

EUROMEC

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A turn key choice

**ELECTRIC ARC FURNACE STEEL PLANTS
ACCESSORIES**

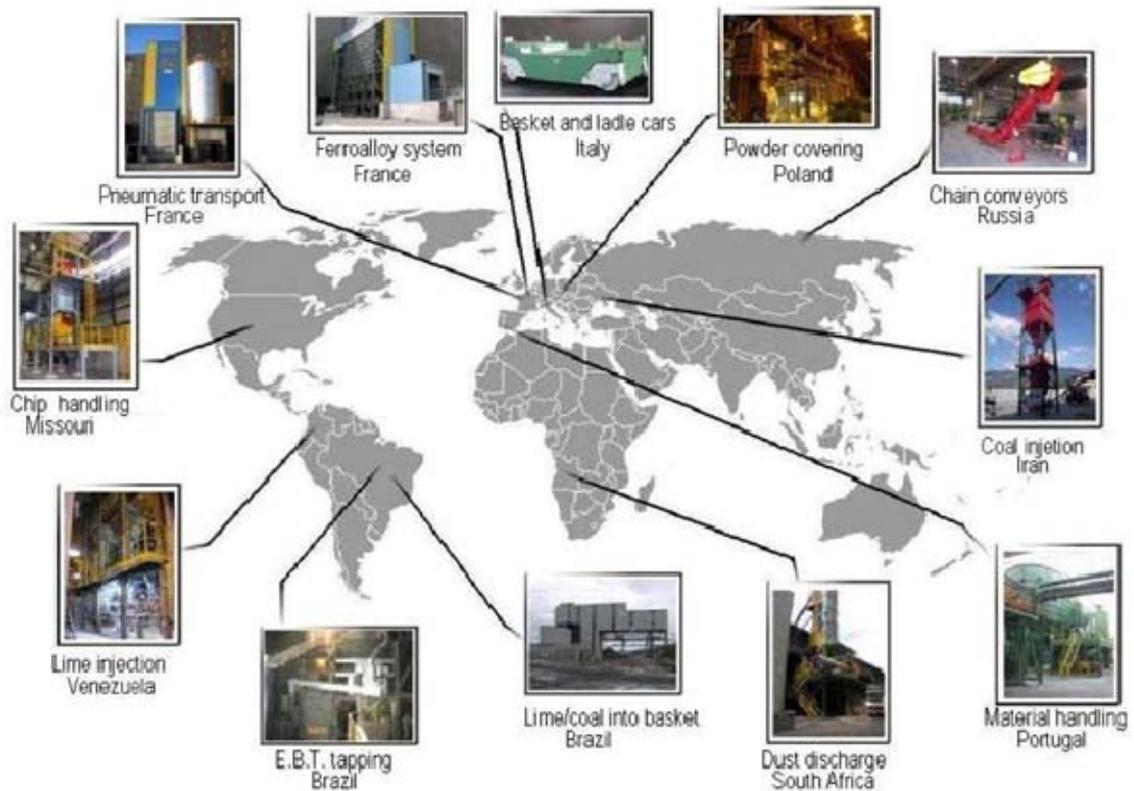
DESIGN

CONSTRUCTION

SUPPLY

ERECTION AND START UP

Electric arc furnace steel plants accessories



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POWDER COVERING SYSTEM



This type of systems are used for liquid bath covering with silica and carbon powder with the purpose to reduce heat dispersion.

The system allows the operation to be carried out without the intervention of personnel and provides a uniform layer by a correct adjustment of the cone-shaped nozzle. The accurate dosing of powder obtained by this system, keeps material consumption to least quantities.

BENEFITS

REDUCTION OF QUANTITY RAW MATERIAL USED

REDUCTION OF PRODUCTION TIME

PERSONNEL NOT REQUIRED ON TOP OF LADLE FURNACE

HIGH SAFETY STANDARDS

AUTOMATIC INVENTORY MANAGEMENT

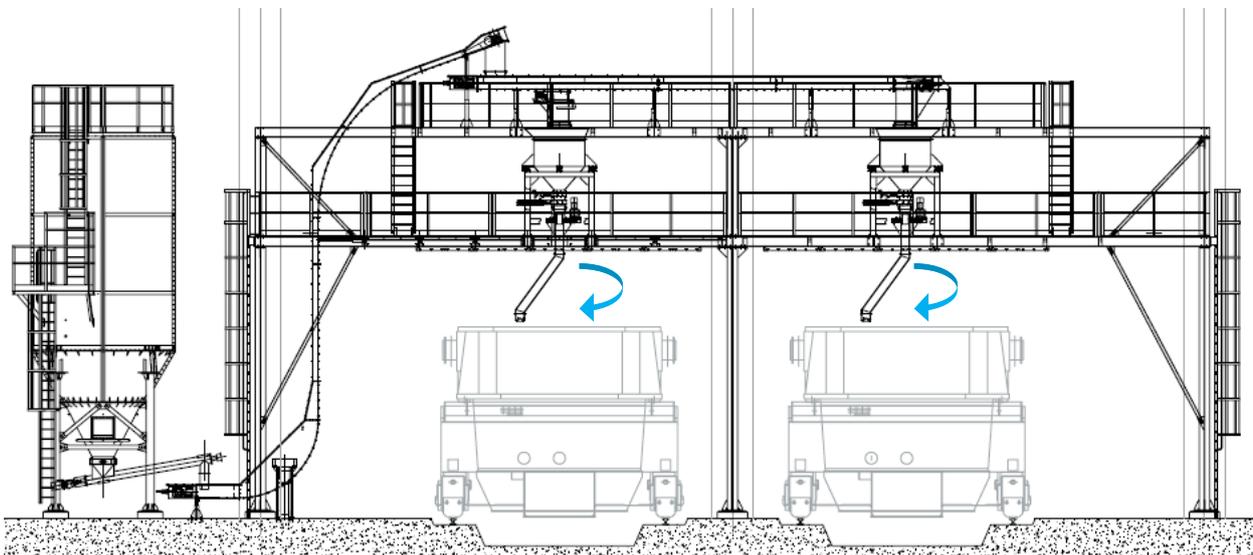
FULLY AUTOMATED



POWDER COVERING SYSTEM



Double powder covering system with 50 cubic meters capacity storage bin and two rotating powder distributors.



EBT HOLE SAND FILLING SYSTEM WITH ROTATING SCREW CONVEYOR

EBT hole sand filling systems are used for the addition of granular magnesite and silica compound into the EBT hole.

Generally composed by a storage hopper with weighing cells, an extracting screw feeder that charges a second hopper equipped with another screw feeder. This screw conveyor is equipped with a cooled video camera, installed on a rotating or translating group to avoid interferences with the furnace movement.

This system is fully automated and can be monitored from the control room by video camera.



BENEFITS

REDUCTION OF QUANTITY RAW MATERIAL USED

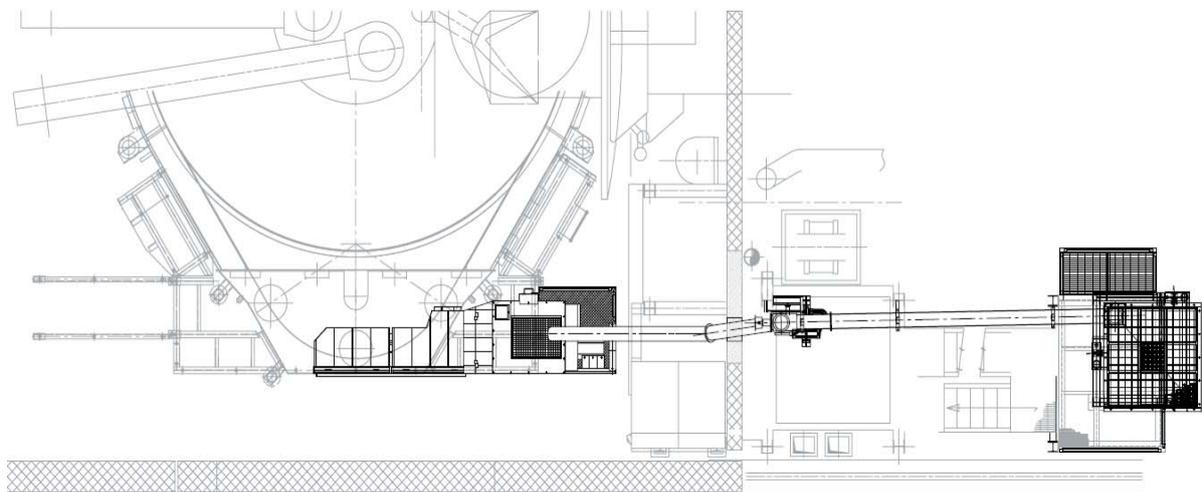
REDUCTION OF PRODUCTION TIME

PERSONNEL NOT REQUIRED ON TOP OF THE FURNACE
TOP OF THE FURNACE

HIGH SAFETY STANDARDS

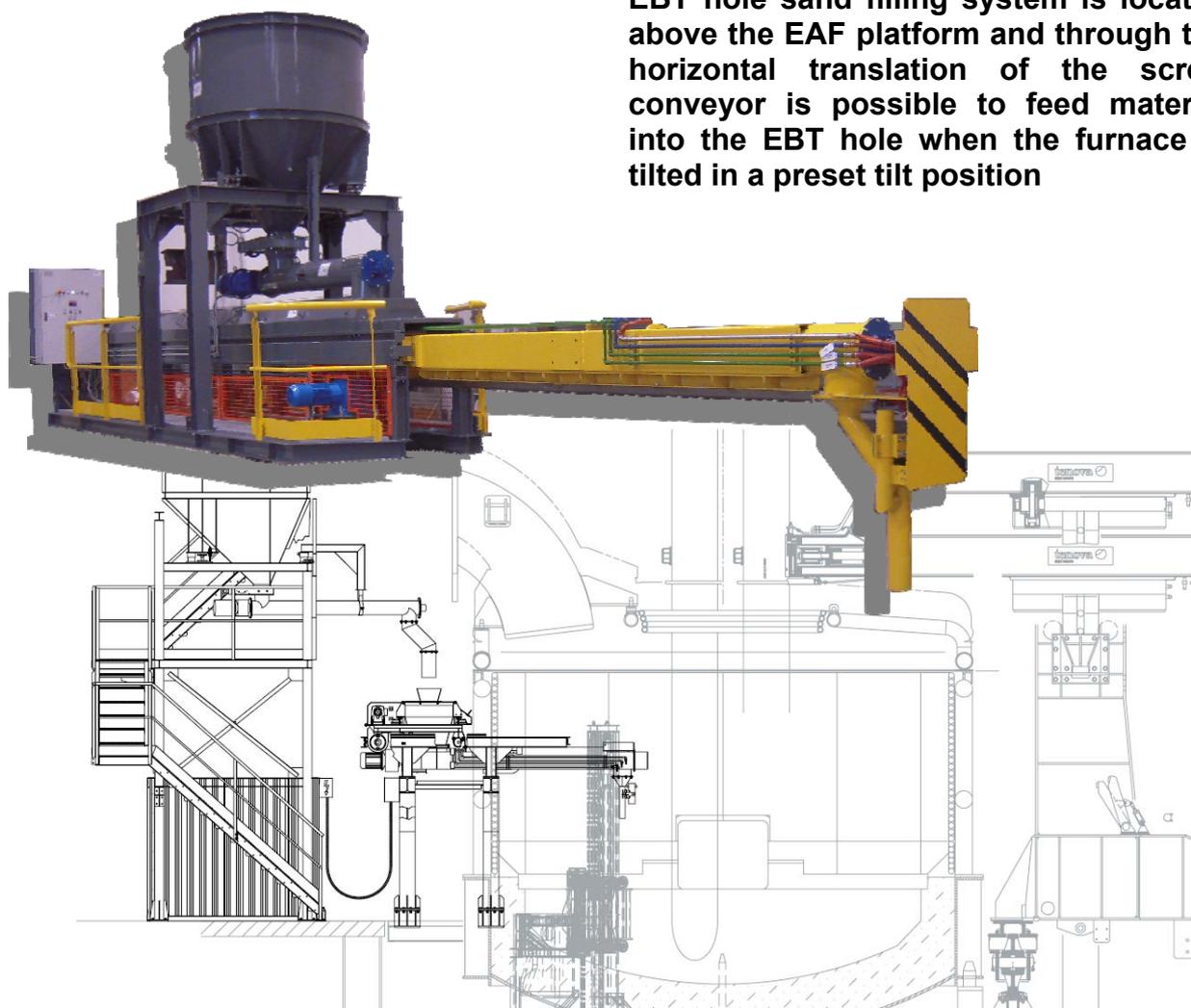
AUTOMATIC INVENTORY MANAGEMENT

FULLY AUTOMATED



EBT HOLE SAND FILLING SYSTEM WITH TRANSLATING SCREW CONVEYOR

EBT hole sand filling system is located above the EAF platform and through the horizontal translation of the screw conveyor is possible to feed material into the EBT hole when the furnace is tilted in a preset tilt position



BENEFITS

HIGH SAFETY STANDARDS

OPERATING COSTS REDUCTION

CONSUMPTIONS AND PRODUCTION TIMES REDUCTION

REDUCTION OF QUANTITY RAW MATERIAL USED

REDUCTION OF PRODUCTION TIME

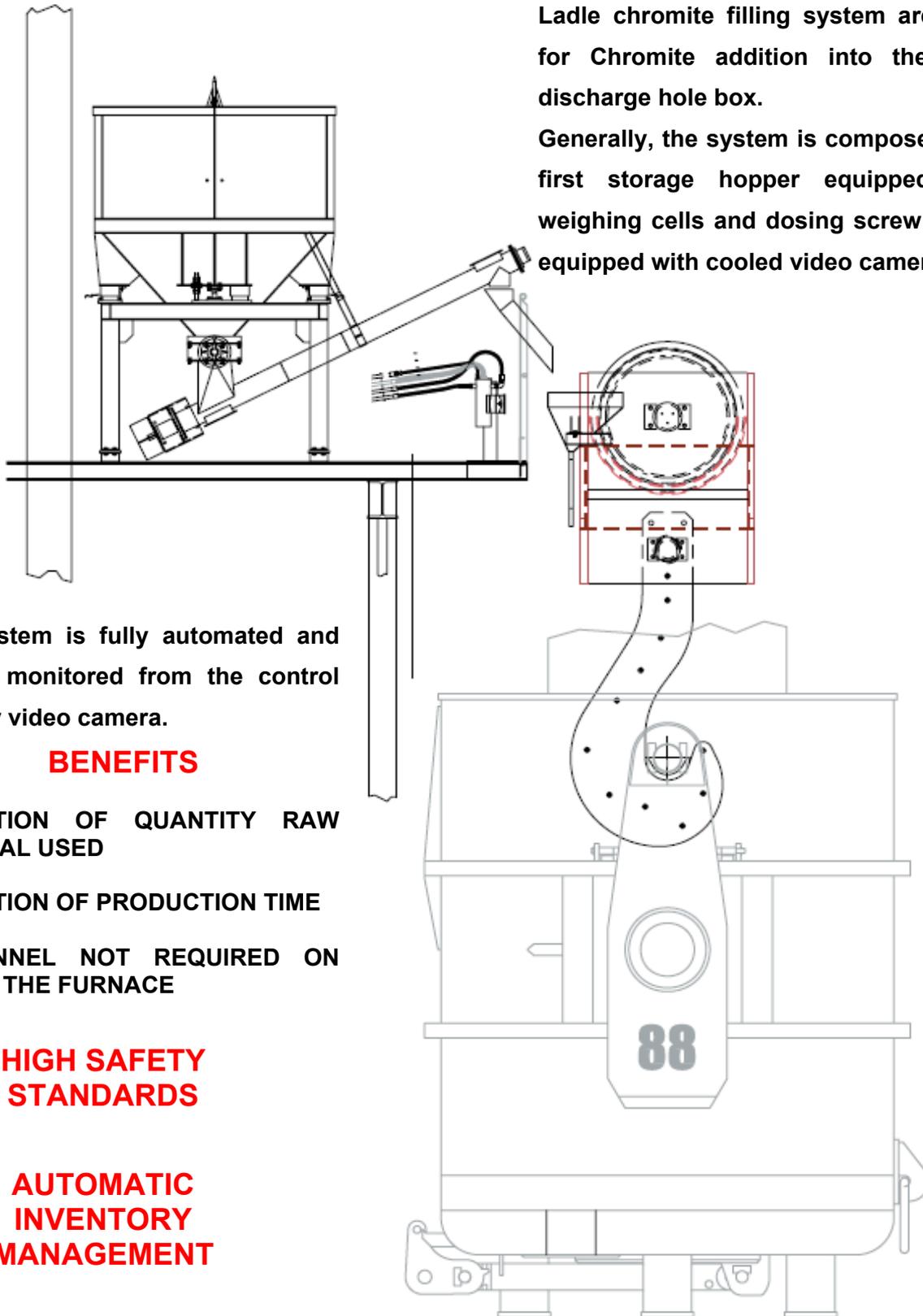
PERSONNEL NOT REQUIRED ON TOP OF THE FURNACE



LADLE CHROMITE FILLING SYSTEM

Ladle chromite filling system are used for Chromite addition into the ladle discharge hole box.

Generally, the system is composed by a first storage hopper equipped with weighing cells and dosing screw feeder equipped with cooled video camera.



This system is fully automated and can be monitored from the control room by video camera.

BENEFITS

REDUCTION OF QUANTITY RAW MATERIAL USED

REDUCTION OF PRODUCTION TIME

PERSONNEL NOT REQUIRED ON TOP OF THE FURNACE

HIGH SAFETY STANDARDS

AUTOMATIC INVENTORY MANAGEMENT

FULLY AUTOMATED

EBT HOLE CLEANING SYSTEM

Machine for the removal of foreign bodies inside the casting hole.

The machine has got a rotating device that puts it in stand-by outside the furnace operating area during tapping operations.

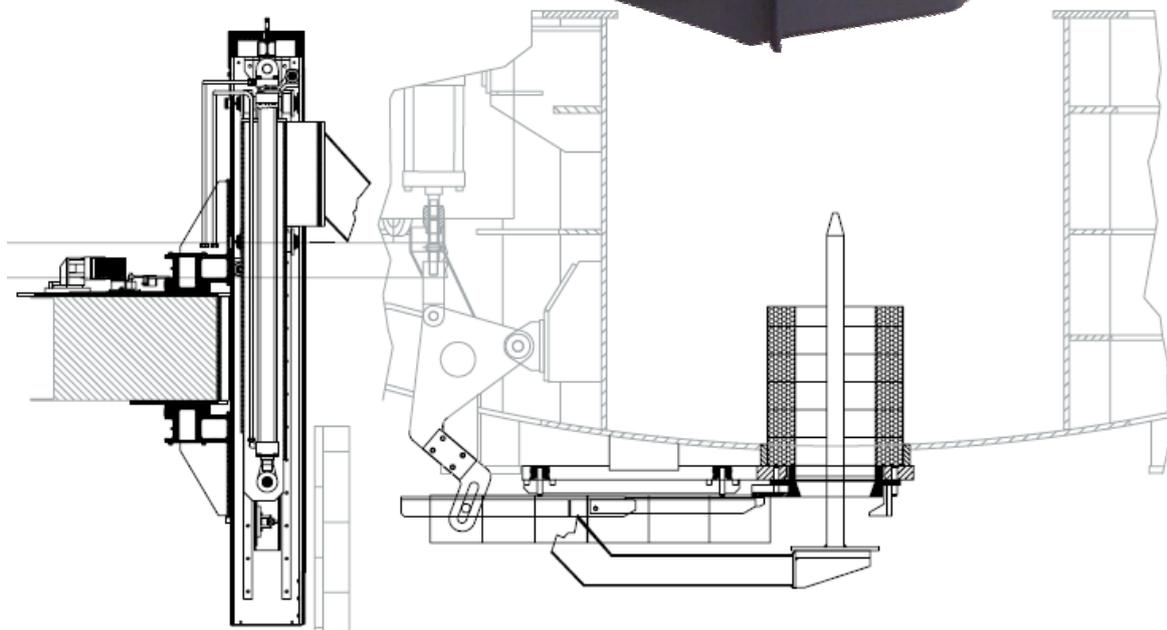
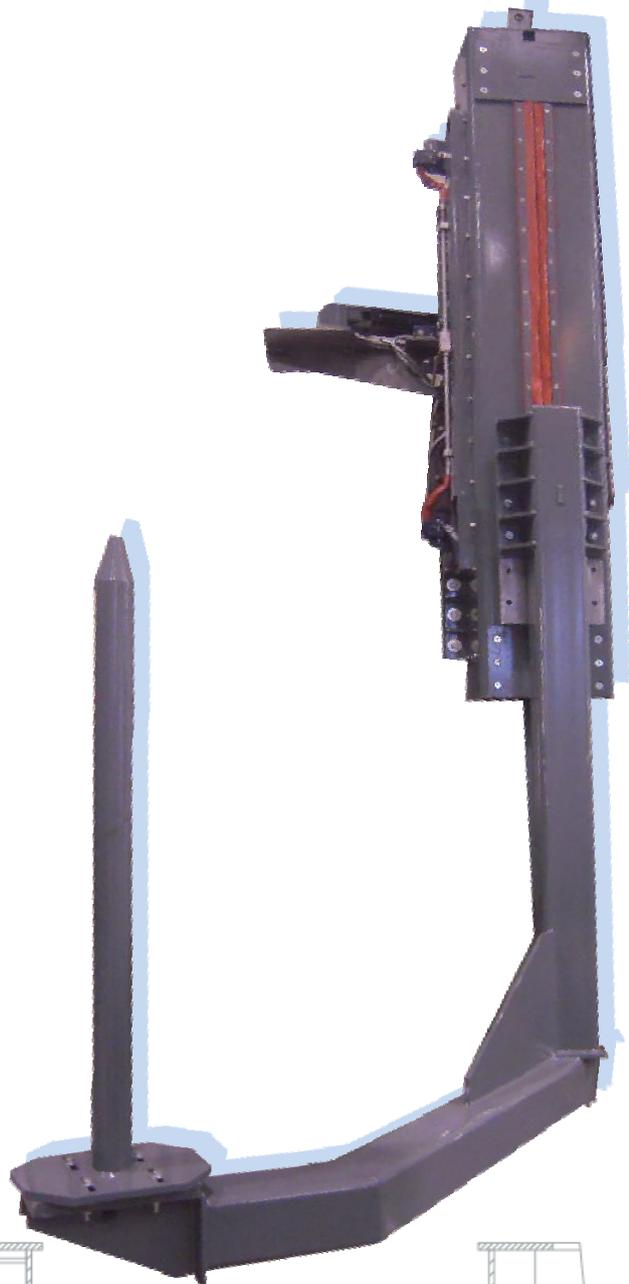
Once again the operator is replaced with an automatic machine.

BENEFIT

Operator presence and intervention is reduced of about 90%.

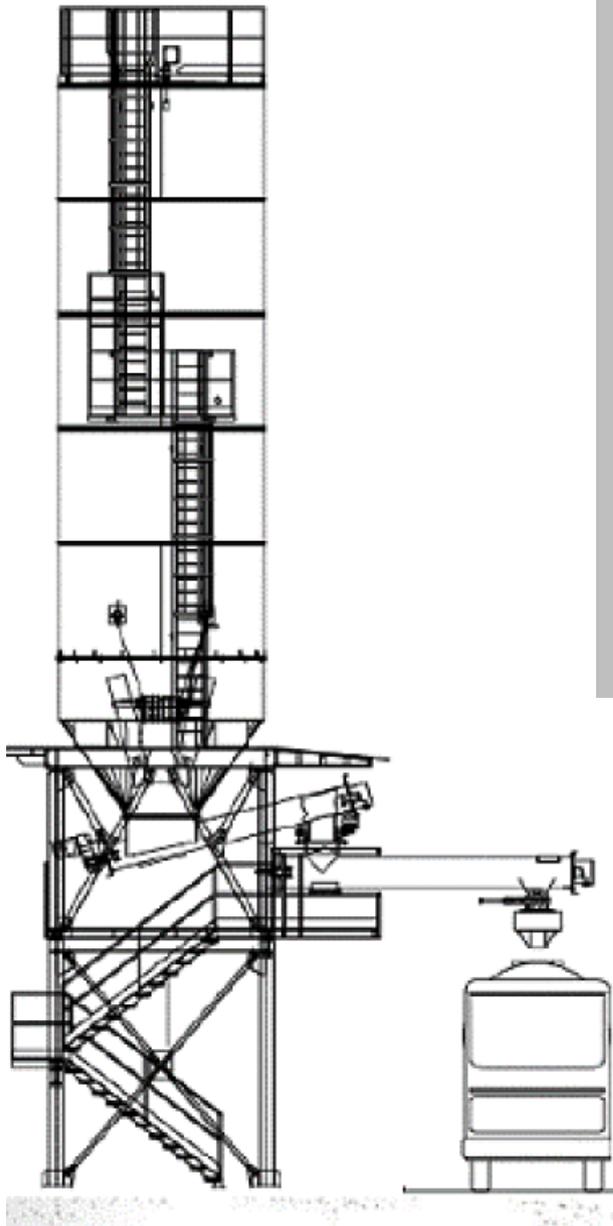
HIGH SAFETY STANDARDS

INTERVENTION TIMES REDUCTION



FILTER DUST HANDLING SYSTEM

The Filter Dust Handling System stores and handles the noxious dust resulting from a steel furnace dust filter (treated as special waste). The dust is then loaded into silo before being transferred to treatment plant area. A telescopic discharger, complete of dust collection filter reduces dust dispersion in the environment during material extraction.

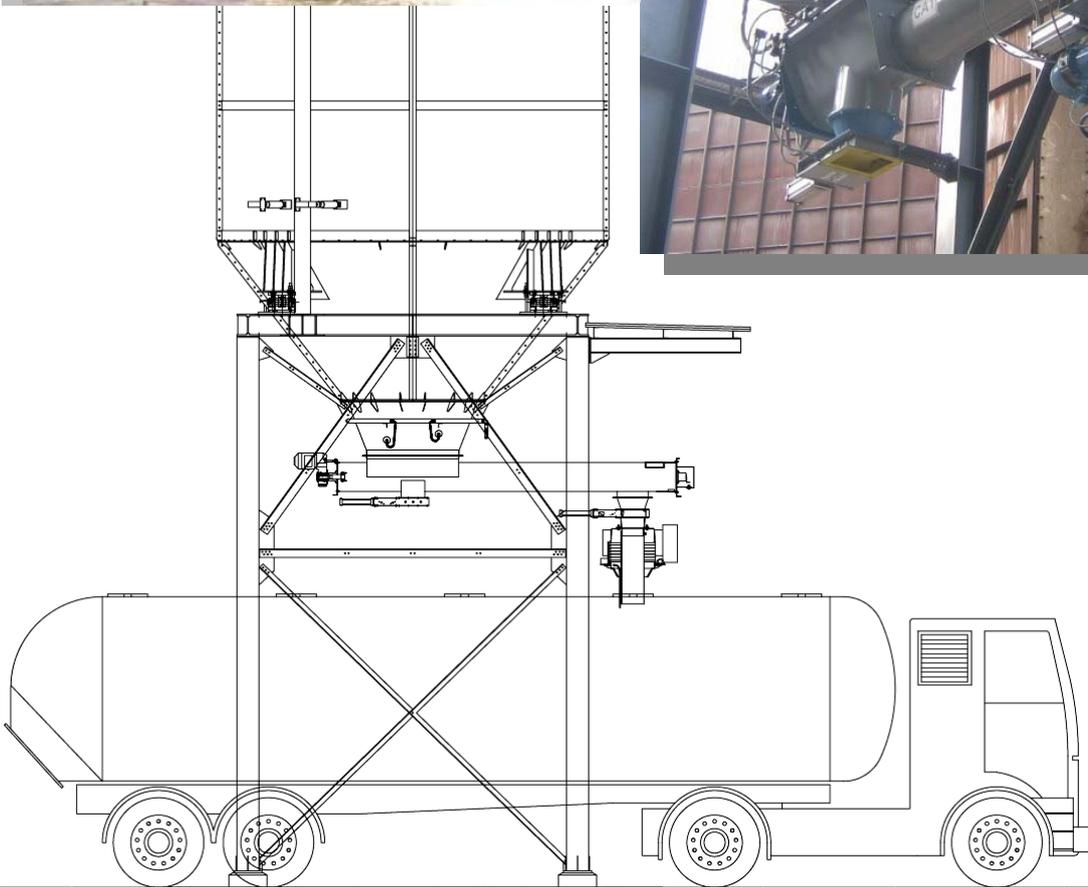


The silo has a weighing system installed under the storage bin.

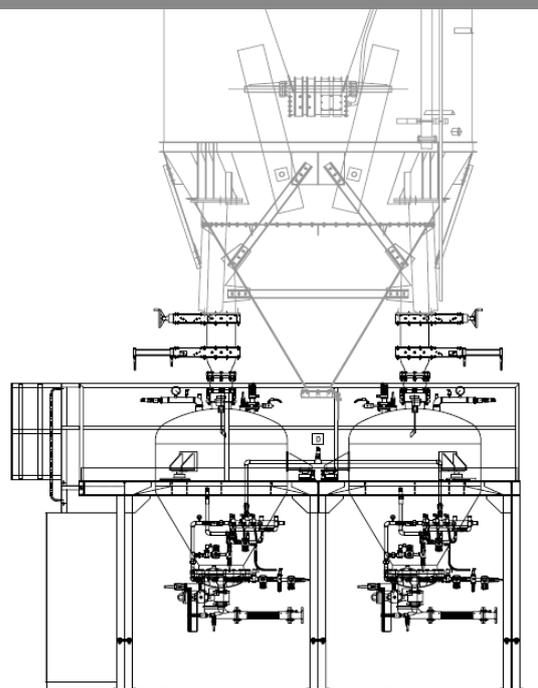
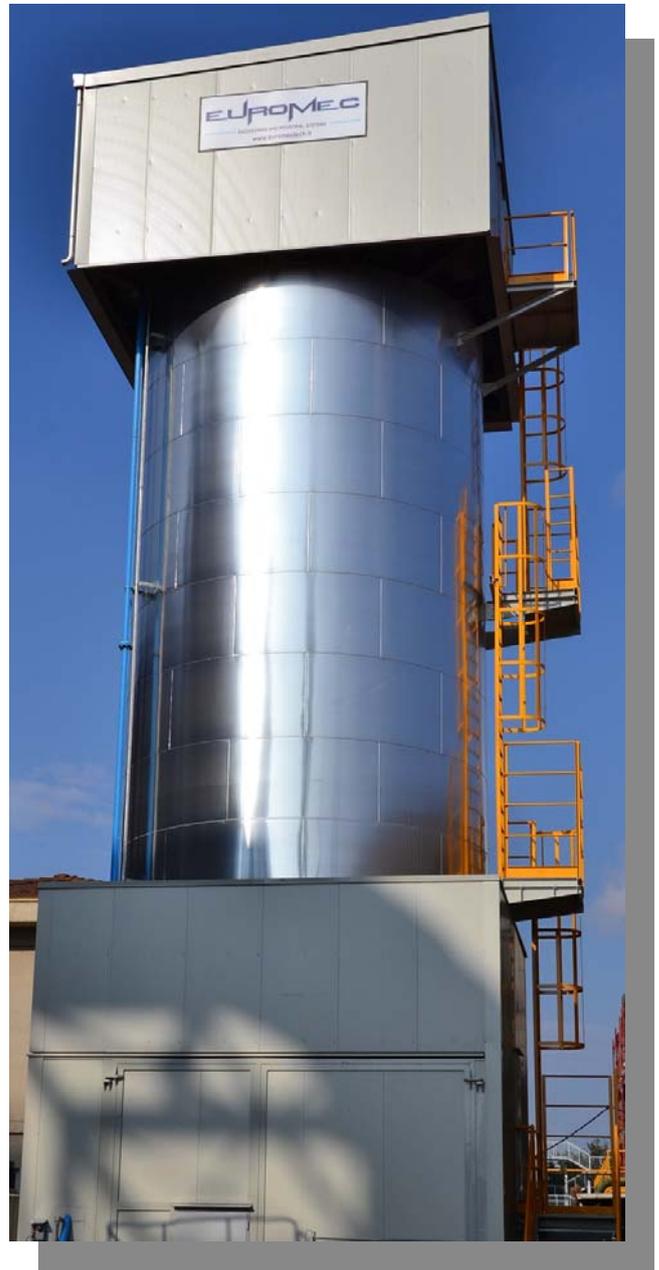
FILTER DUST HANDLING SYSTEM



Alternative solution of the existing filter dust handling system.

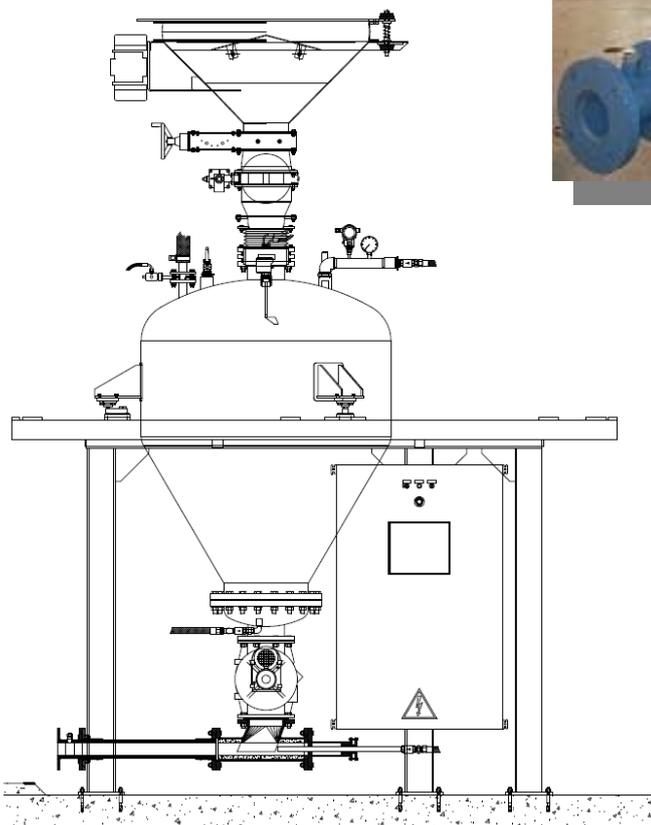


LIME INJECTION SYSTEM



**Automatic systems for
lime storage
pneumatic conveying
and injection in
electric arc furnace**

LIME INJECTION SYSTEM



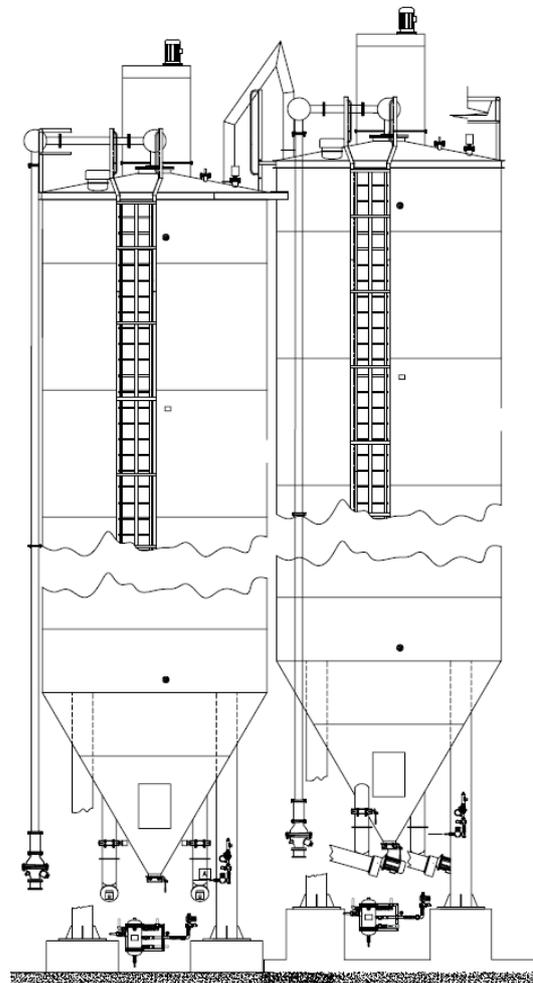
APPLICATIONS

- Lime injection into electric arc furnaces for steel refining or for furnace chemical environment control / slag composition control;
- Storage and pneumatic conveying / batching systems of powder or ground material for foundry and cement industry;
- Automatic plants for powder pneumatic handling;
- Capacity from 20 to 500 Kg/min.

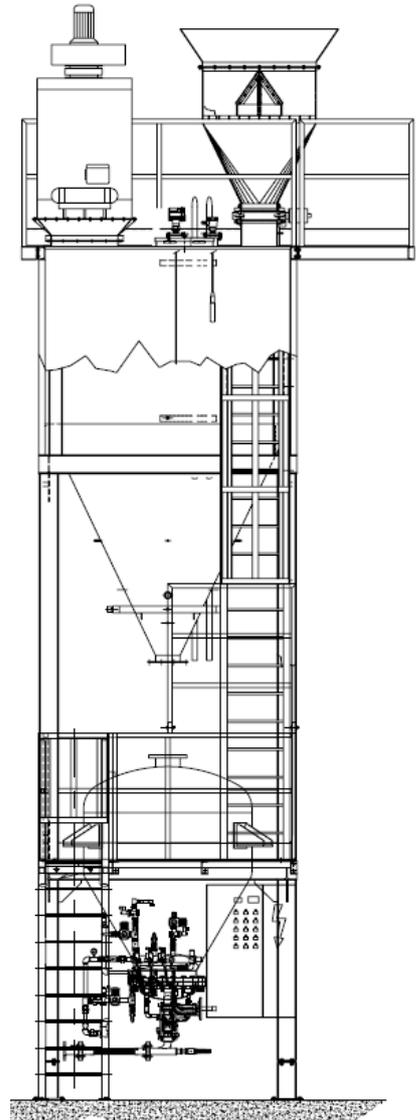
COAL INJECTION SYSTEM



Steel work plant installed automatic system for coal storage, pneumatic conveying and injection in electric arc furnace



COAL INJECTION SYSTEM



APPLICATIONS

- Coal injection to electric arc furnaces for carbon steel or for foamy slag production;
- Slag producer injection to furnaces and ladle;
- Storage and pneumatic conveying / batching systems of powder or ground material for;
- Foundry and cement industry;
- Automatic plants for powder pneumatic handling;
- Capacity from 20 to 200 Kg/min.

QUARTZITE INJECTION SYSTEM

Injection system for slag tank.

The system is made by a pneumatic system with storage a hopper and a screw feeder conveyor.

The injection of sand (quartzite) catalyzes the slag making it inert.

Capacity from 20 to 200 Kg/min.



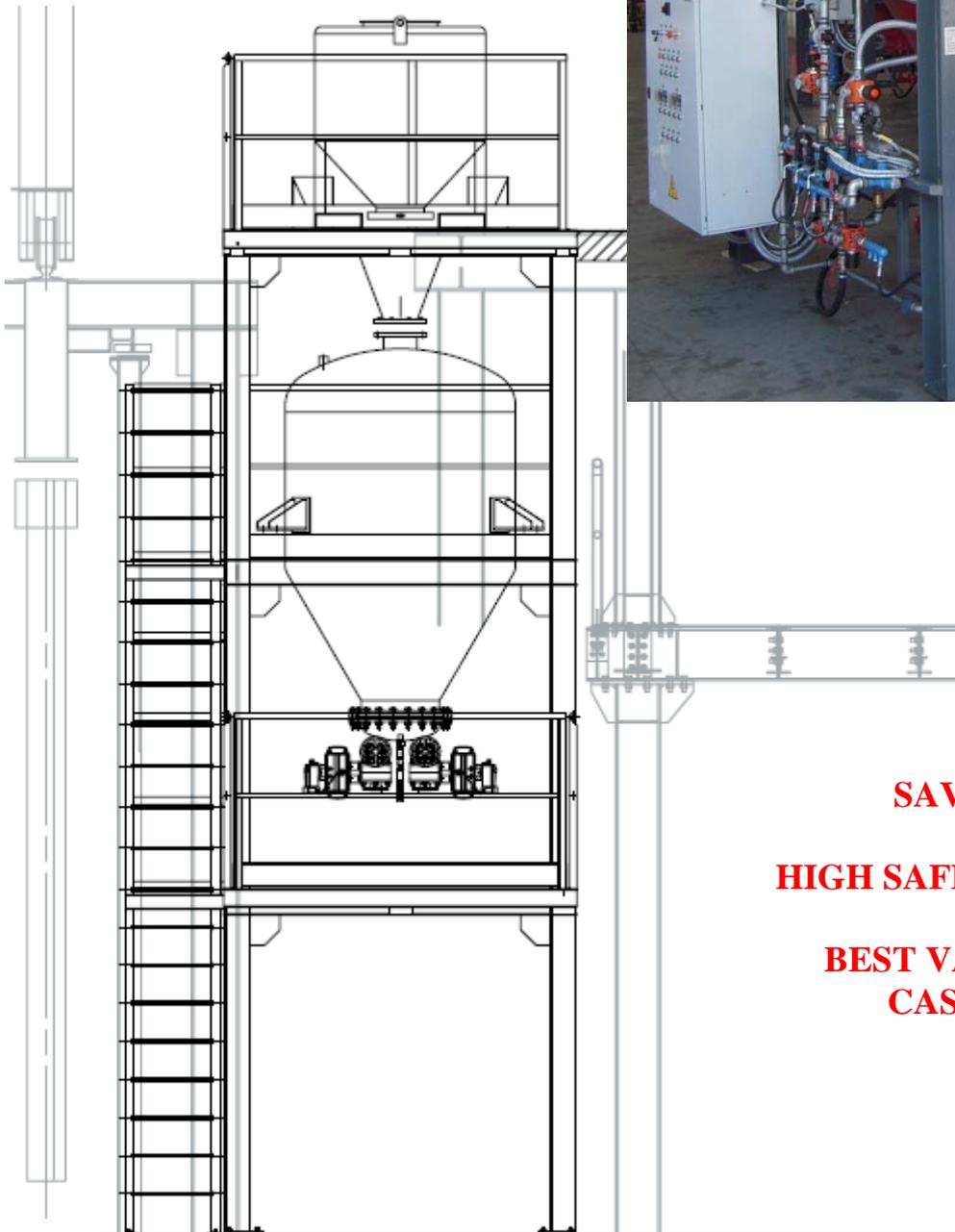
HIGH SAFETY STANDARDS

ENVIRONMENTAL PROTECTION

**TRANSFORMATION OF A WASTE MATERIAL INTO A REUSABLE ONE
WITH ADDED VALUE**

CALCIUM CARBIDE INJECTION SYSTEM

Calcium carbide is a deoxcling for slag.
This material injected allows a better and fast erection, moreover this system can save money because the material is stored in hermetic steel box instead of small bags.



SAVE MONEY

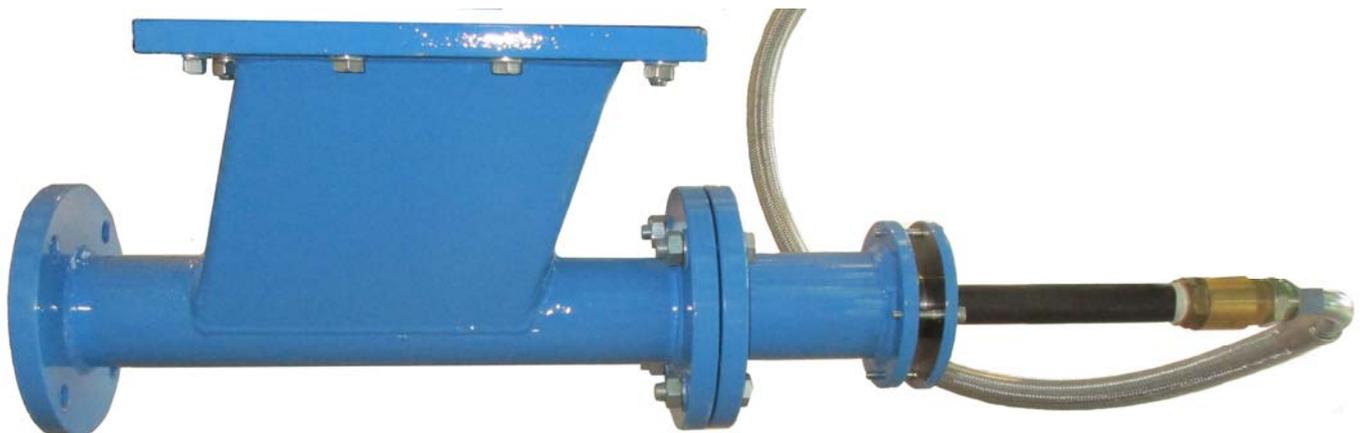
HIGH SAFETY STANDARDS

**BEST VALUES IN THE
CAST REPORT**

ROTARY AIR LOCK VALVES



With flexible blades for high-vacuum seals, especially indicated for discharge of cyclones and/or process filters, the particular building allows the utilization also to high temperatures (350°).



Pneumatic conveyor ejectors for use in combination with blade rotary air lock valves, suitable for powdery materials with low conveyance density

HOT FEED GATE VALVE

Special cast iron valve for
preheating furnaces actuated with
a hydraulic cylinder.



HIGH PERFORMANCE

REDUCED MAINTENANCE REQUIREMENTS

EXCELLENT QUALITY/PRICE RATIO

PNEUMATIC TRANSPORT APPLICATIONS

Manufacture

Underlay: hexagonal ceramic plaques Sarosint (Sintered Alumina) joined to a black rubber base compound type BR/NR, highly resistant to abrasion. Good chemical resistance for some products, for which is suggested to contact our technical support before specific applications. The plaques are composed by Oxide of Alumina and produced with the most advanced technology by sintering atomized dusts. The special production process allows to get a particularly compact structure (porosity 0) and an elevated hardness (staircase Mohs). These characteristics set the pipe to a point, till now ever reached, of

high quality in terms of wear material. The special surface guarantees a perfect flow of materials, avoiding any relative problem of stoppage and oxidation.

Reinforcements: synthetic textile with incorporated steel spirals and copper cables to guarantee electric continuity among the extremities.

Covering layer: black, anti-static ($R=2,0 \text{ M}\Omega/\text{m}$), rubber base compound type SBR/NBR, highly resistant to abrasion and to environmental conditions.

Applications:

suggested for pneumatic transport and aspiration ducts for industrial applications of dry cement, coal, and CDR (fuel derived by reclaimed refuses mixed to coal dust), material and ceramic dusts, reclaimed glass fibres and for the load of storage bins.

Applications in the following industries: steelworks, thermoelectric centrals, cement industry, mineral industry, ceramics and glass industry, installation materials industry etc...



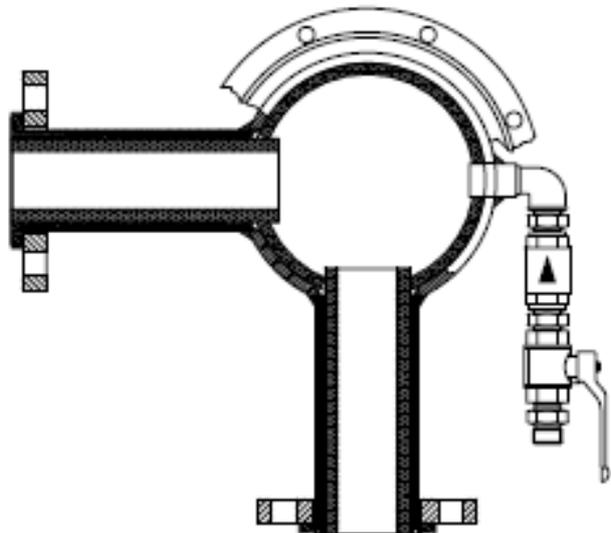
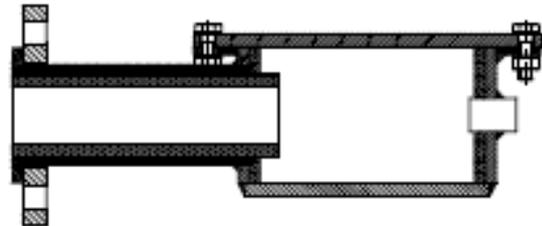
PNEUMATIC TRANSPORT APPLICATIONS

	Ø int. (mm)	Ø est. (mm)	Peso (kg)/m	R minimo Curv mm/m
30 METERS LENGHT	20	44	2,07	300
	25	49	2,59	375
	32	56	3,07	480
	38	62	3,48	570
	42	66	3,75	630
	48	72	4,17	720
	50	74	4,31	750
15 METERS LENGHT.	60	86	5,27	900
	63.5	90	5,54	953
	70	95	6,00	1050
	75	100	6,35	1125
	80	106	6,93	1200
LENGHT TO BE DEFINED	100	130	8,56	1500
	114	145	13,24	1710
	125	157	14,42	1875
	150	185	19,42	2250
	203	241	27,68	3045

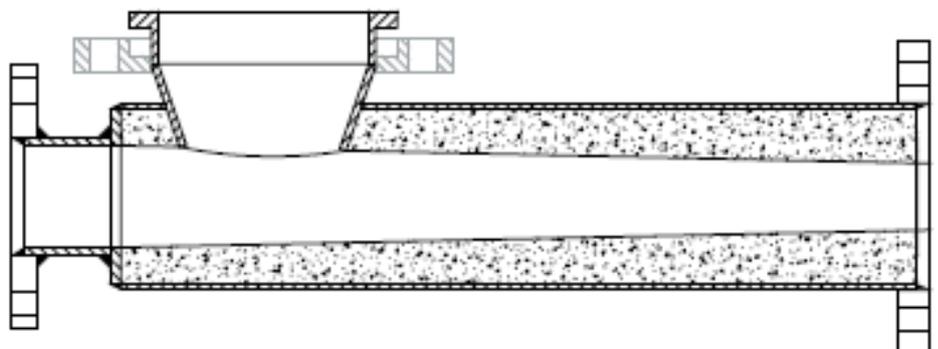
PNEUMATIC TRANSPORT APPLICATIONS

Some type of details about injection pipe line that allow to reduce maintenance operations.

Diameter of pipes from DN40 to DN100



Normal and ceramic internal coated injecto



- Normal and ceramic internal coated bends
- V pneumatic deviators
- Normal and ceramic internal coated boosters
- Normal and ceramic internal coated elbow
- Ceramic internal coated stub pipe

