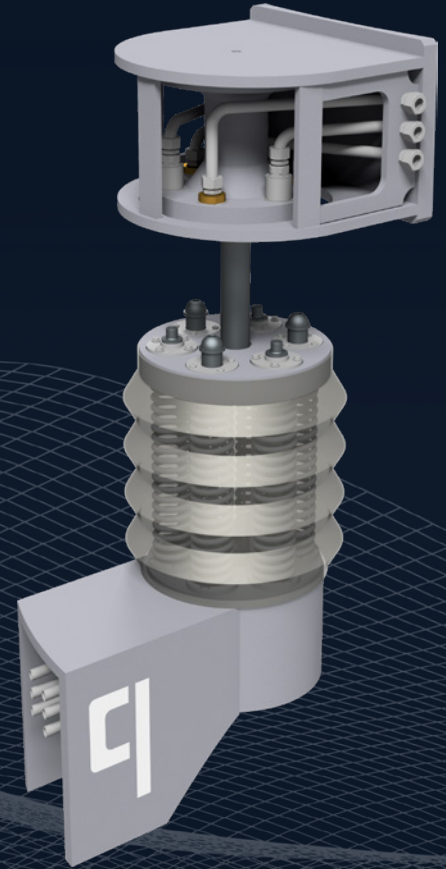




Multifunctional multi-media coupling system
for harsh industrial applications





coupler is a patented, quick, safe, reliable and maintenance friendly automatic multi-media connection device for coupling different media in harsh environments like the metals or mining industry.

It is a compact coupling system to create the link between a fixed media supply source and a mobile coupling partner.

The system is designated to increase operator safety compared to any manual coupling operation.

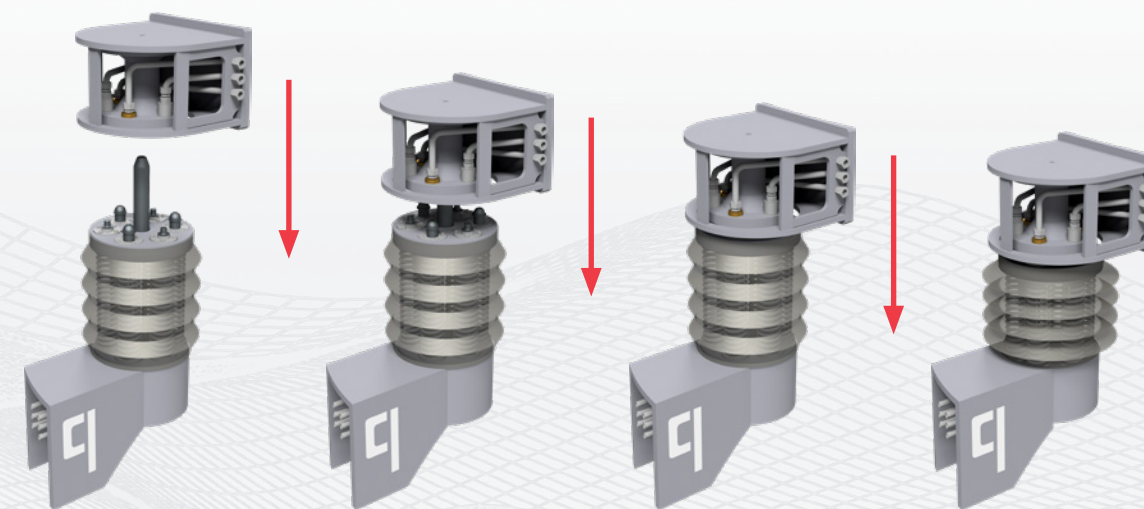
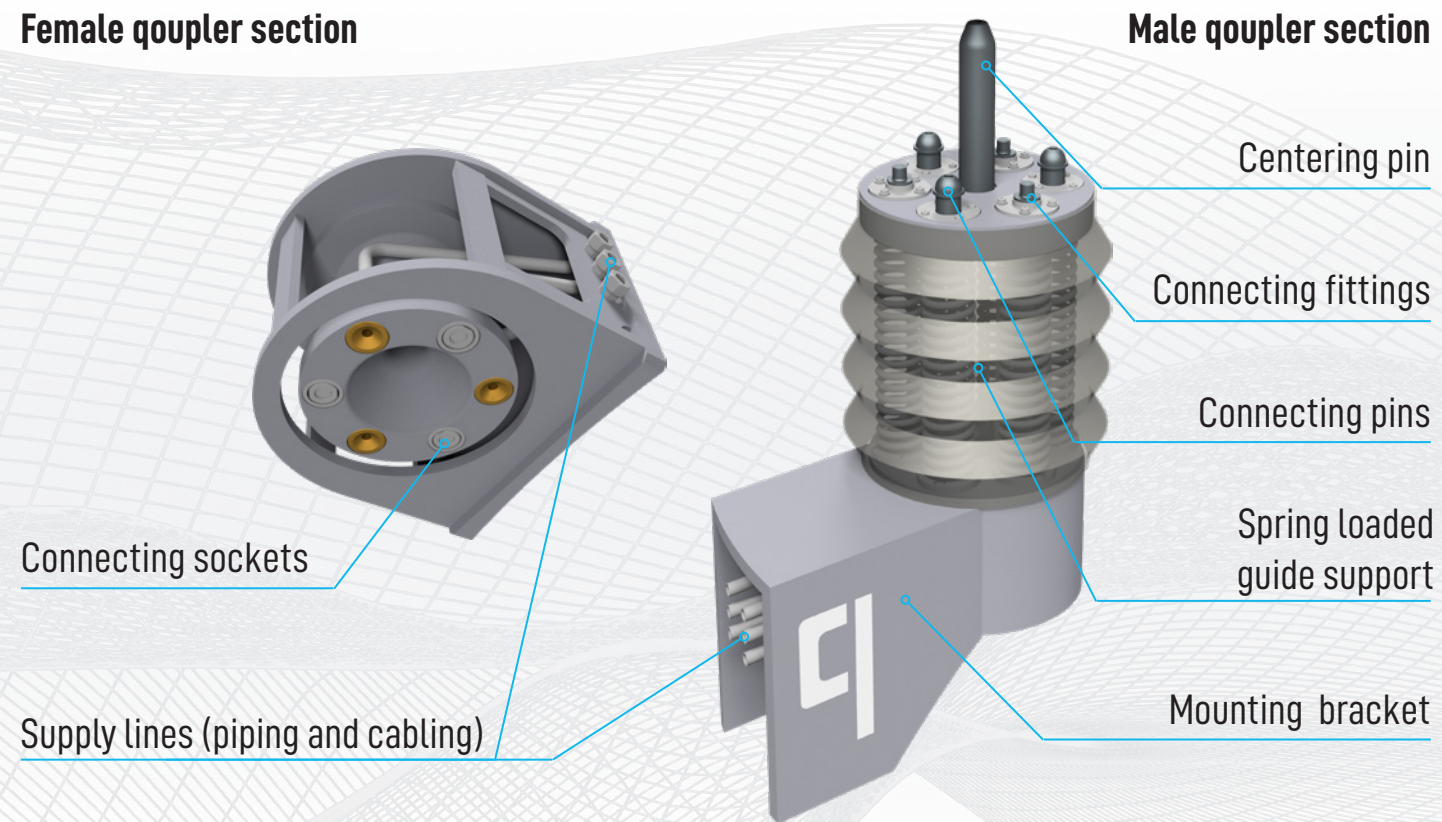
- Automatically couple different media like gas, liquids, hydraulics or electrical currents with one multi coupling connection
- Actuated by placing the mobile part onto the fixed mating partner
- Supply of different media starts immediately without need of any personnel for coupling hoses or cables from the supply source
- Spring loaded system offerst highest coupling reliability.
- High flexibility in all directions to compensate for misalignment between the coupling partners.
- Used to harshest environments, dust-proof and temperature resistant
- Multifunctional and multi-media coupling in a single coupling solution for up to 7 separate feeding lines
- Patented solution for 100% operator safety



Main System Components

Coupling Procedure

Female coupler section



Coupling procedure with the fixed (female) part approaching the flexible (male) coupling section

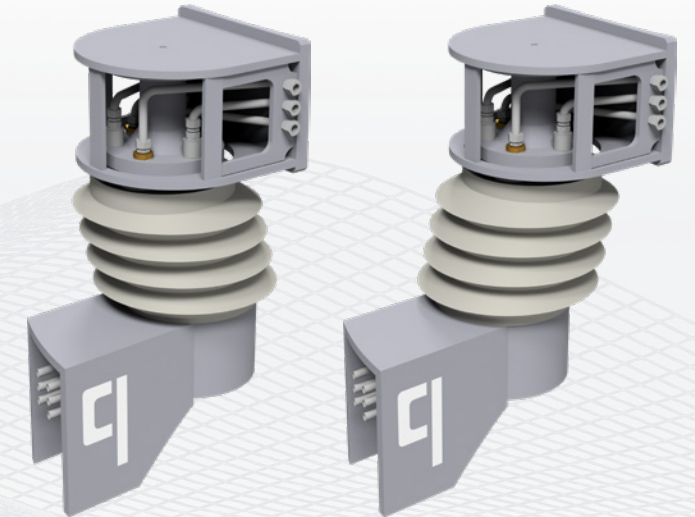
Functionality and Flexibility



coupler connects two mating coupling halves in a fully automatic manner. Nearly any kind of media can be transported through the coupler such as liquids, gas, electrical signals. There is no more requirement for personnel to execute a coupling procedure.

By a special design, well-proven under rough industrial applications, coupler offers a flexibility of 100 mm (4") to ensure a proper coupling even when the two mating partners are not aligned.

The coupling tightness itself and unprecedented flexibility are ensured by especially designed springs within the coupler.



Lateral and axial flexibility even in fully coupled position

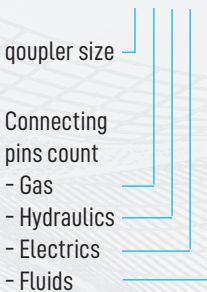


The project scope of supply includes qoupler as a system solution and the overall project engineering and installation supervision. The approach for a project-specific engineering is to ensure proper installation and performance of the system.

The included engineering services are:

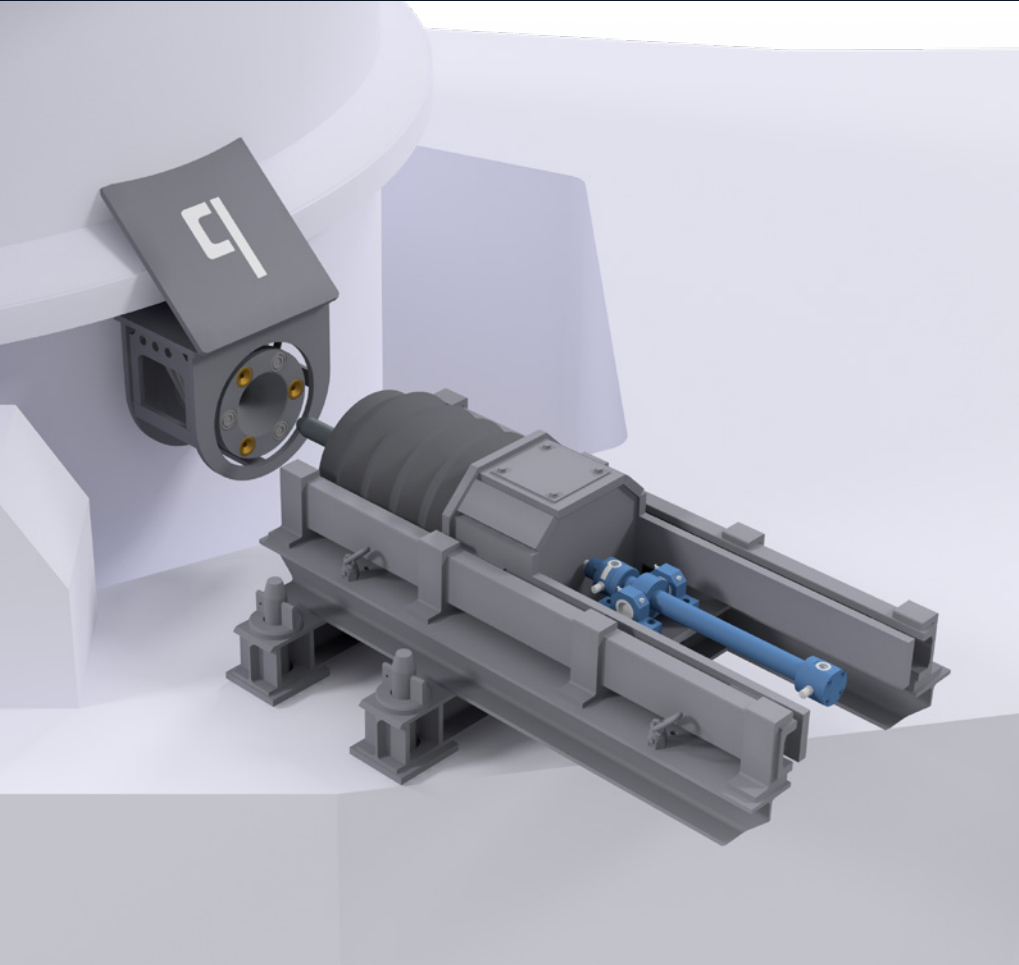
- Creating an overview of the requirement and the interferences.
- Choosing best location for qoupler taking into consideration plant-specific requirements
- Elaborating of conceptual study.
- Designing customized brackets, attachment plates for brackets

Example for model key
qoupler-L-1-2-1-0



qoupler Flexibility	Size L	± 50 mm in all axes
	Size XL	± 100 mm in all axes
Media	Gas	Ar, N ₂ , CO ₂ , Air (other gases upon request) max. 30 bar 4000 l/min 500 °C ambient temperature
	Hydraulics	max. 250 bar 100 l/min 150 °C ambient temperature (higher values upon request)
	Electrics	max. 1000 V 500 A 150 °C ambient temperature (higher values upon request)
	Fluids	Parameters depending on fluid

Application Examples



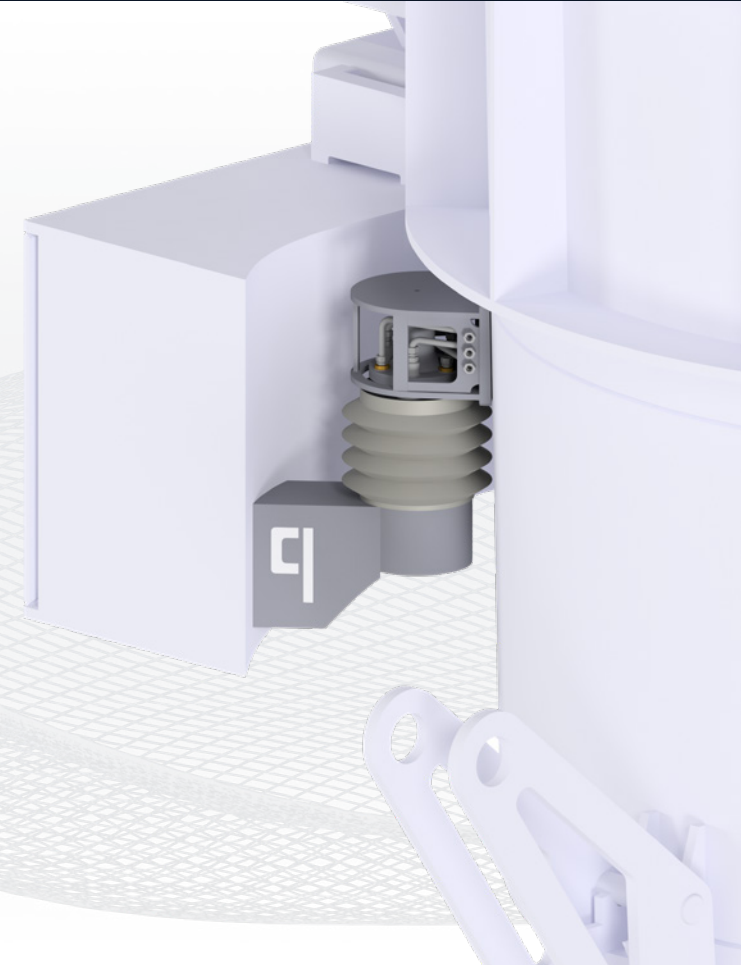
Horizontal coupler system for automatic hydraulic connection

A heavy duty application where coupler used to connect hydraulic connections to a mobile transport device. The hydraulic pressure over the connecting pins is 250 bar.

The horizontal arrangement is necessary due to the movement of the mobile transport device.

coupler applied to a steel ladle for the steel industry

In this application, coupler is used to automatically connect ladle gas stirring and electrical signals at various positions in a steel plant without any operation interaction.





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