

Stucchi®

# Solutions for Steel Mill

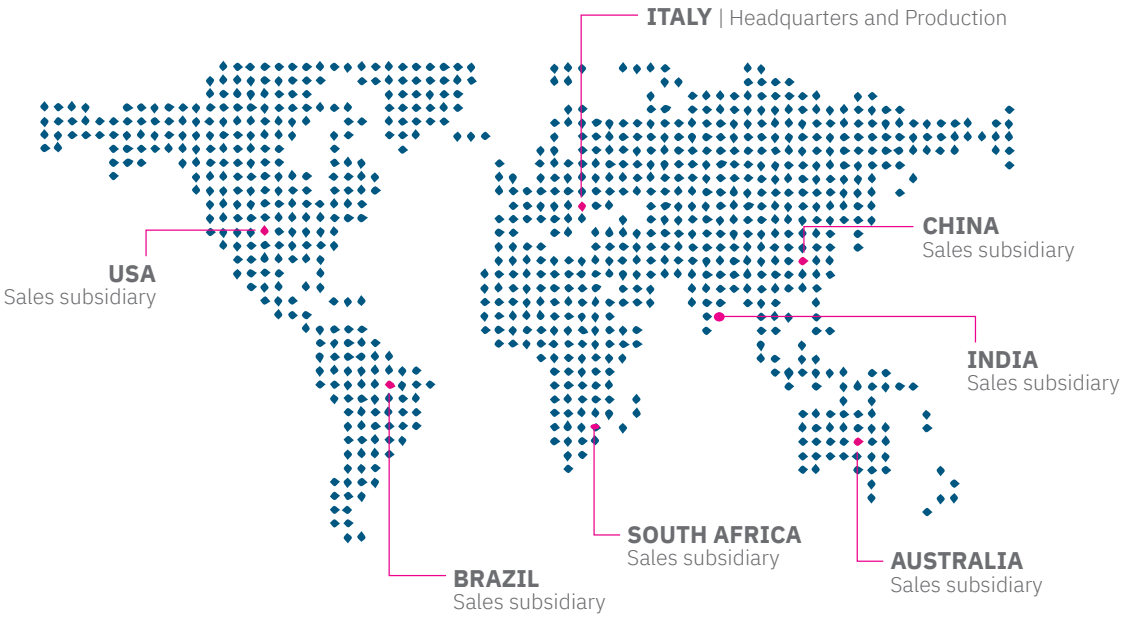
stucchigroup.com

# The Company

Stucchi was founded in 1960 in Italy and during these dacades has gained a vast experience in the production of quick couplings for fluid transfer.

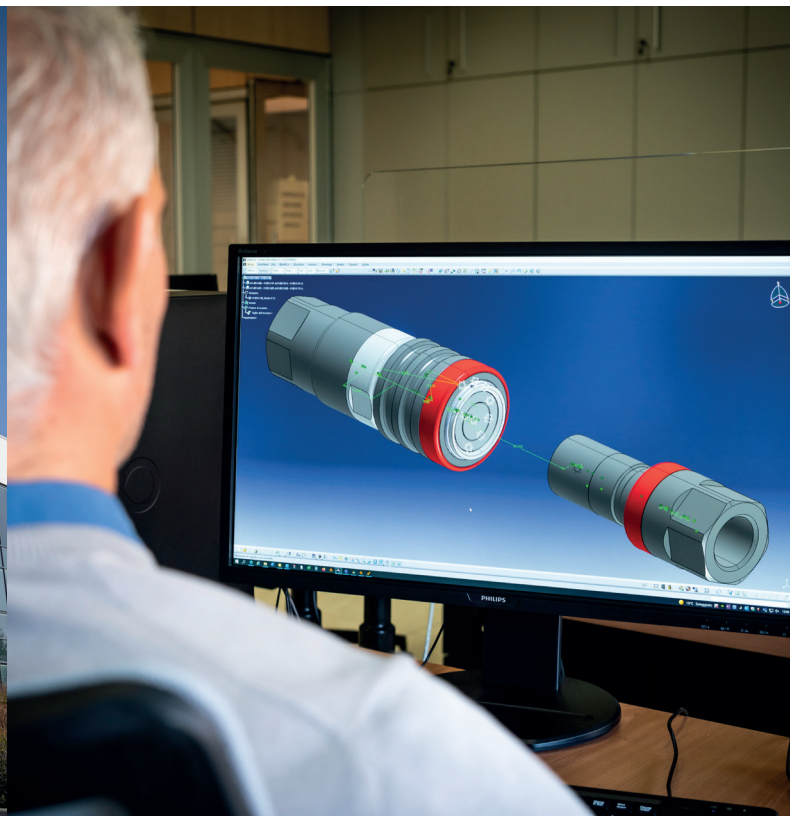
The vision that drives us to the future is to be recognized by our customers as their supplier of choice for fluid power products and solutions that are easy to use, safe, long lasting, environmentally friendly and that help in saving energy.

# Stucchi in the world









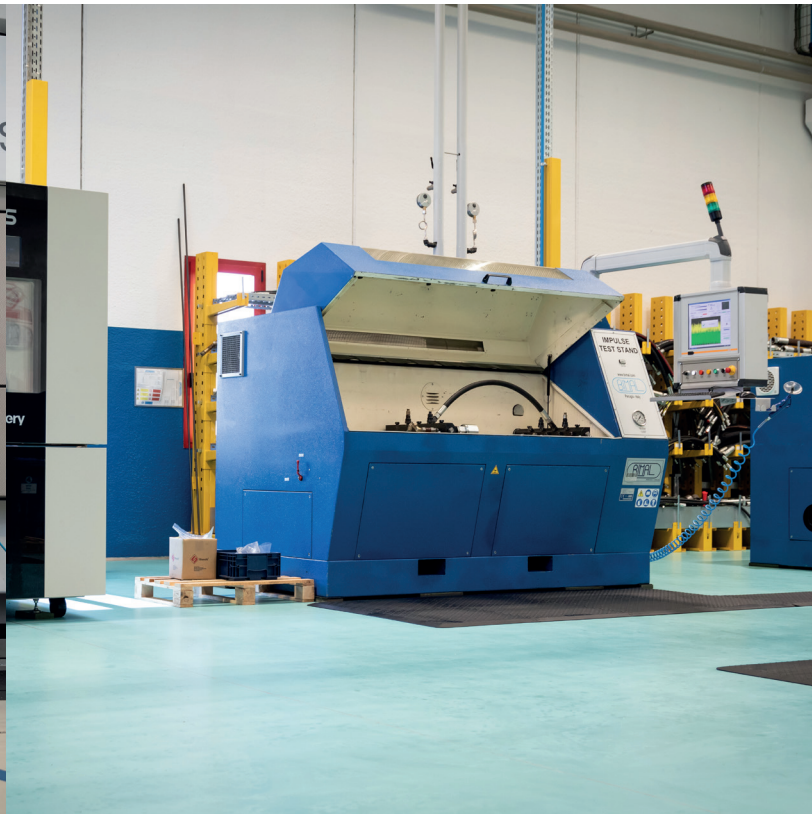
# Why Stucchi

· Extensive knowledge across different thermal management fields
· Strong global network and presence
· Collaborative engineering tailored to customer needs
· In-house expertise in design, production and testing

# Why Stucchi products

· Durability under mechanical stress
· Flat face design with no-spill valve
· Minimal pressure drop design
· Flexibility to provide different port configurations
· Our solutions are designed to offer superior compatibility with a wide range of fluids
· Different raw materials and seals available according to customer requirements
· Solutions for connection under residual pressure



# The Stucchi proposition

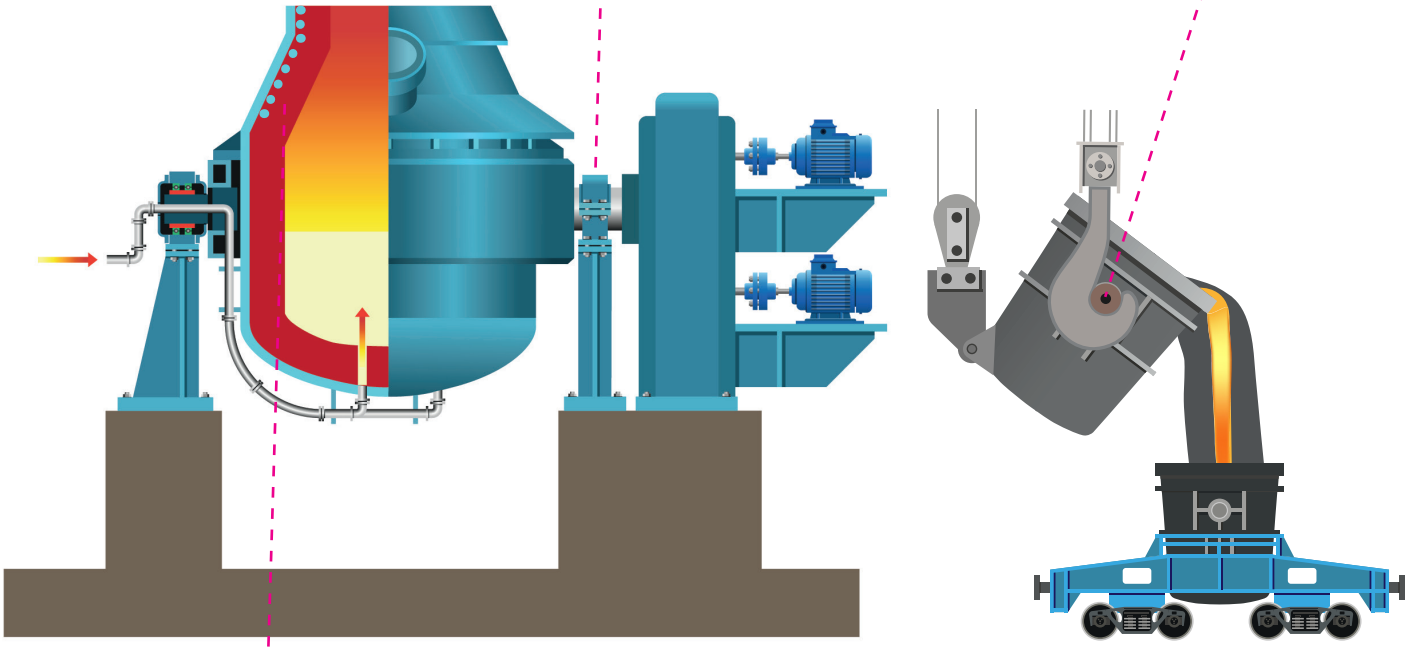
With over 60 years of experience in quick couplings, Stucchi supports steel mills and foundries with reliable fluid connection solutions for demanding industrial environments. Its products are engineered to withstand high temperatures, heavy mechanical stress and continuous operating cycles.
By combining technical expertise, robust design and strict quality standards, Stucchi ensures long-term durability, operational safety and consistent performance in critical production processes.

**Vessel hydraulic movements**
*(tilting/lifting cylinders)*

- FIRG-Q • GR + FAP-ZN • IRB
- A
- FL
- AX
- VEP-P

**Hydraulic manipulator system**

- FIRG-Q • GR + FAP-ZN • IRB
- A
- FL
- AX
- VEP-P



**Vessel cooling panels system**

- FIRG-Q • GR + FAQ • IRBX
- FL • IRBO
- AX

# Steel Mill applications

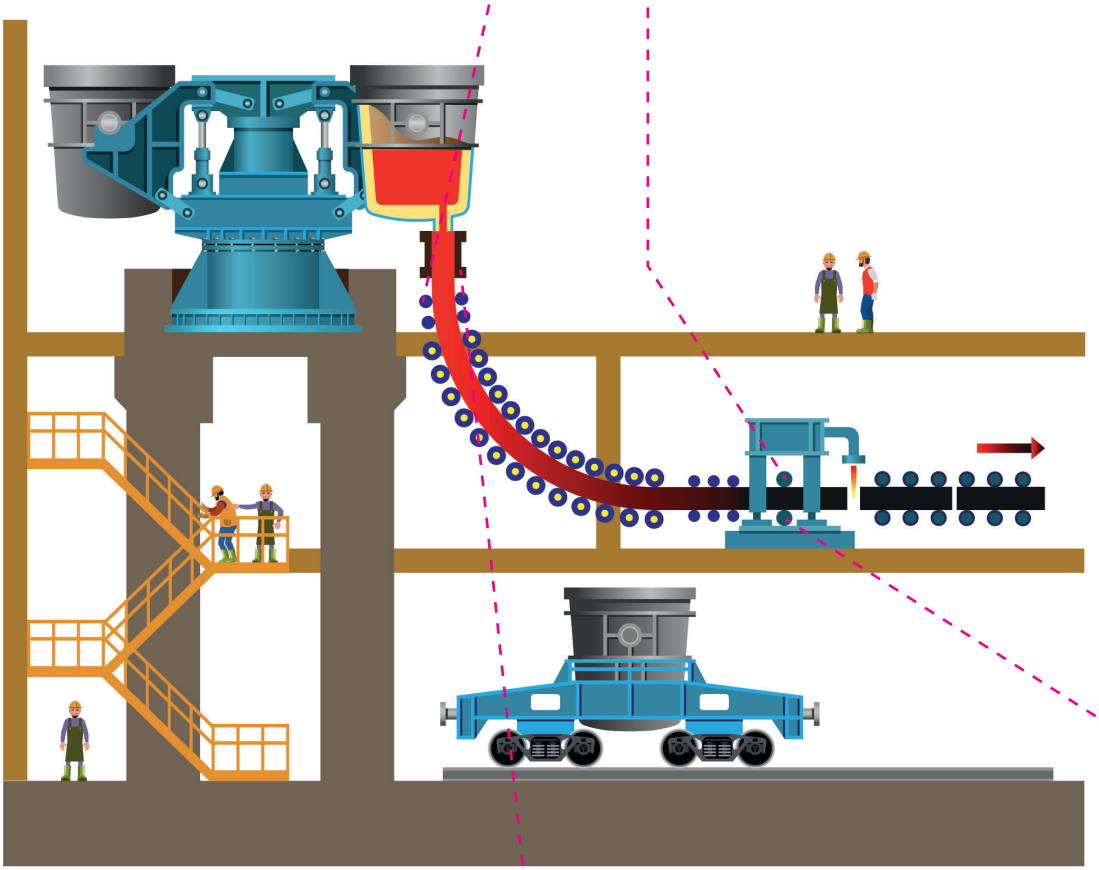
Stucchi quick couplings are used in vessel hydraulic movements such as tilting and lifting cylinders, as well as in continuous casting and rolling mill hydraulics, including rotating cylinders and manipulator systems.
They are also employed in vessel cooling panels, roll cooling systems, lubrication lines and inert gas circuits. Suitable for both hydraulic oil and cooling fluids, Stucchi products contribute to safe, efficient and reliable steel production operations.

**Continous casting/rolling mill cooling system**

- FIRG-Q
- FL
- AX
- GR + FAQ
- IRBX
- IRBO

**Continous casting/rolling mill hydraulics** *(rotating cylinders)*

- FIRG-Q
- A
- FL
- AX
- VEP-P
- GR + FAP-ZN



**Inert gas lines for continous casting**

- GR + FAQ
- IRBX
- IRBO
- IRB

**Lubrication lines**

- FIRG-Q
- A
- FL
- AX
- GR + FAQ
- IRBX
- IRBO

# Stucchi solutions for Steel mills

Steel production processes require fluid systems capable of operating under extreme conditions while guaranteeing continuity and safety. Stucchi provides a comprehensive range of quick couplings for hydraulic oil, diathermic oil, water and water-glycol circuits, supporting both power transmission and thermal management.
Designed for seamless integration into modern steel plant equipment, these solutions help reduce downtime, simplify maintenance and improve overall system efficiency.

## Technical notes

| | | Valving style | Size | Operating pressure (bar) | Flow rate (l/min) | Material /Treatment |
|---|---|---|---|---|---|---|
| FIRG-Q |  | Flat face | 1/4”, 3/8”, 1/2”, 5/8”, 3/4”, 1”, 1-1/2”, 2” | max 300 bar | max 1000 l/min | Carbon steel+Stainless steel/ QPQ |
| A |  | Flat face | 1/8”, 1/4”, 3/8”, 1/2”, 5/8”, 3/4”, 1”, 1-1/4”, 1-1/2” | max 420 bar | max 750 l/min | Carbon steel / Cr3 (Zn-Ni available) |
| FL |  | Flat face | 1/8”, 1/4”, 3/8”, 1/2”, 5/8”, 3/4”, 1”, 1-1/2”, 2” | max 350 bar | max 1000 l/min | Stainless steel |
| AX |  | Flat face | 3/8”, 1/2”, 3/4”, 1” | max 350 bar | max 378 l/min | Stainless steel |
| VEP-P |  | Flat face | 1/4”, 3/8”, 1/2”, 5/8”, 3/4”, 1”, 1-1/2”, 2” | max 600 bar | max 1000 l/min | Carbon steel / Cr3 |
| GR+ FAP-ZN |  | Flat face | from 3/8” to 1” (up to 10 lines) | max 350 bar | max 378 l/min | Body plates in aluminum, couplings in carbon steel/Zn-Ni |
| GR+FAQ |  | Flat face | from 3/8” to 1” | max 20 bar | max 378 l/min | Body plates in aluminum, couplings in carbon steel-stainless steel/QPQ |
| IRBX |  | Poppet | 1/8”, 1/4”, 3/8”, 1/2”, 3/4”, 1” | max 250 bar | max 200 l/min | Stainless steel+Brass |
| IRBO |  | Poppet | 1/8” to 1” | max 250 bar | max 200 l/min | Brass |
| IRB |  | Poppet | 1/8”, 1/4”, 3/8”, 1/2”, 3/4”, 1” | max 350 bar | max 200 l/min | Stainless steel |

# Different products for different uses

Applications within steel mills vary significantly in terms of pressure levels, fluid types and environmental conditions. Stucchi develops dedicated solutions tailored to hydraulic movements, cooling circuits and auxiliary lines, ensuring secure and repeatable connections.
Careful material selection and precise engineering allow each product family to deliver reliability, long service life and stable performance even in continuous-duty and high-temperature environments.

| | Media - Sealing - Temperature | | | Applications | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hydraulic oil (power transmission) Nitrile NBR from -20°C to +100°C (from -4°F to +212°F) | Diathermic oil (temperature control) FKM (VITON®) from -15°C to +180°C (from +5°F to+356°F) | Water, water/glycol (liquid cooling) EPDM from -40°C to +150°C (from -40°F to +302°F) | Vessel hydraulic movements *(tilting/ lifting cylinders)* | Hydraulic manipulator system | Vessel cooling panels system | Continous casting/ rolling mill hydraulics *(rotating cylinders)* | Continous casting /rolling mill cooling system | Lubrication lines | Inert gas lines for continous casting |
| FIRG-Q | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | — |
| A | ✓ | ✓ | — | ✓ | ✓ | — | ✓ | — | ✓ | — |
| FL | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | — |
| AX | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | — |
| VEP-P | ✓ | — | — | ✓ | ✓ | — | ✓ | — | — | — |
| GR+ FAP-ZN | ✓ | — | — | ✓ | ✓ | — | ✓ | — | — | — |
| GR+FAQ | — | ✓ | ✓ | — | — | ✓ | — | ✓ | ✓ | ✓ |
| IRBX | ✓ | ✓ | ✓ | — | — | ✓ | — | ✓ | ✓ | ✓ |
| IRBO | ✓ | ✓ | ✓ | — | — | ✓ | — | ✓ | ✓ | ✓ |
| IRB | ✓ | ✓ | — | ✓ | ✓ | — | — | — | — | ✓ |

Stucchi®

For complete technical information see www.stucchigroup.com
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