mm
wall thickness: 1.5 mm / 2.0 mm
bending radii: 75/250/500/800/1000 mm
material: **stainless steel**, aluminium, steel



For use in clean air pipe systems, our pipe bends with small radii are the ideal alternative to type 3 pipe bends with welded leg extensions.



We can deliver extension pipe bends according to your measurement specifications and/or drawings or samples.

Stock list:

stainless steel pipe bends

* other diametres and/or radii are also possible

as per March 2009

radius in mm	70	75	115	150	250	300	500	800	1000
38.0 x 1.5	●				●		●	●	
40.0 x 1.5		●			●		●	●	●
45.0 x 1.5		●	● R=100 mm			●	●		
50.0 x 1.5		●		●	●		●	●	●
50.0 x 2.0		●		●	●		●	●	
54.0 x 2.0		●		●	●		●	●	●
60.3 x 2.0			●		●	●	●	●	●
63.5 x 2.0							●		
65.0 x 2.0			●		●		●	●	●
70.0 x 2.0			● R=95 mm				●	●	●
76.1 x 2.0							●	●	●
80.0 x 2.0				●			●	●	●
80.0 x 1.5							●	●	●
84.0 x 2.0				●			●	●	●
88.9 x 2.0					●		●	●	●
100.0 x 1.5							●	●	
101.6 x 2.0							●	●	●
104.0 x 2.0				●			●	●	●
114.3 x 2.0				●			●	●	●
114.3 x 2.6									●
129.0 x 2.0							●	●	●
133.0 x 3.0									●
139.7 x 2.0							●		
154.0 x 2.0							●	●	●

● = delivery right from stock

- tubes from stainless steel sheets, cold-rolled-
DIN17 457 or DIN 11 850 (beverage conduits)
 - welding seam smoothed and/or scraped
 - pipe bends are grease-free both in- and outside
 - no starting-off bulges
 - minimal ovality
 - leg extension of 200 mm on both sides
 - bending angle: stock articles 90°
and 45° (any other bending angle
is possible)
 - pipe ends deburred
- Furthermore we can offer pipe bends in
different radii for all **common** tube
dimensions.

Stock article: Alu die-cast coupling type DVK 6 suitable for suction and pressure conveying

- **optimal relation price-yield**
- easy-to-install version
- two massive aluminium clamps double secured, in closed state
- interior absolutely round, no groove, **no overlapping metal inlays**
- no sharp edges
- **optically aesthetic design**

- **high-pressure version, pressure-resistant up to 6 bar**
- **vacuum-resistant up to 5000 mm WH**

- low transport cost
- length: 100 mm or 150 mm – or longer
- material: AlMgSi 0,5 F22
- easy dismantling, after loosening the **corrugated head screws** - self-opening
- **diameter: 33.7 / 38.0 / 40.0 / 45.0 / 47.0 / 50.0 / 50.8 / 54.0 / 56.0 / 60.3 / 65.0 / 66.0 / 70.0 / 76.1 / 80.0 / 84.0 / 85.0 / 88.9 / 100.0 / 104.0 / 106.0 / 108.0 und 110.0 mm**

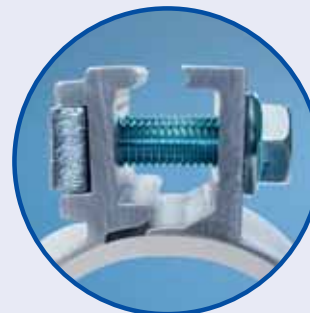
gasket:

- black natural rubber gasket temperature-resistant from -20°C to +80°C
- or with white EPDM gasket temperature-resistant from -30°C to +120°C

- **registered design**
- **TÜV-tested**

special versions:

- **anodised** version e.g. for use in outdoor or indoor areas with very aggressive air, if desired with stainless steel screws and nuts
- **covering caps** for alu die-cast couplings e.g. for clean rooms or for the food industry



open



closed



-20°C natural rubber – elastic +80°C

-30°C EPDM +120°C

-30°C Neoprene – under atmospheric influence +100°C

-65°C Silicone* – heat-resistant +200°C

-20°C Viton – under chemical influence +250°C

* food-safe

Pipe coupling DVK-high pressure Z



Monobloc version

- pipe coupling with traction relief
- pressure-resistance see table DVK-HD®
- length **150**, 200 and 250 mm
- with bridge part to safeguard against axial forces
- material: coupling in aluminium, clamps in galvanized steel
- pipe clamps and traction bars traction-resistant

bridge part traction relief



DVK – quick closure

DVK-HD® quick closure

For quick opening and closing of pipe connections with little negative pressure or overpressure up to max. 1.5 bar.

The coupling is closed with two clamping levers. The clamping lever can be locked in any desired position by a simple upward pull.

Heavy version (large diametres)

Can be delivered in all common sizes:
60.3 / 70.0 / 76.1 / 80 / 84 / 88.9 / 100 /
101.6 / 104 / 108 / 114.3 / 125 / 129 /
133 / 139.7 / 154 mm



DVK 6 quick closure

Light version (small diametres)

Can be delivered in all common sizes:
38 / 40 / 45 / 50 / 54 / 60.3 / 65 / 70 mm
with black or white gasket

DVK-6 Fix

The upper area of the slit coupling is closed with a clamping lever. The clamping lever can be locked in any desired position by a simple upward pull.

High clamping force due to optimal lever length.

Can be delivered in all common sizes:
38 / 40 / 45 / 50 / 54 / 60.3 / 65 / 70 mm
with black or white gasket



Glass bends

Pipe bends for abrasive media

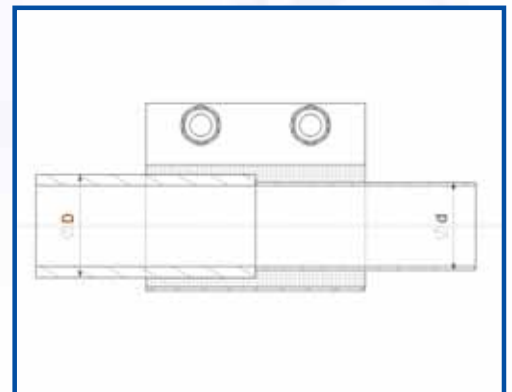
- glass pipe bends
- pipe bends with ceramic coating (interior) for a respectively longer service life

For abrasive media we can offer stainless steel or steel pipe bends that have an interior ceramic coating. For extreme cases of application (abrasive media or high flow-rate) we can also deliver **glass bends**. Their service life is four to five times higher compared to stainless steel pipe bends.



Glass bends from Borosilicate 3.3, ends polished with 200 mm leg extension on each side and copper grounding strip attached at the outer radius.

Pipe coupling for different outer tube diameters



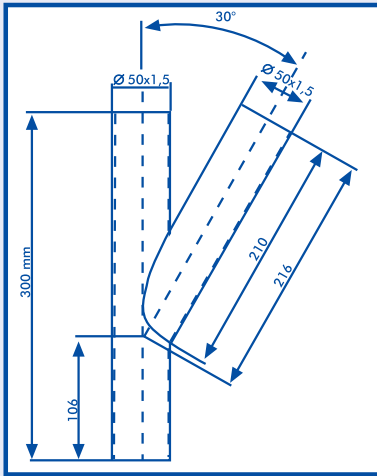
Coupling for tubes with different outer diameters e.g. **glass bend and stainless steel tube**.

Stock article

Sizes on stock:
47 to 40 mm, 56 to 50 mm,
66 to 60 mm

Branch pipes and T-pieces

Stainless steel branch pipes
(30° and 45°) and T-pieces
material no. 1.4301 (AISI 304)



material: aluminium

material: stainless steel 1.4301 (AISI 304)

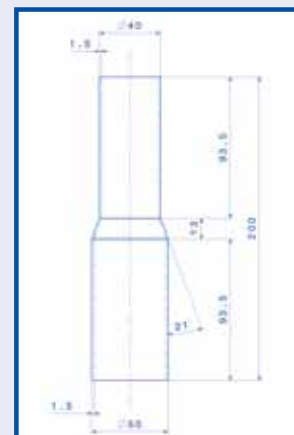
Stock list / stainless steel 1.4301 (AISI 304): T-piece / branch pipe / angle in stainless steel

	T-piece	branch pipe 30°	branch pipe 45°	angle
38.0 x 1.5	●	●	●	
40.0 x 1.5	●	●	●	●
45.0 x 1.5	●	●	●	
50.0 x 1.5	●	●	●	●
50.0 x 2.0		●	●	
54.0 x 2.0	●	●	●	
60.3 x 2.0	●	●	●	●
65.0 x 2.0	●	●	●	
70.0 x 2.0	●	●	●	
76.1 x 2.0	●	●	●	
80.0 x 2.0	●	●	●	
84.0 x 2.0	●	●	●	
88.9 x 2.0	●	●	●	
100.0 x 1.5	●		●	
101.6 x 2.0	●	●	●	
104.0 x 2.0	●	●	●	
114.3 x 2.0	●		●	
129.0 x 2.0	●	●	●	

stainless steel – reducers

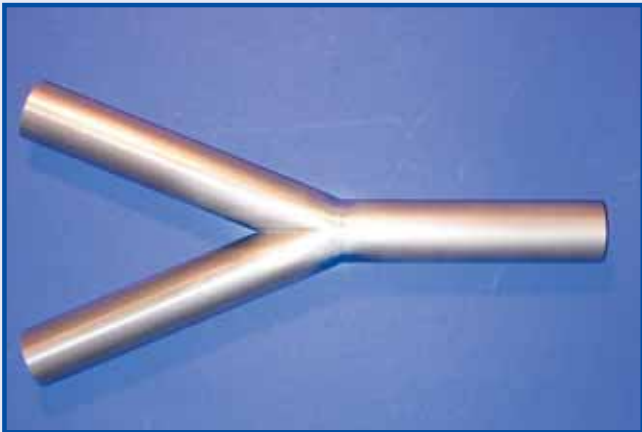


All reducers can be realised, from 38.0 mm up to 129.0 mm. Length and quantity as per your specifications.



= right from stock

Special parts acc. to your drawing



AIRDUC® PUR 355



also available as **AIRDUC® HT-PUR:**
very good heat resistance (better than comparable TPE and Neopren)
Temperature Range from -40 °C approx. to +125 °C approx.; short time to +150 °C approx.

- Universal and abrasion-proof suction and transport hose, especially suitable for high flow-rates of abrasive solids such as powder and granulates
- heavy model
- highly abrasion-proof (abrasion resistance about 2.5 to 5 times better than most rubber materials and about 3 to 4 times better than most soft PVC's)
- flexible with low weight
- increased pressure and vacuum resistance

AIRDUC® PUR 356



also available as **AIRDUC® HT-PUR:**
very good heat resistance (better than comparable TPE and Neopren)
Temperature Range from -40 °C approx. to +125 °C approx.; short time to +150 °C approx.

- Universal and abrasion-proof suction and transport hose, especially for high flow-rates of abrasive solids such as granulates (GFK)
- super-heavy model
- extremely abrasion-proof with reinforcement underneath wire and narrow hose pitch (abrasion resistance about 2.5 to 5 times better than most rubber materials and about 3 to 4 times better than most soft PVC's)
- flexible with low weight
- very high pressure, vacuum and compression resistance

NORPLAST® PVC 384



- Universal and abrasion-proof suction and transport hose, especially suitable for high flow-rates of abrasive solids such as powder and granulates
- heavy model
- flexible
- increased pressure and vacuum resistance
- good resistance to alkalis and acids
- food quality wall complies
- good resistance to UV and ozone

Pintle Hose Clamp 211



- extra stable for attachment of heavy-duty hoses with smooth exterior
- easily and quickly fitted
- re-usable
- rust protected
- very robust

Spiral Hose Clamp 212



- Special clamp for attachment of exterior corrugated spiral hoses
- practically leak-proof and firmly clamped with special bridge geometry
- easily and quickly fitted
- re-usable (threaded)
- rust protected

Safety clamp system



- Safety clamp system for heaviest plastic spiral hoses of polyurethane applicable to silo vehicles for bulk solids such as plastic granulates
- suitable hose AIRDUC® PUR 356 MHF reinforced (abrasion resistance about 2.5 to 5 times better than most rubber materials and about 3 to 4 times better than most soft PVC's)
- exceptionally rugged and impact-resistance for even the harshest of environments
- re-usable
- rust protected

CONNECT Safety Clamp System 231



- Safety clamp system for close mounting of outside curled spiral hoses for avoidance of decrease in pressure in pneumatic conveying systems
- for industrial appliance for example the plastic industry
- vibration resistant
- re-usable
- easily and quickly fitted

Material distributors / coupling stations

There are 5 units with 3 outlets of stainless steel tube 50.0 x 1.5 mm (other tube cross sections and arrangements are possible) mounted in the frame.

The individual elements like bends, branch pipes and tubes are connected by vacuum couplings, adjusted exactly and fixed with pipe clamps to the frame construction.

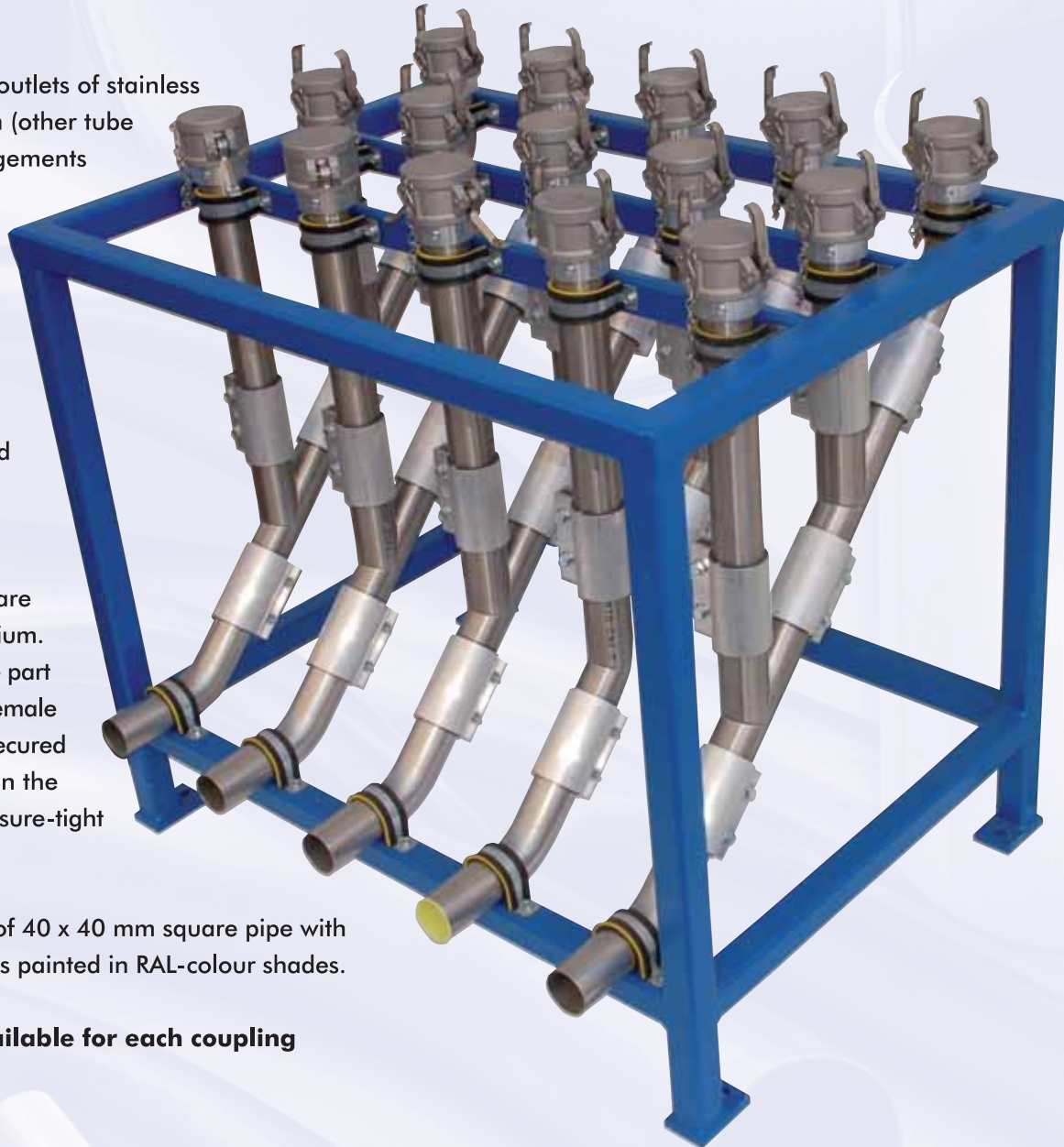
At the upper ends there are camlock couplings in minimum. These consists of the male part and the covering cap as female part. Both elements are secured with a chain. An O-ring in the male part is used for pressure-tight sealing.

The base frame consists of 40 x 40 mm square pipe with diagonal connections. It is painted in RAL-colour shades.

CAD-drawings are available for each coupling station.

coupling station element

- laser-cut and formgas-welded
- manufactured as per your drawing or sketch



Camlock couplings

in different dimensions for coupling stations

tube diameter 40.0 / 50.0 / 60.3 and 65.0 mm



male parts in aluminium

size 1 1/2 inch, 2 inch, 2 1/2 inch



covering caps in aluminium

size 1 1/2 inch, 2 inch, 2 1/2 inch



**female part with hose connector
in aluminium or stainless steel**

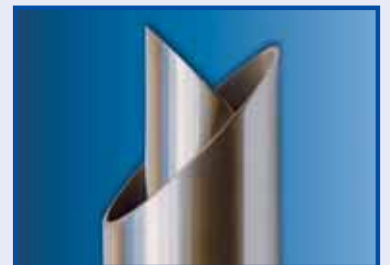
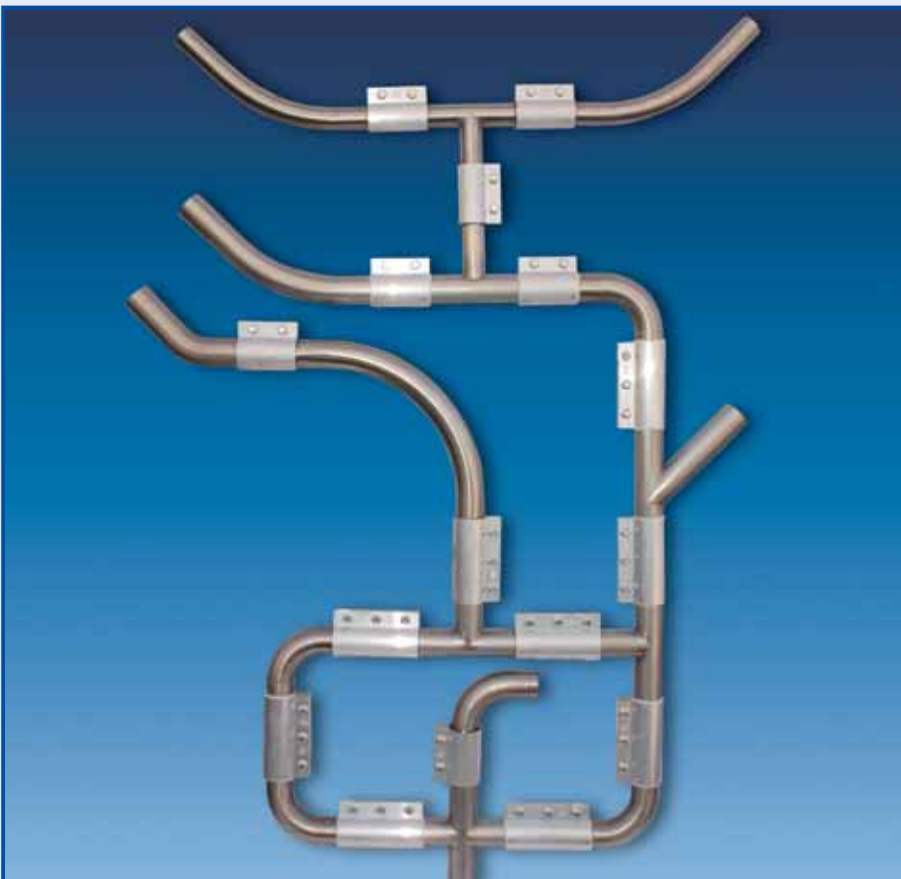
size 1 1/2 inch, 2 inch, 2 1/2 inch



Suction pipe / suction lances



- material: stainless steel no.1.4301(AISI 304), manufactured acc. to your drawing and/or sketch or sample
- can be delivered in different diametres
- short-term delivery possible for any version
- in all common tube dimensions 40.0 / 50.0 und 60.3 mm – **right from stock**



suction pipe 45°
chamfered for improved
suction function.



suction pipe with spacer
for optimal suction function.

Mounting systems for aluminium and stainless steel tubes

C-bar with T-nut and threaded bar



pipe bracket with rubber inlay



bolt clamp with rubber inlay



brackets, light versions



brackets, reinforced



Storz couplings in all common sizes (A-B-C) in aluminium / brass or stainless steel

solid coupling with inner thread



solid coupling with outer thread

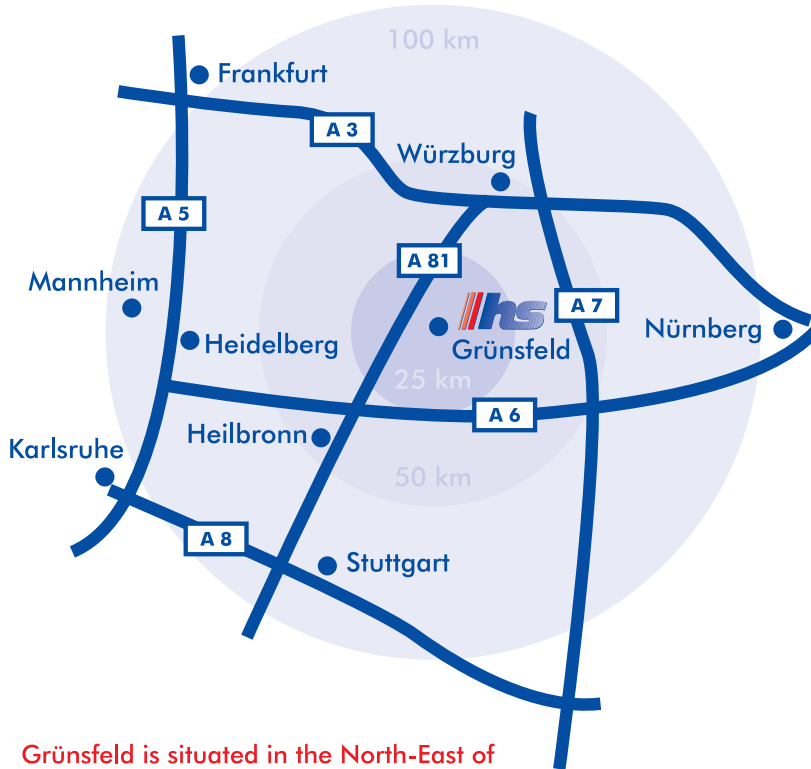


cap fire hose coupling



suction coupling

How to find us



Grünfeld is situated in the North-East of Baden-Württemberg, in the Main-Tauber-Region.



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