




# EQUIPMENT AND DEVICES

Reliable and sustainable products and solutions that make your work easier and safer.



**welcome to our  
engineering products**

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**introduction coupling devices**

**equipment and devices**

01 automatic gas coupler

02 heavy duty multiline coupler

03 bins and silos

**engineering services**

# OUR WORK

## Equipment | Devices

- Engineering and supply of mechanical auxiliary machines (global).
- coupler M – automatic & safe ladle coupler for hydraulic slide gate (Beltrame Group, Italy).
- coupler M – engineering and supply of the system for a ladle transfer car (Brazil).
- coupler G – engineering and supply for a Belgium steel producer.
- coupler G – engineering and supply for an Italian steel producer.
- Engineering, supply and commissioning of a new preheating station (Austria).





# INTRODUCTION

## AUTOMATIC COUPLING DEVICES




**the safety of  
your employees  
is our priority.**



Safety in the workplace is a top priority in the design, manufacture and use of machinery. Safety has been given special consideration at concept and is reflected in our coupler series.

# INTRODUCTION

## Coupler

-  Our automatic **couplers** are designed to increase operator safety over any manual coupling operation in harsh or demanding environments.
-  It is a compact coupling system to create the link between a fixed media supply source and a mobile coupling partner.
-  The system allows for the automatic and simultaneous coupling of different types of media.

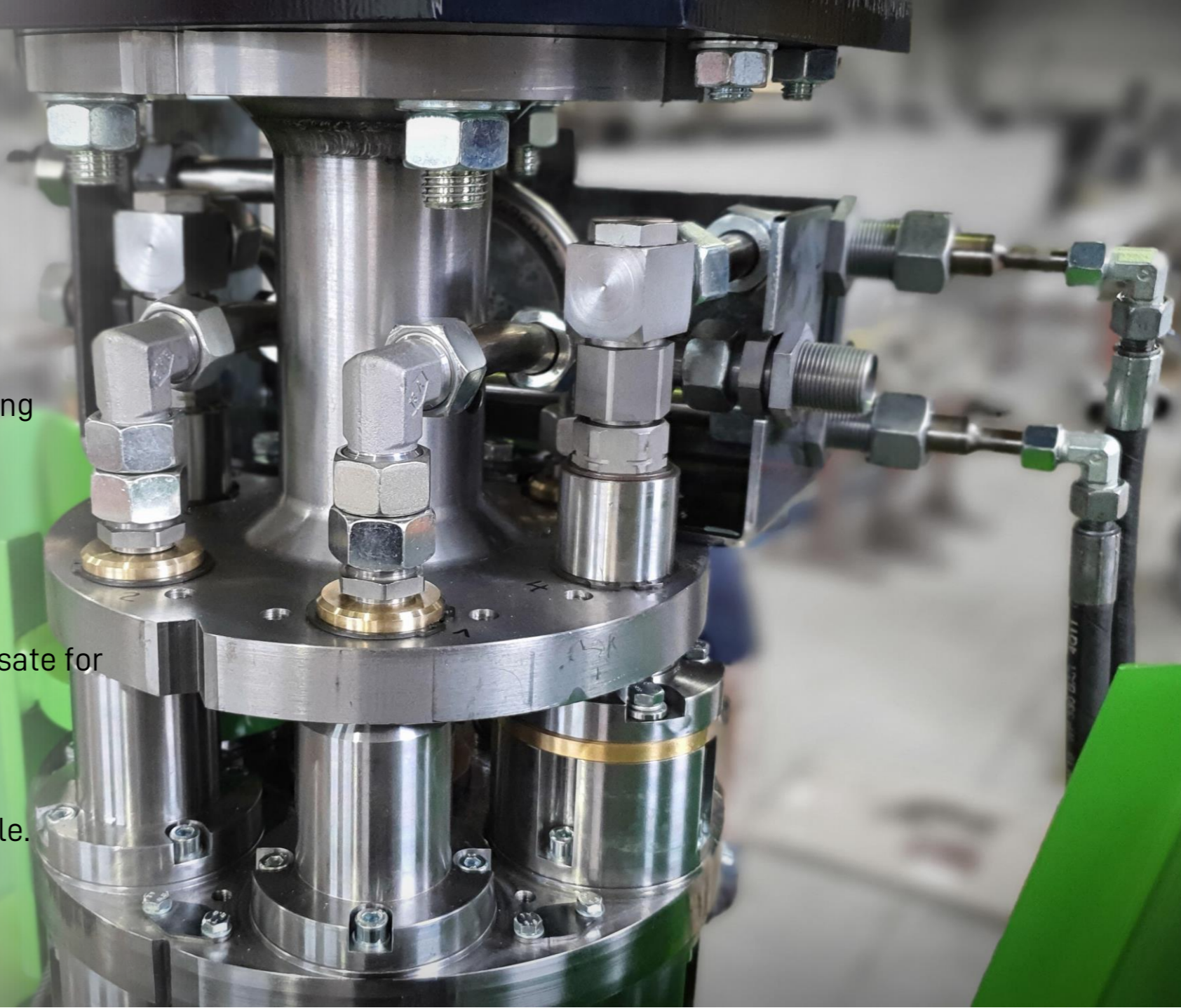




# INTRODUCTION

## WHEN TO CONTACT US

- 1** Your goal is the replacement of dangerous manual coupling with an automatic system.
- 2** It is not only gas that you want to connect, but also other media, such as electrical signals, fluids or hydraulics.
- 3** You need maximum flexibility in all directions to compensate for misalignment between coupling partners.
- 4** Your harsh environmental conditions (dusty, high temperatures) call for a solution that is robust and reliable.



# EQUIPMENT | DEVICES

**sustainable**

**reliable**

**durable**

## **01. Automatic Gas Coupler**

A solution based on decades of experience in automatic gas coupling.

## 02. Heavy Duty Multiline Coupler

Automatic coupling of different media such as gas, liquid, hydraulic, or electric signals with a single multi-coupling connection.

## 03. Bins and Silos

High quality bins and silos equipped with all necessary components and accessories for various applications,

# 01. AUTOMATIC GAS COUPLER

the shooting star of  
gas couplers

G  
coupler

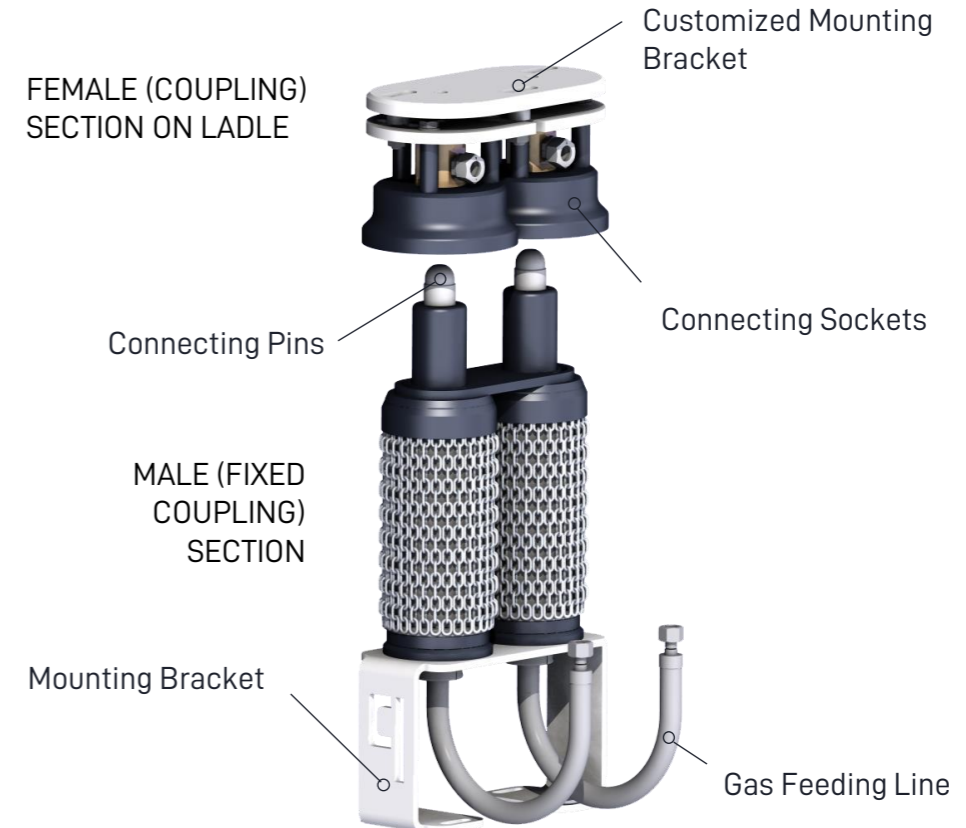




# 01. AUTOMATIC GAS COUPLER

## qoupler G

qoupler G creates the link between the gas supply source and the porous plug on the ladle. It is the only solution that covers all ladle sizes and gas flow requirements with a single coupling for up to 3 separate gas feeding lines.



# 01. AUTOMATIC GAS COUPLER

**fast, safe,  
reliable and  
easy to maintain**

The highlights of qoupler-G at a glance:

- It is the only system that 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
- Supply of gas starts immediately when the coupling halves meet.
- Improved ladle guiding for precise crane manipulation without additional efforts for the crane operator
- Proven application with high flexibility in all directions
- Highest operator safety

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## Technical Data

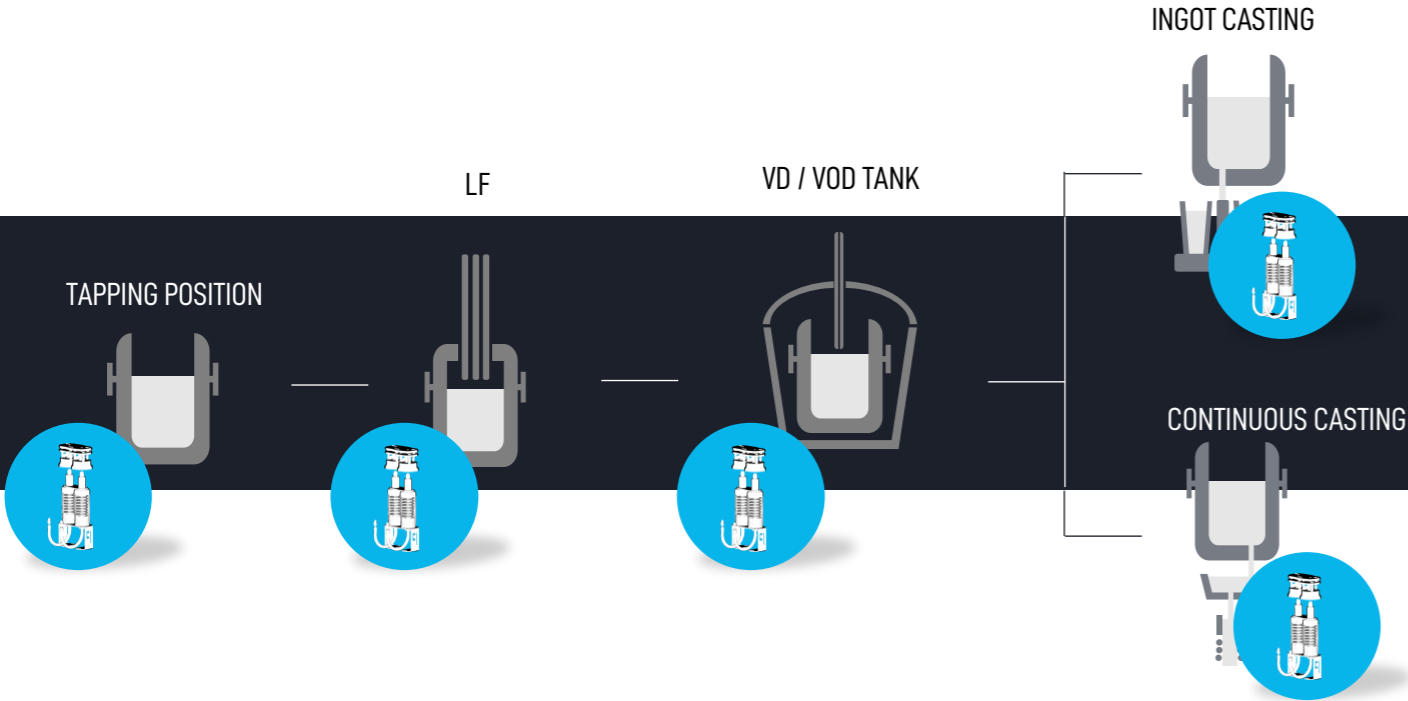
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Flexibility	± 65 mm all axes
Number of ports	Up to 3
Pipe Connections	DN20 (3/4") flexible metal hose
Gas	Ar, N <sub>2</sub> or compressed air
Max. volume	0 – 2500 l/min
Max. pressure	25 bar (360 psi)
Max. temperature	max. 450 °C / 850 °F higher T upon request

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# 01. AUTOMATIC GAS COUPLER

countless  
installation  
possibilities.





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# 02. MULTILINE COUPLER

the world's first  
multiline  
coupler

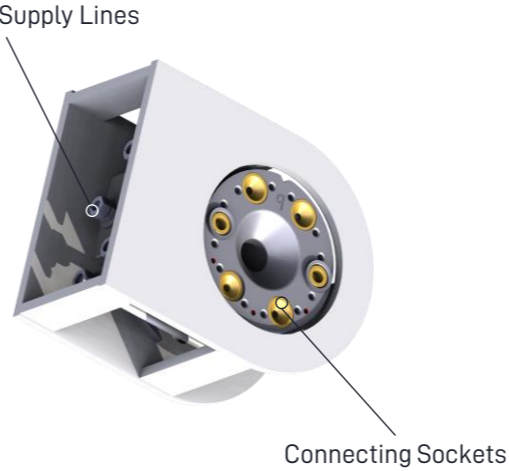
 PATENTED  
**M**  
coupler



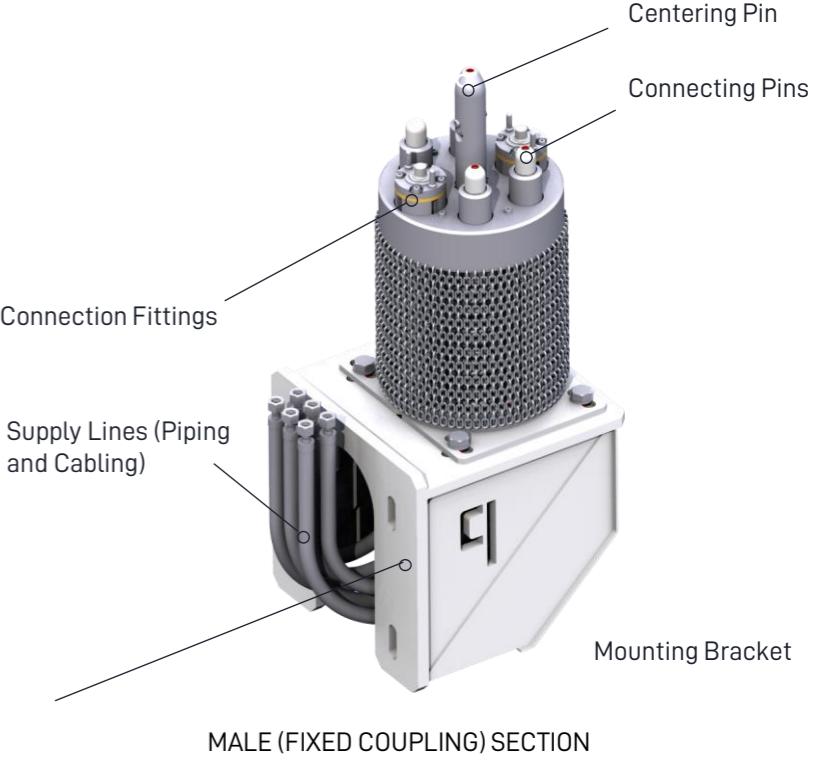
# 02. MULTILINE COUPLER

## coupler M

Model M is the multi-coupling device. It automatically couples different media like gas, liquids, hydraulics or electrical currents with one multi-coupling connection.



FEMALE (MOVING COUPLING SECTION)



MALE (FIXED COUPLING) SECTION



# 02. MULTILINE COUPLER

multiline  
coupling is  
now possible

The highlights of coupler-M at a glance:

- Allows different media such as gas, liquids, hydraulics or electrical currents to be coupled simultaneously and automatically.
- Immediate delivery of various media without the need for personnel to connect hoses or cables from the supply source
- High flexibility in all directions to compensate for misalignment between the coupling partners
- Used to harshest environments, dust-proof and temperature resistant
- Multi-function and multi-media coupling in a single coupling solution for up to 7 separate supply lines
- Patented solution for highest operator safety.

PARAMETER		DESCRIPTION
Flexibility	Ladle Misalignment	± 65 mm   2.5" in all axes
	Gas	Ar, N <sub>2</sub> (other gases upon request) max. 25 bar   360 psi max. 450 °C   850 °F ambient temperature
	Hydraulics	max. 275 bar   4000 psi 150 °C   300 °F ambient temperature higher values upon request
	Electrics	max. 1000 V   500 A 150 °C   300 °F ambient temperature higher values upon request
	Fluids	Parameters depending on fluid

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High quality bins and silos equipped with all necessary components and accessories for various applications,

## 03. BINS AND SILOS



” Silos may be simple structures, but they are the foundation of progress and efficiency in construction and manufacturing, preserving and protecting the resources that drive our economy.

**engineering,  
manufacturing  
and erection**



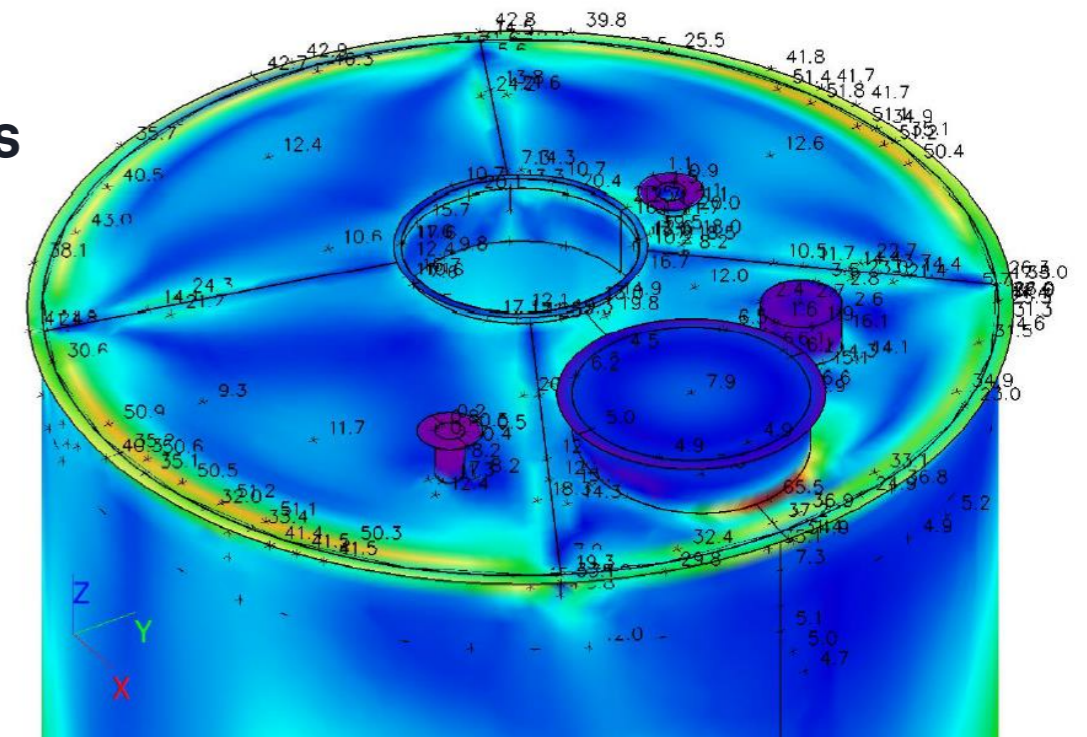
# 03. BINS AND SILOS

**The steel silos are primarily storage silos with the associated components such as:**

- Silo roof edge railings
- Access ladder with back protection cage
- Add-on platforms of existing plants for access to the silo roof
- Injection line with pinch valve for truck filling

**The silos can also be equipped with the necessary silo accessories according to the customer's requirements such as:**

- Full and empty detector
- Valves and filters
- Electromechanical pressure detector
- Gate valves / Rotary valves / Discharge screws / Vibrobottoms





## 03. BINS AND SILOS

# application areas

Depending on the customers' requirements, we can offer:

- Erection
- Site management
- Supervision of erection

Our silos can be used in a wide range of industries:

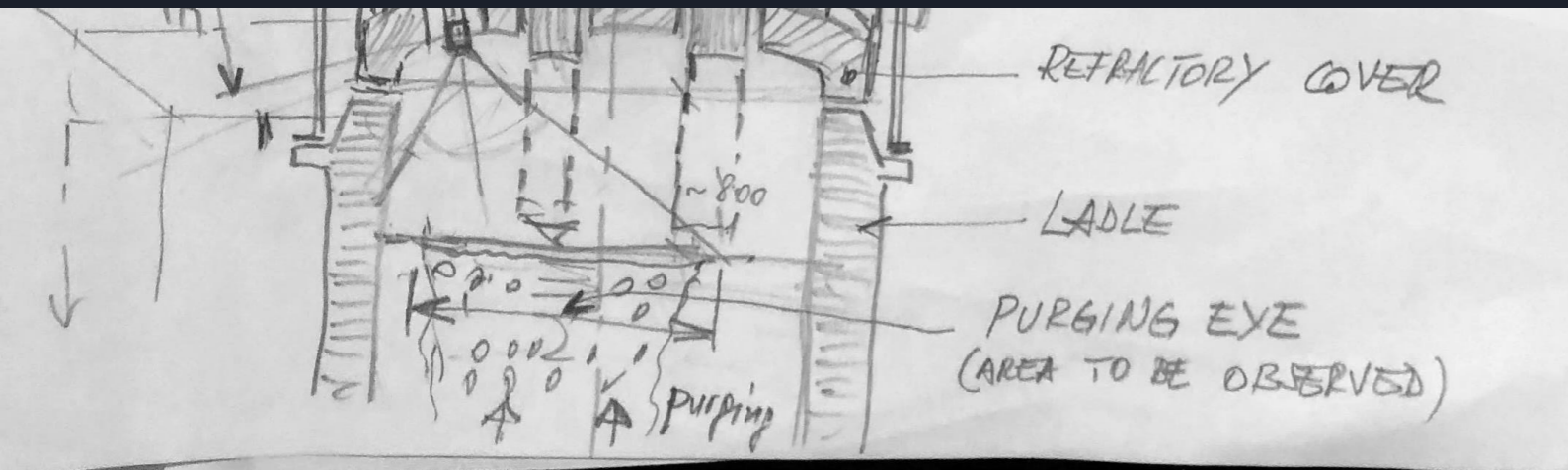
- Steel industry (coal dust, lime, fly ash, etc.)
- Glas industry (storage, dosage and mixing)
- Stone and Earth (gravel, rock, sand, etc.)
- Wood industry (pellets, etc.)
- Concrete, mortar, lime and gypsum
- Fertilizers and grains



# ENGINEERING SERVICES

cross-domain  
engineered  
solutions

” Our team of skilled engineers covers all necessary engineering disciplines to deliver specifically engineered products for customers in the metals industry.





# ENGINEERING SERVICES

# Typical applications

We deliver completely customized solutions for individual customer benefits, if required on a turn-key basis:

- Tailor-made engineering solutions and machines for all areas in the steel plant
- Manipulators and machines for increasing operator safety
- Customized ladle, tundish and vessel preheaters
- Continuous casting auxiliaries (tube changer, nozzle changer, emergency slide gate)





**qoncept**

**expect nothing  
less**

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