




qoupler

Automatic gas coupling system



 oupler

# safety-driven versatility in motion



**qoupler G** is an advanced automatic gas coupling system that guarantees speed, safety, and reliability. Tailored for challenging environments such as steel plants, it guarantees optimal performance in harsh conditions.


**qoupler G** automatically connects the gas supply to the porous plug on the ladle. This system can be easily installed and adapted to existing facilities, ensuring smooth operation and maintenance.

At **qoncept**, we develop reliable and efficient solutions for optimizing production processes across industries, prioritizing operator protection. **qoupler G** is built to increase operator safety compared to any manual coupling operation.


” Experience the future of gas coupling with **qoupler G**, where versatility and safety converge. **Together, let's redefine industry standards.**

# System Highlights

- Covers all ladle sizes and gas flow requirements with a single coupling for up to 3 separate feeding lines.
- Automatically actuated by placing the ladle on the ladle station or on the transfer car.
- Immediately supplies gas when the coupling sections meet.
- Ensures high coupling reliability with a spring-loaded system.
- Proven application with high flexibility in all directions.
- Improved ladle guiding for precise crane manipulation without additional efforts for the crane operator.



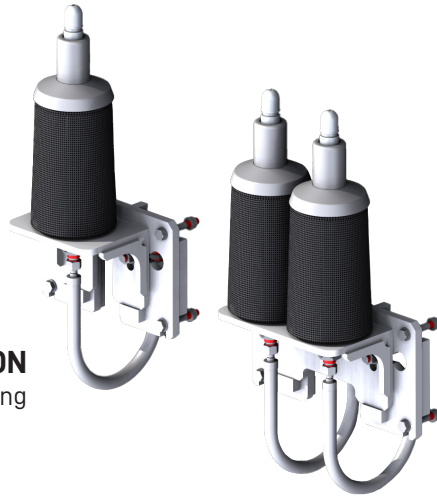
” **goupler G** offers **production versatility** with **paramount operator safety** at its core.



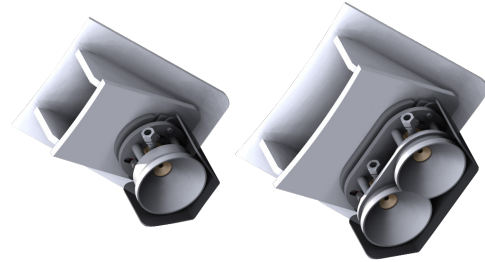
# System Components & Application

G  
coupler

**MALE SECTION**  
Fixed Coupling



**FEMALE SECTION ON LADLE**  
Moving Coupling



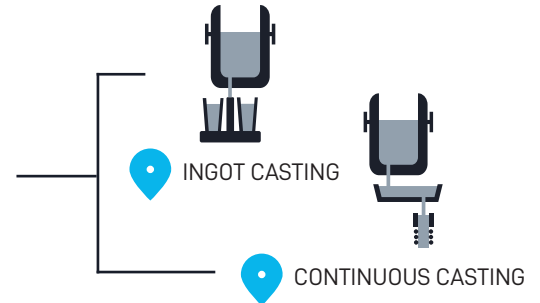
TAPPING POSITION



LADLE FURNACE



VD/VOD TANK



## Technical Data

PARAMETER	DESCRIPTION
Flexibility	65 mm (±2.5") in all axes
Number of Ports	Up to 3
Pipe Connections	DN20 (3/4") flexible metal hose
Gas	Ar, N <sub>2</sub> or compressed air
Max. Flow Rate	0 – 2 500 l/min (0 – 90 cfm)
Max. Pressure	25 bar (360 psi)
Max. Temperature	Max. 450 °C (850 °F), higher T upon request
Coupling Sealing	Metal-Metal

**coupler G** automatically connects the stirring gas supply when the ladle is placed on the ladle car or stand, eliminating the need for personnel to be near ladles containing molten steel at extreme temperatures.

When the ladle is lifted into position by crane, the female part of the ladle and male part are pressed together, forming a secure and tight connection.

The male section is equipped with multiple springs to provide the necessary sealing strength and flexibility. Tested and proven in harsh industrial environments, **coupler G** also provides the highest range of horizontal flexibility to ensure proper coupling, even if the ladle is not perfectly positioned.



[www.qoncept.at](http://www.qoncept.at)

[www.qoncept.us](http://www.qoncept.us)

[sales@qoncept.at](mailto:sales@qoncept.at)

© 2025