

Carl Hamm
Pipesystems



Effective
High-quality
Safe

Carl Hamm
Tube®
HD



Our services are based on competence, experience, innovative thinking, modern production equipment and motivated employees.

Numerous certificates and approvals give you the security that applicable rules and regulations are observed throughout the entire production processes.

Our product range is focused on above and below-ground applications in water and waste water management, the power industries, tunnel construction, well sinking, domestic installations and mining.

Benefit from a strong, competent partner who fulfils your special requirements: from design planning and professional production to punctual delivery.

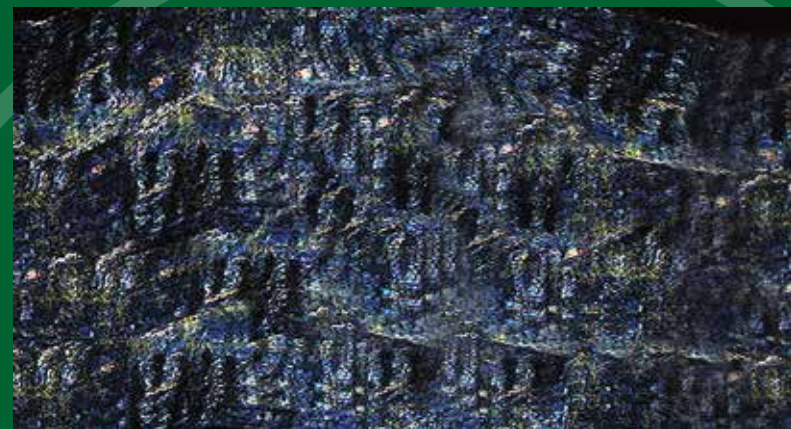
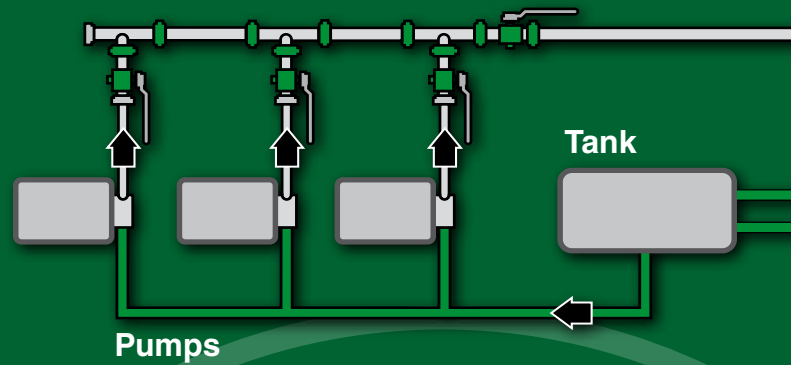
hyper tube[®] HD system is a product of Carl Hamm, which has been operating successfully in the mining industry for over 80 years. Our high-quality products are recognised throughout the world.

The **hyper tube[®] HD** system is used for the entire emulsion circuit:

- As a supply line from the pump station to the shields
 - As a return line from the shields to the pump chamber
- Furthermore, the system is used for cooling water and spray lines.

Every project starts with the planning of the volume and pressure requirements and the preliminary planning of the pipe routing. The second stage involves calculating the pressure losses and determining the optimum nominal sizes to achieve the performance required. The final stage comprises the detailed planning; valves are positioned and the routing adapted to suit local conditions / peculiarities. The entire procedure is coordinated with the customer and, if necessary, a site tour is also possible.

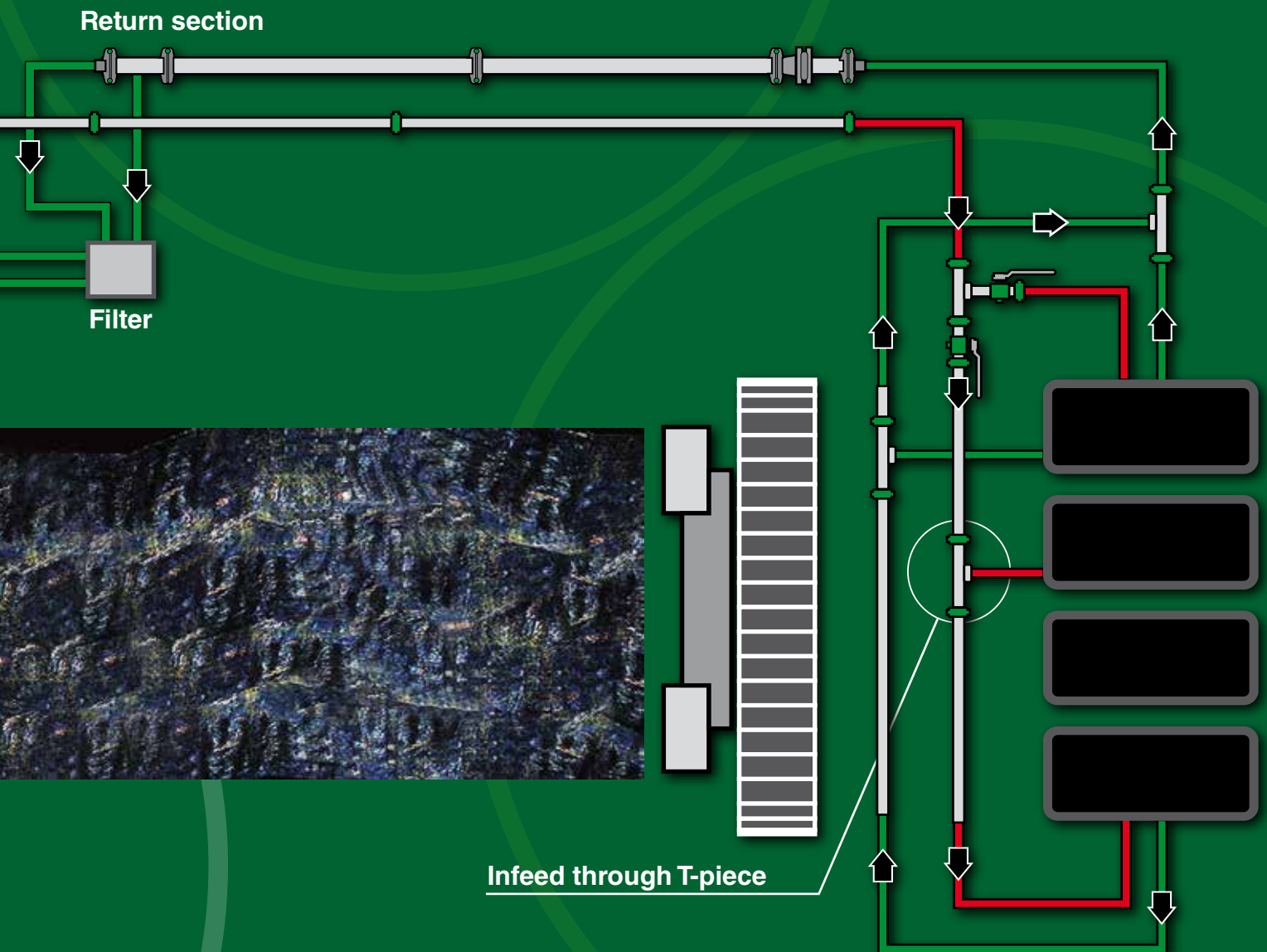
Supply section



The concept of a „central pump station“ has been used all over the world to supply the hydraulic face support with HFA fluid for many years. In principle, this concept involves the use of rapid-action connecting lines to transport the hydraulic fluid over several kilometres without an major pressure losses. Ever more projects are being implemented where a „central pump station“ supplies HFA fluid to several faces at the same time. As a result, even greater cost savings can be achieved. Moreover, this concept is also employed to supply cooling water and combat dust at the face.





hyper tube[®] HD

High-pressure pipelines



hyper tube[®] HD

High-pressure pipelines

Connection	Nominal size											
	25	32	40	50	60	DN		80	100	125	150	
	PN 400											
			PN 400	PN 400	PN 400		PN 400					
			PN 400	PN 400	PN 400		PN 400	PN 400	PN 400			
				PN 100		PN 100	PN 100	PN 100	PN 100	PN 100	PN 100	PN 40

Tubes for the roadway




We offer tubes with various connections for pipelines in the roadway.

Supply line

- Connections - screw couplings (union nut with 2 to 5 cams)

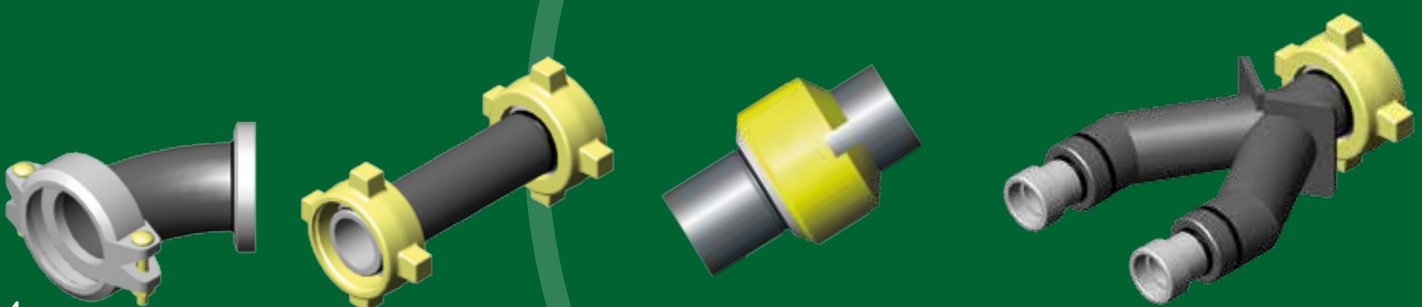
Return / Spraying / Cooling water

- Connections - split couplings with bolts

Connection	Nominal size											
	25	32	40	50	60	DN		80	100	125	150	
		PN 400	PN 400	PN 400	PN 400		PN 400	PN 400				
								PN 400	PN 400	PN 400		
				PN 100		PN 100	PN 100	PN 100	PN 100	PN 100		

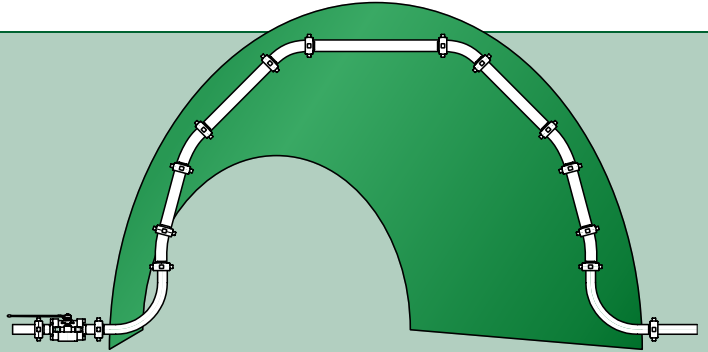
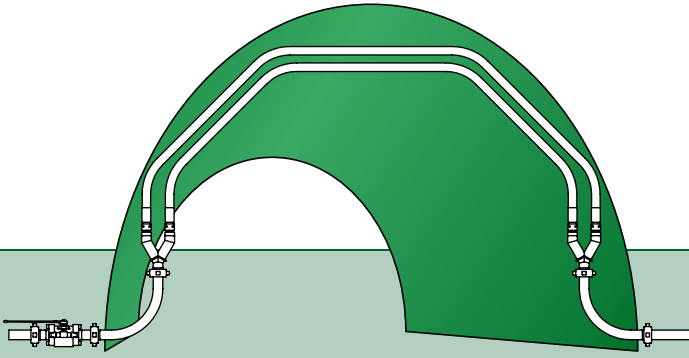
Pipelines for the face (considerably reduce the pressure losses compared with a pure hose)

In view of the confined local conditions screw couplings with chamfered union nuts are mainly used at the face. In order to give the pipeline more flexibility, it is advisable to use a 1 m long hose every 30 – 50 metres.

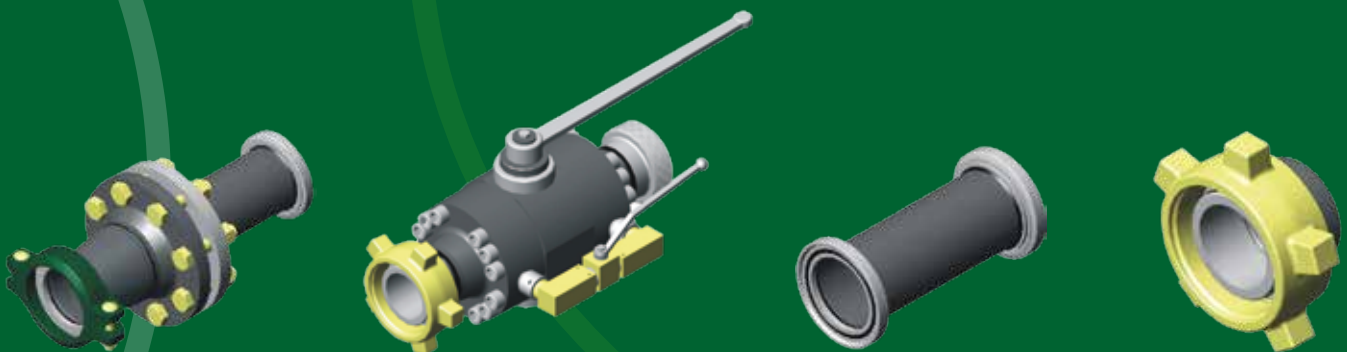


Special solutions

We have developed special solutions (bridges) for laying the pipeline in complicated roadway routes. These bridges consist, on the one hand, completely of tubes and, on the other, of a tube / hose combination.



Efficiency, quality and safety are not just empty words for us. As we are aware of our responsibility, we test 100% of our tubes and fittings at 1.43 times the operating pressure.



hyper tube[®] HD

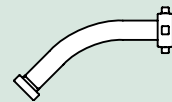
High-pressure pipelines

Components of a high-pressure tube

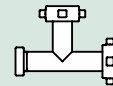
Tubes serve to convey liquids and are manufactured in lengths from 250 mm to 6,000 mm for pressures of up to PN 400.



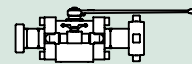
Bends permit a change in direction of the tube. They are manufactured with standard angles of 15°, 30°, 45°, 60° and 90°.



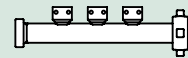
T-pieces permit the division and / or merging of liquid flows. They are manufactured in such a way that the discharge has an angle of 90° to the main pipe. The discharge can be made with the same or a reduced nominal size.



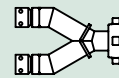
Ball valves permit the separation of two pipe sections and therefore the interruption of liquid flows. They are supplied with a hand lever and, from DN65, they are manufactured with a bypass.



Infeeds permit the removal and/or introduction of liquid flows. They are manufactured so that the discharges (2-5) have an angle of 90° to the main pipe. The discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



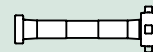
Y-joints permit the more streamlined division and / or merging of liquid flows. They are made with 2 – 4 discharges. The discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



Adapters serve to connect 2 pipes where the pipe ends have the same design. They are made with a sealing head on both sides or a thread on both sides.



Hoses permit the flexible connection of two pipes and therefore easier modification to suit the local conditions. They are used for connecting the pipe to the pump station and for the transition to the face. Hoses are made in lengths of 1 m to 20 m.



Seals serve to seal the connections.

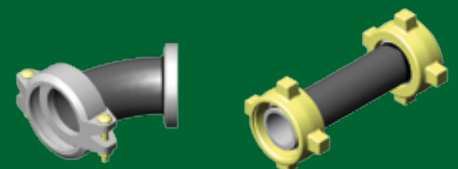


The transition pieces permit various elements with different connection couplings to be connected to the pipeline. The discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



Tubes, fittings and valves

We manufacture all the components of a pipe, permitting the implementation of any project.



effective • high-quality • safe

Components of a return line.

Tubes serve to convey liquids and are manufactured in lengths from 250 mm to 6,000 mm for pressures of up to PN 100.



Bends permit a change in direction of the tube. They are manufactured with standard angles of 15°, 30°, 45°, 60° and 90°.



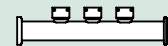
Transition pieces are mainly used at the end of a pipe or at the discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



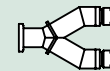
T-pieces permit the division and / or merging of liquid flows. They are manufactured in such a way that the discharge has an angle of 90° to the main pipe. The discharge can be made with the same or reduced nominal size.



Infeeds permit the removal and / or introduction of liquid flows. They are manufactured so that the discharges (2-5) have an angle of 90° to the main pipe. The discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



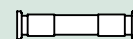
Y-joints permit the more streamlined division and / or merging of liquid flows. They are made with 2 – 4 discharges. The discharges can be designed with plug-in connections (plug-O DN 10 to plug-O DN50SS) or with SAE flanges.



Adapters serve to connect 2 pipes where the pipe ends have the same design. They are made with a spring collar on both sides or a groove collar both sides.



Hoses permit the flexible connection of two pipes and therefore easier modification to suit the local conditions. They are used for connecting the pipe to the pump station and for the transition to the face. Hoses are made in lengths of 1 m to 20 m.



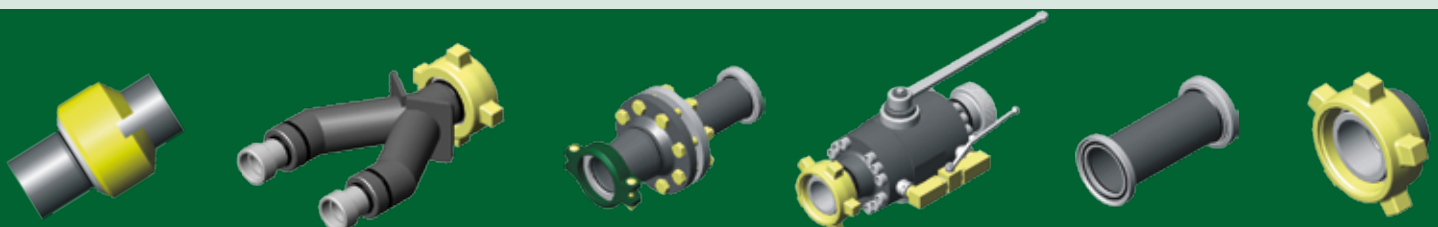
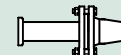
Seals serve to seal the connections.



Split couplings are used to connect the individual tubes and fittings.



Non-return valves serve to convey liquids in only one direction.



hyper tube[®] HD

High-pressure pipelines

Quality management

Certificates for non-destructive testing procedures as well as personal welding qualification certificates of our MAG, TIG and submerged arc welders are available as well as the authorisation to transfer markings (re-stamping) for metallic materials with a test certificate 2.2 and 3.1 to DIN EN 10204:2005.

The staff of our quality assurance department, who are certified to DIN EN 473, guarantee a constantly high quality standard of our welds with in-process, non-destructive, radiographic, dye penetration and magnetic particle tests.

We have a quality management system certified to DIN EN ISO 9001:2010. As an approved specialised company for welding applications to DIN EN ISO 3834-3, AD 2000 HP0, DLGRL and to DIN 18800-7, we fulfil national and international requirements.



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