

## Facts and Figures



GVF Impianti Srl was founded in 1964 by three partners: Ing. Mattei, Fiorini Mario and Gozzi. Thanks to their experience, gained in the USA, in building and designing machineries and plants, they firstly began to serve the foundry sector.



Years after years the company has slowly improved the production range, by supplying products in more and more sectors of application and to different types of customers.

## IN-HOUSE ENGINEERING

Our company studies each production process of its cutomers, in order to provide them with the best solution, not only in terms of productivity, but also in term of efficiency and effectiveness. This allows our company to be able to project the entire systems's functioning and management logic.

Engineering department uses the most up to date design and 3D simulation systems. Engineers interact with the mechanical production department, and follow all the production phases up to the assembling, the start-up and the commissioning of the machine in customer's premises.

## **52** YEARS OF EXPERIENCE

GVF Impianti was born in 1964 and started its production in machines and complete plant for the foundry sector. Years after years it extended its production range and acquired a solid experience in the bulk material handling sectors.

GVF Impianti service is fully comprehensive and is underwritten by over 52 years of specialist experience in bulk solids handling system and enineering. This impressive background, toghether with the in-house production and engineering is your guarantee of total satisfaction, from the first consultation to the final installation, commissioning and after-sales support.

## SOFTWARE DEVELOPMENT

Our company is able to provide also a complete service of in-house industrial automation, for its machineries and its complete turn-key plants, thanks to an internal software development department, which follows and studies all projects in order to provide the best solutions. The software development department takes care of the software project and the mechanical automation project. It follows also the creation and assembly of control, power and monitoring panels. Moreover, in order to offer the best solution possible in terms of industrial automation, our company has established some important partnerships with the major global powerhouses such as Siemens. This results in a fundamental quality guarantee and improvement.



In 2000 the business passed from one generation to the next, and the Fiorini family aquired the complete owership of the company.

Like the ownership of the compay also the company view changed, in order to become more and more customer oriented.



Recentely the company has enlarged its target markets abroad, by suppling goods and establishing business relationships in a lot of European countries.

During next years our main goal is to to grow further, with the support of our selected partners, and solving our customers' problems with high quality solutions.





# FEUER 500-5000 Thermal Sand Reclamation Plant

## THE PROCESS

GVF Impianti's thermal sand reclamation plant includes design, engineering for the on-site installation Gof all machines, equipment and control systems needed for the plant's installation. The entire plant is composed by a vibrating crusher FSV type for the reduction in size and the screening of sands, a pneumatic conveying system, which transport the material to the storage silos and, between them, a deferrization system for the material. From the storage silos, the material is conveyed, through a pneumatic conveying system, to the process furnace called FEUER, thermally treated and equipped with volumetric feeding. Then the system includes a fluid bed cooler, with diathermic oil cooling circuit, and a consequent transport of the material to the storage silos. A pneuamtic and electrical panel with touch-screen operator interface controls the entire system.



The whole plant is equipped with a suction and dust-suppression system for powders, divided into primary and secondary systems. The primary plant is composed by a high-efficiency cyclone, with automatic discharge of powders and by a shell and tube heat exchanger, in order to make the fumes' temperature decrease up to less than 80°C. The secondary plant is composed by a sleeves filter with dust-suppression longitudinal pre-chamber, served by a centrifugal fan. The system can be completed by a post-burner, positioned near the furnace FEUER outlet, by a certified continuous oxygen analyzer, triboelectric probe on chimney emission, with continuous data communication and by a continuous emissions' analyzer

#### **TECHNICAL FEATURES**

•	Sand capacity	:	from 0,5 to 5 Ton/h
•	Average Gas consumption	:	14-18 mc/Ton
•	Electrical consumption	:	30-180 kW/h
•	Sand's temperature Out	:	40°C
•	Cooling Chiller	:	30°C (optional)
•	Post burner	:	optional
Average data for reclaimed sand			
•	Finess index	:	52
•	Fine (sieve 0,125)%	:	0,2-1
•	Loss in fire %	:	0,75-2
•	Acid need	:	3-4

## FEUER Thermal Sand Reclamation

his machine is the heart of the treatment plant, and it has a combustion system which allows to remove the resins from the treated material, guaranteeing a sand's high quality. The project developed by the GVF Impianti Srl technicians, was created thanks to 30 years of experience in sand reclamation furnace. The new fluid bed lowers considerably the management costs of the plant thanks to a mix injection nozzles' special design and to their widespread distribution over the fluid bed. The two plenums, air and gas, are divided so that mix sacks are avoided and the gas' plenum is isolated from the machine. The Gas-Air mix is created inside the nozzle just before it is injected into the fluid bed and this process is performed with a high speed, so that a perfect combustion of the gas and the maximum output of the whole system are guaranteed. The fluid bed is created at a precise height from the bottom and at a right distance from the containment tank, in order to guarantee a heat protection to the whole structure.

The product is then divided though an especially shaped wall, in order to resist to thermal expansion, made in stainless steel for high temperature. This allows the protection of the inner covering, which is made by mats made in eco-friendly material, following the current regulation, that are not worne out by the sand friction. The fluid bed is divided into more than one section, in order to adjust the temperatures in a differentiated way, improving the efficiency of the machine and giving a notable saving in energy.



#### **A**DVANTAGES

- Totally automatic machine
- Easy management
- Touch screen operator interface for the complete control of the system
- Low management costs
- Low maintenance costs



The entire working cycle is controlled by two series of temperature probes, which guarantee the perfect functioning and the continuous control of the temperatures, in order to prevent plastic effects of the material. Each air injection is controlled by a digital differential manostat, which supervise the correct functioning of the machine, pointing out also possible functioning anomaly. The big gas expansion chamber, allows the complete combustion, respecting the current regulation if the conduction stays within the minimum designed temperature limits of the fluid bed. A post-combustor is installed on request, and it is supplied complete with output temperature control and with a continuous oxygen detection system.

The machine is totally automatic and easy to manage; the touch screen operator interface allows to have the complete control of the system in few steps. Particularly inexpensive for what concerns its management and maintenance, it is a necessary choice for the foundry's sand management systems.

## COOLER Air - Oil Cooling System



#### **A**DVANTAGES

- Lack of blockages due to limestone
- Lack of liquid spillages
- Adjustable height of the bed
- Easy and fast complete emptying
- Optional forced refrigerating system with chillers
- Low maintenance
- Modular management

The three-step GVF Impianti's cooler is the development of the general shell & tube heat exchanger, which uses water or water-solutions and glycol, causing continuous blockages and malfunctioning, and has a very low efficiency. The study of these problems has led to the deveolpment of a range of machines from 0,5 to 30 T/h, composed by three or more fluid beds, crossed in counter-current by air and refrigerating materials, a diathermic oil circuit, fed by a pump, and a forced refrigerating unit. This design allows an high efficiency of the system, lack of blockages due to the limestone and lack of liquid spillage, thanks to the fact that the cycle is totally closed.



The fluidized levels are equipped with adjusting valves for the adjustment of the height of the bed and, when needed, can be completely emptied, easily and rapidly. Below each fluid bed is positioned an air distribution plenum, which is sectioned into independent and separately adjustable sections. The oil circuit can be completed on request with a forced refrigerating system, through chillers, which in turns allows decreasing significantly the outlet sand's temperature. The upper part of the machine forms a low speed big suction hood, in order to reduce to a minimum the forced extraction of sand. Into this hood are directed, through reserved channels, all the reliefs of each level.

# CC500-3000 Kg Automatic Pouring System



## CASTING CARRIAGE

**G**VF Impianti provides foundry its birth in 1964. For this reason our Casting Carriage is the result of 30 years of experience in casting systems and it was developed with the precise goal to obtain a total safety and a maximum precision during the pouring operations. Indeed this system increases significantly the operator's comfort and the entire line's productivity. Both casting quality and productivity increase. The strong points of the GVF Impianti casting system are: constancy of results, comfort and security.



### SIZES

• The machine is produced in sizes 500 - 1000 - 1500 - 3000 Kg of liquid cast iron



Control cockpit

#### **CUSTOMIZATION**

n order to fulfill all our customers' needs the Casting Carriage can be also equipped with a totally automatic loading system from the melting furnace, which carries three ladles to the casting carriage, so that it guaranees always the continuity of the system and a very high productivity. Furthermore it is also possible to produce the casting carriage, which maintains a fixed puoring position or which uses a double ladle.

#### **ADDITIONAL EQUIPMENT**

- Ladles lifting on both sides with a forklift
- Rails in Mn steel Burback type
- Inoculation and spheroidization systems
- Systems for slagging and pouring operations
- Automatic loading system

## **OPERATIONAL SAFETY**

One of the Casting Carriage peculiar feature is that no oil is needed to make any movements. The machine uses Brushless motors technology to ensure incomparable movement's precision and fluidity. A software, produced by GVF Impianti, controls the entire system and allows managing each engine and the angular and linear controls with a joystick from the bridge's deck. We pay particular attention to the safety, both active and passive, of the staff operating in the working area, with barriers inside the bridge deck and on the moving axis of the carriage; sensors and position reeds are provided in order to prevent accidental spills of liquid.



#### **ERGONOMICS AND PERFORMANCE**

The higher position of the bridge deck allows operators to follow with safety and precision all the operative phases, permitting the casting while the line is moving. The movement of the carriage on every axis also allows to reach easily all the casting points. To be more precise the trasversal movement allows to reach and maintain the casting hole's center during the pouring operations. The longintudinal movement is studied to let the casting carriage move along the line in order to rach the pouring hole. Finally the casting rotation leads the full ladle up to a complete emptying angle. The operator is also able to adjust the speed of this movement by means of a joystick.

CASTING CARRIAGE MAIN MOVING AXIS

**Casting rotation** 

One unit composed by two Joysticks, that Control the movements described above, is installed inside the cockpit of the casting carriage and it activates a brushless motor. The speed of the movements, in proportion to the reaction of the joysticks, allows movements as fast as precise, and accelerations and decelerations with a fluidity not achievable with any other casting system. The presence of two roller conveyors, one for the loading and one for the unloading operations of the ladle, permits to keep always the Casting Carriage fed. If you invest in an efficient molding system, then you shall equip it with an innovative casting system: GVF Impianti's Casting Carriage.

Longitudinal translation

Transverse translation





Ladle for cast iron



Roller conveyors

# Sand Pre-coating Plant

he SPP is a sand pre-coating plant with resins both in flakes and liquid. The plant can be supplied only for resins in flakes, only for liquid resins or for both processes at the same time. The plant distinguishes itself for the high hourly productivity, thanks to its exclusive sand pre-treatment system. All ingredients are weighted and dosed, with an high precision, on the basis of the receipts set or selected by the operator. Being more precise the plant is equipped with a turbo-dissolving unit for the Hexamine, which allows to dose the product in very precise percentages through one dedicated skid. The heart of the plant is composed by one vertical ploughshare mixer with armor plates in wear-resistant cast-iron. The treated material inside the first mixer is transferred to a second liquid-cooled mixer which allows to complete the coating porcess in an optimal way lowering the production time.

Afluid bed screening and cooling system complete the process. Finally the entire plant is equipped with a complete filtration and suction system composted by sleeves filers, cyclones, de-dusters and a postcombustion abatement system. The whole plant's management is fully automatic from the raw materials loading to the final product. This allows the traceability of each production batch.





- High productivity
- Hogh dosage precision
- Regularity and repeatability of results
- High automation
- Complete process control

# PROCESSING

## VIBRATING FEEDERS

## **TECHNICAL FEATURES**

- Eccentric rotating mass vibrating motors
- Made in S235JR, AISI304, AISI316 or Wear-resistant steel
- Inner covering in wear-resistant material or in polyurethane
- Sides with interchangeable plates
- Elastomeric dampening system
- Customized sizes



## VIBRATING SCREENERS



## **TECHNICAL FEATURES**

- Sides shaped and strengthened
- Loading shelves with metal or rubber coating are studied and manufactured for the receipt and the distribution of the material
- Low maintenace and wear
- Special and adjustable eccentric enmasse bearings

## VIBRATING CRUSHERS

G-F Impianti vibrating crusher type FSV for sand reclamation is produced in three main models: FSV 80 G-100 – 160. The high performance vibrating crusher works with the sand over sand theory, and crushes the agglomerated sand until it has reduced the sand to the needed size. In this way the wear of the mechanical parts is reduced to the minimum. The capacity goes from 0,5 to 3 Ton/h. The machine is composed by a wide crushing hopper, which has replaceable wear-resistant armored sides, and a grid with particular crossed shapes for the primary selection of the sand. The material crushed in this way, moves to a secondary crushing chamber, which has a stainless steel grid, and in which all the metal small impurities stop. The machine is equipped with inspection and rear unloading door, fast-lock system of the selection grid and lateral outlet door for the waste.

## **TECHNICAL FEATURES**

- Robust carbon steel carpentry
- Interchangeable wearing parts made in Creusabro steel
- Adjustable eccentric en-masse motor-vibrators
- SAND-OVER-SAND technology
- Dampening system with Mollingum
- Inspection and unloading doors
- Available models: FSV80 100 160

- High wear resistance
- Interchangeable wearing elements
- High productivity
- Low production costs
- Easy to be assembled and installed



## Machineries and Systems

## **SHAKE-OUT MACHINE**

The shake-out machine allows to divide the casting from the sand. The machine is composed by a upper grid in high thickness Creusabro steel, which can be detachable. The body of the shake-out is made in electronwelded carbon steel, subjected to a loosening treatment. The machine is also equipped with interchangeable inner plates made in manganese steel. The primary selection and crushing grid is interchangeable and it is made in manganese steel too with quick connectors. Secondary and fine interchangeable selection grid made in stainless steel with quick connectors. Lateral wasted material 's outlet equipped with door with pneumatic activation for the material unloading. Unloading outlet for crushed and selctioned sand. The control unit composed by two adjustable vibrators with unbalanced mass.

#### **TECHNICAL FEATURES**

- Detachable and interchangeable selection grids
- Lateral outlet for waste with door euipped with pneumatic activation
- Avilable in different sizes
- From 1 to 3 selection grids
- Interchangeable and detachable lateral armor plate





- High efficincy
- Low level of wear
- High selection level

# BULK SCREW CONVEYORS

GVF Impianti screw conveyors are used in thousands of industrial applications every day for efficiently conveying a variety of bulk materials. A screw conveyor's main function is to transfer bulk materials from one process to another. Engineered to convey dusty products in continuous duty, GVF Impianti screw conveyors are supplied with different diameters.



## **TECHNICAL FEATURES**

- Heavy duty construction
- Tubular screw conveyors
- V-trough or U-trough screw conveyors
- Made in S235JR, AISI 304, AISI 316 or Wearresistant steel
- Augers in S235JR, AISI 304, AISI 316 or Wearresistant steel
- Segmented augers in steel with wear-resistant hard-facing
- Special augers with molded outline
- Motor side structural support with seals, lubricator and air flushing

## APRON CONVEYORS



WEAR-RESISTANT WELD BEADS

#### **A**DVANTAGES

- Low product breakage
- Versatile plant layout
- It conveys horizontally, vertically, in inclined surfaces
- Low maintenance

Thanks to a comprehensive products range, GVF Impianti Apron conveyors are mainly used for the special demands involved in the transportation of heavy materials and materials with high temperatures. The especially studied mechanical components of our Apron conveyors are the basis for its extreme reliability. The use of high-quality construction materials in combination with technologies developed by GVF Impianti and manufacturing precision, ensure a long service life and guarantee significant economic benefits.

## **TECHNICAL FEATURES**

- Heavy duty construction
- Cemented sliding wheels with inner structural supports
- Made in S235JR or Wear-resistant steel
- High thickness metal belt
- Lateral retaining sides included
- Customized sizes



## Bulk material handling

## BUCKET ELEVATORS

GVF Impianti bucket elevators ET series are engineered to work in particularly hard environment, they have a strong structure and guarantee an easy maintenance. The bucket elevators can be made also with chain dragging or with special customised buckets. GVF Impianti bucket elevators have an inlet studied specifically to remove the remains in the bottom and they are also equipped with guiding rolls on bearings both in the head and in the transfer case. The control unit is made by a drum on keyed shaft in order to allow an easy replacement. The elevator is complete with motorgearbox and tensioning unit and its head can be disassembled in two pieces, in order to guarantee an easy maintenance and a simple replacement of the belt. The loading area is equipped with a wear-resistant bottom.



#### **TECHNICAL FEATURES**

- Rubber-coated drive head drum
- Self cleaning "squirrel-cage" idler drum
- Heavy-duty belt's cover 4+2 cut and oil resistant
- Heat resistant belt (if required)
- DIN compliant chain (etc.)
- Idler drum rotation sensor
- Load/unload hopper



- Elevator's head composed by two pieces so that maintenance is easy and replacement simple
- Easy installation
- Low-wear and low-maintenance
- Heavy-duty construction
- Wear resistant bottom



## BELT CONVEYING SYSTEMS

ong distances, big heights – The wide range of materials and belt shapes, allows the production of belt conveyors suitable to satisfy all customer's needs of transport. The finding of the right solution makes the material handling quickly, safety and efficient. GVF Impianti belt conveyors can be supplied in different construction forms: "NP" flat belt conveyor, "NPE" flat extractor belt conveyor, "NC" V-belt conveyor, "NC S-series" sliding V-belt, supplied also with contrast in AISI for magnetic selection.

#### MAIN APPLICATIONS

The technology is particularly suitable for the horizontal movement, at low, medium and high speed of a wide range of products both in bulk and packed, also with very small size or in granules.

#### **A**DVANTAGES

- Low maintenance costs
- Easy installation
- Low-wear and low-maintenance components
- Conveying capacity up to 500 t/h
- Conveying speed up to 4 mt/sec

## BANDEBORD CONVEYORS

GVF Impianti's bandebord belt conveyors NB series represent a suitable alternative to classic bucket gelevators and are particularly advised for transport of granules or products with variable sizes on inclined surfaces up to 70°. The flat part, suitable for both gravitational and dosed loading, allows an uniform distribution of the material inside the conveyor, guaranteeing an high capacity. In addiction the upper flat part of the conveyor allows to place the unloading point depending on the plant's needs, making this solution particularly suitable for all friable or highly-abrasive products. The machine can be supplied with protection plates and suction system to obtain a depression area.





#### **TECHNICAL FEATURES**

- NBR covered drive head drum
- Self cleaning "squirrel-cage" idler drum
- Lower belt sides protection (if required)
- Heavy duty belt rollers on totally sealed bearings
- Rubber belt's cover 4+2 oil resistant
- Safety "pull-rope-to stop" switch on both sides
- Idler drum rotation proximity sensor
- Load / Unload hopper (if required)

## REDLER CHAIN CONVEYORS

GVF Impianti Redler chain conveyors transport different types of products. They have a reliable longlasting system, and they are characterized by an high attention for the constructive parts. Indeed they are assembled on sliding surfaces in wear-resistant or lubricating material with dragging chains, studied and realized depending on the plant's needs.

#### **TECHNICAL FEATURES**

- Heavy duty construction
- Redler conveyors with a square cross section of the box
- Redler conveyors with a round cross section of the box
- Loading units
- Unloading units complete with shut-off valves
- Paddles in plastic, S235JR, AISI 304, AISI 316 or Wear-resistant steel
- Bottom covering in wear-resistant material (optional)

## SLIDE VALVES TYPE ZW



In the slide valves' range with particularly hard performances, GVF Impianti offers the series ZW. The valve type ZW is a machine studied to perform the exchange function, maintaining the upper opening closed with perfect seal. The machine's functioning is made through two pneumatic cylinders, which move two heat-treated stainless steel blades on high density polymers rails. The movement is an ON-OFF movement. When the upper blade is closed, the lower blade opens, and when the lower blade is closed the upper blade opens. The sequence of the two movements described above causes a continuous pulsed unload. The ZW valve is made in several sizes with inlet flange from 200x200mm up to 800x800mm.





## SILOS AND STORAGE SYSTEMS



We produce and supply storage systems, complete with filling and extraction systems. We are able to supply storage silos' units complete with all components, such as levels, relief valves, silos' top filters, silos' loading systems, silos' weighing systems and weight in loss silos' unloading systems. In the range of the unloading systems the GVF Impianti produces fluidizing systems such as anti-stick systems for silos and shocking hammers. The silos installations are equipped with unloading butterfly valves or double-chamber valves depending on the requested applications and can be equipped with telescopic truck loading systems.

# PNEUMATIC

## PNEUMATIC CONVEYORS MAIN FEATURES



#### **A**DVANTAGES

- Automatic execution
- Low wear
- Reduced product breakages and degradation
- Low gas consumption
- High efficient ratio product/gas
- No moving parts
- Low operating and maintenance costs
- External air injection system possible
- Use of hydrogen in explosive atmosphere possible

### **OPTIONAL FEATURES**

- Stainless steel construction AISI316
- Weighing system with load cells
- Double loading valve
- Min. level probe
- Supporting structure on wheels



#### CARBONITRURATED OUTLET IN NI-HARD CAST IRON WITH ROTARY FLANGES

## PNEUMATIC CONVEYOR TYPE GA

neumatic conveyor type GA is characterized by the presence of a butterfly inlet valve PN16 with pneumatic actuator. This type of conveyor is particularly suitable for normal wearing materials





#### **FEATURES**

- Heavy duty construction
- Butterfly valve with pneumatic actuator
- Possibility to install a double loading butterfly valve
- Vessel fluidizing air-jets (from GA90lt.)
- PLC control panel
- Operator interface with touch screen
- Capacity from 24 to 4000 lt
- Outlet unit in NiHard cast iron (2" 1/2 3")
- The outlet in carbonitrurated NiHard cast iron is equipped with rotary flanges
- Suitable for normal wearing materials
- Equipped with electro-pneumatic control panel in box

## Dense phase pneumatic conveyors

## PNEUMATIC CONVEYOR TYPE GC



A series, characterized by a weighing system on inlet cells that allows performing batching processes before the transport, enriches GVF Impianti's range of conveyors. GA-A pneuamtic conveyor is particularly suitable for the dosage of the bentonite in the sand mixer.

#### **FEATURES**

- The pneumatic conveyor type GA-A has the same features of the GA type, but it is equipped with load cells for the materials' weighing
- Particularly suitable for the dosage of bentonite in the sand mixer
- On board electrical and pneumatic panels
- Produced in sizes from 24lt. to 150lt.





## TWO WAYS DIVERTER VALVES

DAS series diverter valves are studied to be installed on the top of the silos, giving the possibility to divert between more silos or to become a terminal box made in a wear-resistant material. Available in sizes form 2" 1/2 up to 10"



The two-ways diverter valve type Y allows the selection between two different ways, through the opening and the closure of two pinch valves. Available with parallel outlets at  $30^{\circ}$  and  $45^{\circ}$  and in sizes from 2" 1/2 up to 10".

## MULTI-WAYS DIVERTER VALVE TYPE DS

The DS valve is designed to have only one incoming pipe and multiple outgoing pipes, in order to manage complex systems featuring up to 12 outlets, with considerable savings in terms of pipes, assembly costs and operating space. It is possible to install the valve both vertically and horizontally by means of the lower fixing plates.

#### **FEATURES**

- Compact
- Accurate and reliable
- Pollution-free
- Wear-resistant
- Simple maintenance
- Easy to install both vertically and horizontally
- Diameter from 2"1/2 up to 10"
- From 2 to 12 outlets



## WEAR-RESISTANT BENDS



## **CSQ and CM TYPE - FEATURES**

- CM type has interchangeable sectors
- CSQ type works with SAND-OVER-SAND technology and can be supplied for both two or three ways
- Made in carbonitrided NiHard cast iron
- Split flanges PN 10
- Gaskets in high quality vulcanized rubber







## **FILTRATION** Suction and Filtration Systems CARTRIDGE FILTERS

The GVF Impianti cartridge filter with a backwashing cleaning capability is composed of cartridge filter elements enclosed in an air tight central body and is conceived for being used in vacuum systems. The filter can be used for treatment of fumes and dusts in mechanical, chemical or pharmaceutical applications. GVF Impianti cartridge filters may be used to replace the conventional woven fabric or needled felt filter bags in dust collection equipment under certain working conditions or where there is restricted space. The star-shaped structure of the filter cartridges offers a wide filter surface, approximately 10 times greater than that of the filter bags with the same proportion.

#### TECHNICAL FEATURES

- Suitable for dust suppression
- Monolithic construction for high negative pressure values
- High performance longitudinal pre-abatement chamber
- Pulse Jet cleaning system with obstruction control
- PED compliant bin
- Capacity from 3.000 to 150.000 mc/h
- High temperature version
- Atex compliant version
- Unloading screw conveyors
- Triboelectric probes to control emissions from chimney



## SLEEVES FILTERS

The bag filter FM type provides automatic cleaning through countercurrent compressed air blown into the bags. This air, due to the Venturi effect causes the shaking and the backwashing of the bags at the same time. The GVF Impianti's bag filters are equipped with longitudinal pre-chamber for de-dusting, which guarantees the homogeneous distribution of powder over the entire filter's length. The automatic cleaning is managed through an appropriate electrical control unit, which adjusts the compressed air, thanks to a timer or a differential pressure switch.



#### **TECHNICAL FEATURES**

- Suitable for dust suppression
- Monolithic construction for high negative pressure values
- High performance longitudinal pre-abatement chamber
- Pulse Jet cleaning system with obstruction control
- PED compliant bin
- Capacity from 3.000 to 150.000 mc/h
- High temperature version
- Atex compliant version
- Unloading screw conveyors
- Triboelectric probes to control emissions from chimney

## **RING FILTERS**

#### **TECHNICAL FEATURES**

- Suitable for oil and fogs abatement
- Monolithic construction
- Pre-abatement chamber
- Filtering rings abatement chamber
- Abatement chamber with metal filters
- Drop-stop filter CP type in carbon steel



## CYCLONES AND DEDUSTERS

The cyclones are advisable as de-dusting dust collectors in industrial processes, where are treated coarse dust particles, chips, saw dust and other types of powders. They are also used as primary collector for the following filtration. The powders enter tangentially and acquire in the separator a downwards whirling movement due to the effect of both the weight and the centrifugal force; the clean air exits from on high while the powders are collected in the cone and fall to the lower part of the cyclone. All our cyclones are supplied complete with Compliance Declaration, CE label and are made respecting the current regulations.

#### **TECHNICAL FEATURES**

- Cyclone filters with high dust suppression efficiency
- Made in wear-resistant steel
- Inner interchangeable wearing plates
- Polyurethane wear-resistant covering
- Counter-current de-dusters
- Inner feeding system for not much sliding materials
- De-dusting flow adjustment
- Complete supply of fans, flow control valves and silencers





- Handles small to large volumes of air at temperatures up to 1.000 °C
- Low maintenance
- Easiness of powder recovery
- Need of small spaces for the system's installation
- Low costs of installation and usage
- Optional construction materials and internal linings to suit the application (e.g. wear-resistant lining for high temperatures)
- Handles small to large volumes of air at temperatures up to 1.000 °C





GVF Impianti Srl BUSINESS SECTORS

Ideas, Projects and Solutions in order to provide our customer with the best product possible.

GVF Impianti Srl designs and produces in-house both standardized and customized products, in order to satisfy each possible customers' need.

Various sectors of application are covered by our company's production. The main corporate divisions are: pneumatic conveying system, bulk material, mixing, foundry, recycling and filtration.

avored by 52 years of experience and a strong knowledge in different sectors, we provide reliable machineries, equipment and turn-key solutions.



# GVF

Via Milano 6/a 42048 Rubiera -REwww.gvfimpianti.it info@gvfimpianti.it