

THE **IDEAL** PARTNER FOR ALL **HANDLING** **SOLUTIONS**



✓ MACHINES ✓ SYSTEMS ✓ CONTROL



STRONG EXPERTISE

in the fields of **dosing, mixing, conveying, and industrial automation** for solid and liquids.



DEFINITIVE
INNOVATION

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A photograph of industrial machinery, likely part of a conveyor or dosing system, with various pipes, valves, and mechanical components. The image is partially obscured by large blue geometric shapes that frame the text on the right.

ABOUT US

DEFINITIVE INNOVATION is the conception of a group of professionals with decades of world wide experience in the fields **of dosing, mixing, conveying, and industrial automation.**

DEFINITIVE INNOVATION designs high quality, efficient solutions for a wide range of industries from food or chemical to cement and plastics or any process reliant on handling technologies.

INDUSTRIAL AUTOMATION

STORAGE

DOSING

FILTRATION

MIXING

CONVEYING



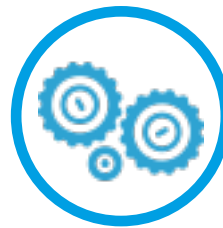
OUR EXPERTISE

DEFINITIVE INNOVATION's vast experience and attention to detail makes us the perfect partner for a single feeder or a complete plant automation.

DEFINITIVE INNOVATION's first priority is customer satisfaction. Our success is based on your success with our products and service.

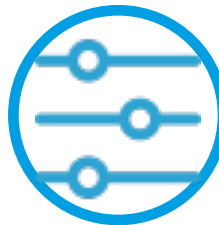
DEFINITIVE INNOVATION

HANDLING SOLUTIONS



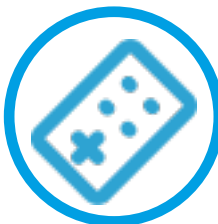
MACHINES

Processing machines for material treatments.



SYSTEMS

Modular Systems for batch or continuous processes.



AUTOMATION

Integrated control Systems.

APPLICATIONS



FOOD



Raw materials handling in all production processes: from powder or liquid such as flour, groats and oils, to the addition of spices and dyes.



ZOOTECHNICS

Raw materials handling in all zootechnic processes: from powder or liquid such as flour, groats and oils, to the addition of medical components.



COSMETICS

Basic raw material handling (liquids powders creams) and use of micro elements as excipients of petrochemical, animal, synthetic or vegetable dyes, thickeners, emulsifiers, antioxidants, opacifiers.



CHEMICAL

A common example of application in the chemical sector is the batch feeder. The need is dispensing individually different ingredients, including liquids, into a weighed hopper to make them available to the following process, for example a mixing cycle.



PLASTICS

Definitive Innovation has fine-tuned machines and components that are widely used in plastic extrusion plants. Many types of different plastics can be realized by using PE and PP powders as base and adding various additives depending on the main property which will characterize the final result that it is desired.



BUILDINGS

In the building industry, the ready-mix plants are consolidating their presence thanks to innovative components and the greater requirement for performance and quality in the finished product.



DOSING

Our dosing systems are available both in volumetric and loss-in-weight release with an electronic load cell system to ensure accuracy and reliability. They find application in every field and are available also in Atex release.

- ✓ Feeders for powders
- ✓ Feeders for granules
- ✓ Feeders for fibers
- ✓ Feeders for liquids
- ✓ Feeders for paste



SINGLE SCREW FEEDER F SERIES

Designed for feeding powders and granules. Suitable for processing materials with very different grain size, fluidity and density recommended for fine or very free-flowing powders.

- ☑ **Available in different sizes**
- ☑ **Batch dosing starting from 10gr**
- ☑ **Continuous dosing from 0,5lts up to 13 m³/h**

DOUBLE SCREW FEEDER D SERIES

The D Series twin screw feeders are designed for feeding materials in powder and synthetic fibers and are especially recommended for very fine powders. The twin extraction screw system ensures high accuracy and a homogenous material flow.

- ☑ **Batch dosing starting from 5gr**
- ☑ **Continuous dosing from 0,5lts up to 2 m³/h**



VIBRATING CHANNEL FEEDERS C SERIES

The vibrating channel feeders are suitable for feeding fragile raw materials with irregular sizes such as tablets, granules, flakes and stringy products. They are appropriate for processing large-scale materials with very different fluidity and density.

- ☑ **Batch dosing starting from 5-10gr**
- ☑ **Continuous dosing from 1lt up to 4 m³/h**

SCREW FEEDERS FOR FIBROUS AND GROUND FLAKES GM SERIES



The GM Series single screw feeders are ideal for feeding synthetic stringy or irregular shaped materials after the grinding process.

They are used in different configurations in all applications in which it is necessary to re-use recycled plastics or to feed binding agents in building or plastic compounds in order to increase their mechanical resistance.

Available in volumetric and loss-in-weight release with an electronic load cell system to ensure accuracy and reliability. They find application in every field and are available also in Atex release.

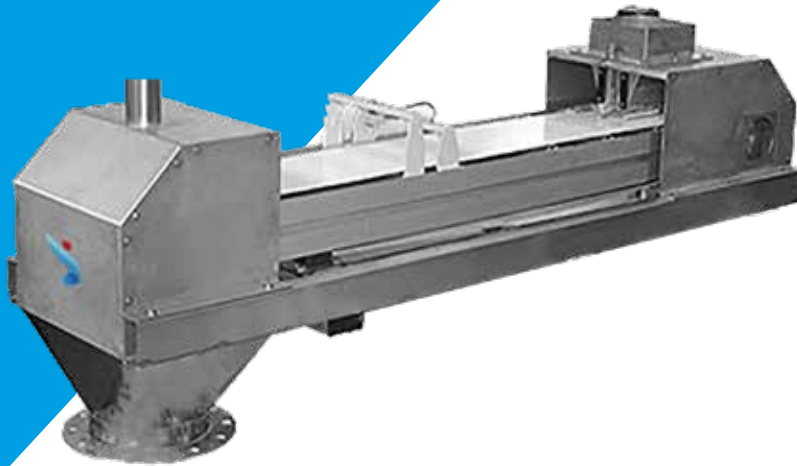
SCREW FEEDERS FOR GRANULATED MATERIALS G SERIES

The G Series screw feeders are used for the loss-in-weight feeding of granular shaped bulk materials.

The composition of the various sizes and the flexibility of each component gives the possibility of having compact feeding units that are easy to use. The ease with which they can be dismantled makes faster the cleaning and the screw replacement.

☑ **Flow rates from 3 to 1500 l/h m³/h**





BELT FEEDERS BWF SERIES

The BWF Series belt feeders are used to feed every type of material even with very irregular grain size. A strong aluminum frame ensures its rigidity, the integrated twin load cell system and the calibrated feeder with anti skidding system to the maximum required standards.

Available in open release or totally enclosed for maximum protection and environmental cleanliness.

DOSING SYSTEM FOR LIQUIDS WLQ SERIES

When the objective is extreme precision, the choice of the type of pump and the the dynamic reading of the signal emitted by the installed components, are key elements.

The dosing systems for liquids WLQ series are the most precise and versatile for dosing liquids of all types and viscosity.

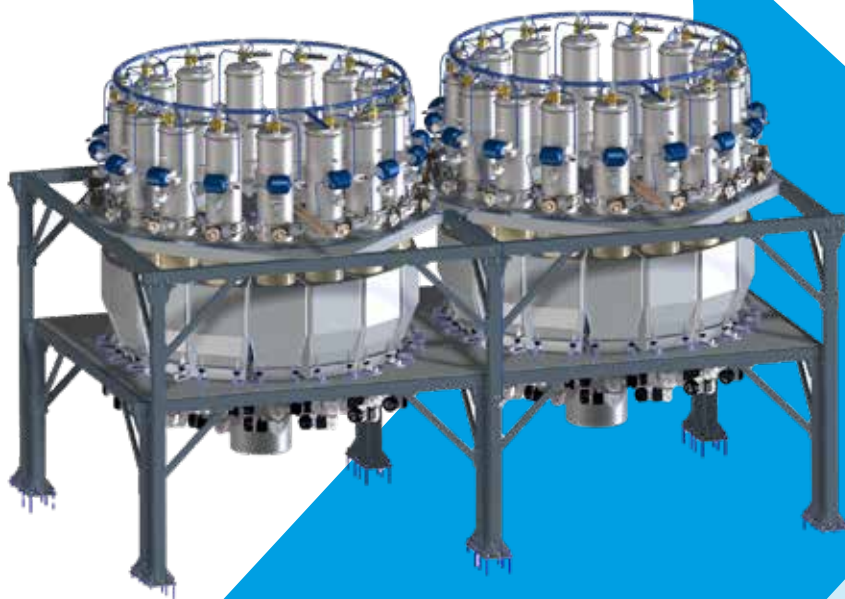
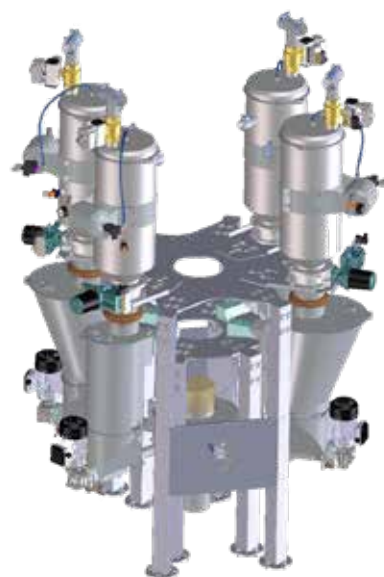


CUSTOMIZED DOSING SYSTEMS RDF STATION

Definitive Innovation designs high quality and efficient solutions for a wide range of industries from food or chemical to cement and plastics or any process reliant on handling technologies.

Our advantages are:

- ✓ **A wide range of solutions for dosing** different raw materials (such as powders, granules, fibers, pastes) with the suitable accessories for each feeder;
- ✓ **A flexible system** that easily adapts to small spaces;
- ✓ Standard solutions up to 12 feeders in 4m² (up to 32 feeders in 18 m² for customized solutions);
- ✓ **Storage of the materials to be managed up to 3 m³** capacity for each raw material;
- ✓ **Easy cleaning:** Each feeder is equipped with “FAST-LOCK” system;
- ✓ **Speed in the batch** (the fully gravimetric feeders can dispense simultaneously), with a flow rate over 8 T/h;
- ✓ **Modular and expandable system with a wide range of accessories** (for example: pneumatic loading system of raw materials)
- ✓ **Management of recipes with system traceability**





STORAGE EXTRACTION CONVEYING

- ✓ Silo
- ✓ Emptying and filling Big-Bag stations
- ✓ Bag Emptying devices
- ✓ Transport screws
- ✓ Conveyor feeders
- ✓ Conveying systems

SILOS

Our Silos are the best solutions for the storage of powder, both in carbon steel or stainless steel, with surface treatments according to the product to contain and the installation environment. They are available in different types: monolithic, telescopic and modular with capacity from 5 to 200m²



FABRIC SILOS

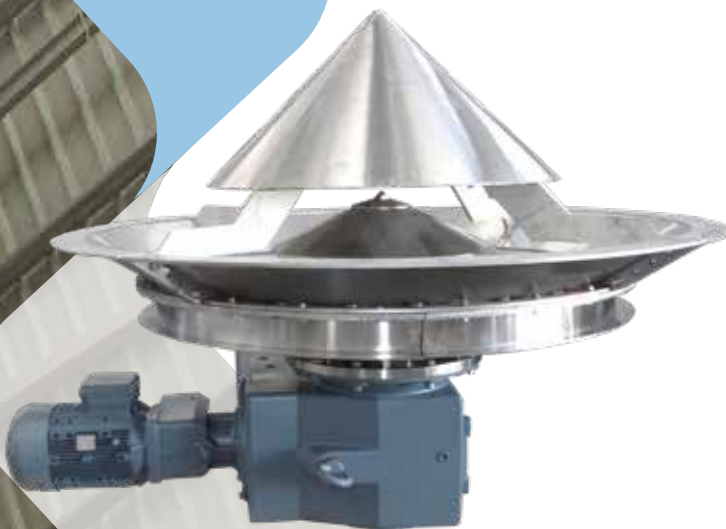
Fabric silos are robust and modular galvanized steel constructions designed to meet specific customer needs. The TREVIRA type (polyethylene terephthalate) antistatic fabric has excellent mechanical properties and it is suitable to store food products in compliance with Regulation (EC) n.1935/2004 and US Food and Drug Administration regulations. This storage system is the answer to many space requirements. The fabric is easily washable in industrial laundries. The range covers containment capacities from 3 to over 50m³.



FLAT-BOTTOM EXTRACTOR FBE

The FBE flat-bottom extractor is the component suitable for the controlled extraction of all those bulk materials with poor fluidity. It is particularly useful in applications where it's absolutely necessary to extract the material without the help of strikers, liquefiers, vibrators and where problems of bridges and mouse holes must be avoided.

The cylindrical shape makes it suitable also in all those applications in which the small spaces would not allow the same containment capacities with conventional cone-shaped geometries. The flexibility of this component allows it to be placed directly in the lower part of a silo, to be used as a refilling hopper, storage bin, small daily silo, or simply as a feeder hopper.



MANUAL BAG EMPTYING DEVICE SSM SERIES



The SSM Series manual bag emptying device is used to empty bags containing powder or granular material. Made of AISI 304 stainless steel as a standard, it can also be released in a completely closed version for hazardous materials. It can be equipped with an automatic cutting system (optional), latex gloves for handling toxic and/or hazardous substances, or connected to an expulsion/compaction system of the empty bags. The machine is ready to be connected with a centralized suction system or equipped with a bag or cartridge filter.

BIG-BAG EMPTYING STATION EBQ SERIES

The EBQ station is the ideal device for unloading BIG-BAGS. An efficient cloverleaf shaking system operated by electro pneumatic pistons ensures a high level of operating comfort even with materials that are difficult to extract.

It is available both in the version with hoist and without hoist and thanks to a complete range of accessories we are able to configure the big bag emptying station on the specific requests of the customer.





TRANSPORT SCREWS SC SERIES

The SC Series screws, simply and carefully constructed, easy to install, are the most reliable for transporting bulk materials continuously.

The compact construction and the wide range of accessories included make them versatile and reliable in different sectors of application.



FLEXIBLE CONVEYORS

Screws or flexible mechanical conveyors are characterized by an external polyamide resin tube (nylon PA12) certified food and wear resistant with an internal spiral made in stainless steel 304.

The flexible mechanical conveyors, with high speed rotation, distributes the material on the internal section so that the screw can float concentrically on the product itself. One of the peculiarities is that they can easily fit in existing plants.

A wide range of diameters and lengths extend the flow rates up to 8m³/h

DILUTE PHASE PNEUMATIC CONVEYING SYSTEM

The dilute phase pneumatic conveying system is the best solution for conveying bulks, granules or flakes with a low specific weight to distant points of a plant. It is also called “low pressure transport” and it is characterized by its low efficiency ratio between kilograms of product and air kilograms. It is the most applied system for light bulk materials handling.

In the dilute phase pneumatic conveying system, the flow rates can reach up to a maximum of 10 tons/h, the transport speeds depend on the type of material and can vary from 20 to 30 meters per second.

This type of system uses the energy created by the depression of a generator (side channel turbine) in order to move the materials in the pipes. The high speed of conveying is the ideal solution for resiatant and non abrasive materials. It is not recommended for blended products.

The dilute phase pneumatic conveying system finds its great advantage in the ease of management and it is a cost-effective solution in terms of execution and energy use. A wide range of pneumatic loaders, combined with vacuum generators and specific components can satisfy many needs in various sectors.



SINGLE-PHASE LOADERS CMP SERIES

The single-phase loaders CMP are indispensable components for the feeding of different types of granules and reground materials in the complex plastics processing systems. These loaders are adopted for receiving free flowing powders pneumatically that are extremely fluid with bare density smaller than 0.8kg/dm^3 . Their application is limited to flow rates of less than 300kg/h with a transfer distance of less than 15mt.

- ☑ **Containment capacity from 2 to 12 liters.**
- ☑ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**

PNEUMATIC LOADERS CJM SERIES



The pneumatic loaders CJM series are effective and economical and can be used for the feeding of granules for plastic processing machines up to a flow rate of 400 kg/h. The compressed air supply system makes them extremely versatile and reliable thanks to their system of fully automatic operation. They can also be used with powders that are extremely flowable thanks to the filtering membrane with compressed air cleaning. Their easy programming allows the user to set the best working cycle, avoiding inappropriate automation costs.

- ☑ **Containment capacity from 1 to 5 liters.**
- ☑ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**

THREE-PHASE LOADERS CTP SERIES

The pneumatic loaders CTP series are indispensable components for the feeding of different types of granules and reground materials in the complex plastics processing systems. Their flexibility, the various accessories available, allow the set-up of articulated systems that are, however, very simple to control thanks to the communication via BUS connection on the centralized system (meaning controlled by a single electrical panel and with the use of the same vacuum pump for several loaders).

- ☑ **Containment capacity from 12 to 100 liters.**
- ☑ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**



THREE- PHASE LOADERS CTF SERIES

The three-phase loaders CTF Series are adopted for receiving free flowing powders pneumatically (suction). They can operate individually, connected to a suction unit, or in sets composed of several loaders centrally connected to the same suction unit; this operation is done in alternating mode or according to a booking logic.

- ☑ **Containment capacity from 12 to 70 liters.**
- ☑ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**

SINGLE-PHASE LOADERS CTM SERIES

The Single-phase loaders CTM series are adopted for receiving free flowing powders pneumatically (suction) that are extremely fluid with bare density greater than 0.5 and smaller than 1.2kg/dm³. They can operate individually, connected to a suction unit, or in sets composed of several loaders centrally connected to the same suction unit; this operation is done in alternating mode or according to a booking logic.

- ✓ **Containment capacity from 30 to 120 liters.**
- ✓ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**



THREE- PHASE LOADERS CTJ SERIES

The three-phase loaders CTJ Series are adopted for receiving free flowing powders pneumatically (suction). They can operate individually, connected to a suction unit, or in sets composed of several loaders centrally connected to the same suction unit; this operation is done in alternating mode or according to a booking logic.

- ✓ **Containment capacity from 40 to 350 liters.**
- ✓ **Please consult our technical department for the sizing of the flow rates according to the material and the specific needs.**



DUST COLLECTOR FILTERS

The dust collector filters are essential elements for pneumatic transport. The FMD series filters are designed for the collection of the dust in industrial plants.

The cylindrical construction equipped with a side door allows the easy extraction of the filtering element, consisting in circular sleeves in polyester felt complete with a wide range of variants according to the dust to be retained and its granulometry. The filtering elements are cleaned with a counter-current air jet managed by an electronic control unit which regulates the working and pause times during the separation cycle. And at the end of the cycle further cleaning phase is guaranteed in the absence of pressure or depression of the circuit.

The standard range of FMD filters provides filtering surfaces ranging from 1m^2 up to 22m^2 , with flow rates to be dedusted over $2000\text{ m}^3/\text{h}$ with filtration efficiencies higher than 99.5%.



DENSE PHASE PNEUMATIC TRANSPORT

The dense phase pneumatic transport allows the transport of large quantities of product using a small amount of compressed air.

The use of line fluidizer device LFD systems placed along the transport line, with controlled injection of small air jet, creates regular caps of product to let the product advance smoothly. This system allows a slow speed transport without stressing the particles and it's suitable for mixed, fragile or abrasive products. The dense phase pneumatic conveying allows the transport of up to $80/100\text{ m}^3/\text{h}$ with distances over than 300 metres.





MIXING

- ✓ Low turbulence
- ✓ High turbulence



DISCONTINUOUS LOW TURBULENCE MIXERS MDN SERIES

The MDN Series horizontal ribbon mixers with opposite coils are the simple and essential proposals for obtaining quickly a homogeneous and repeatable batch mixture even with small quantities of product. The low turbulence generated by a reduced rotation speed of the tool maintains the integrity of fragile and delicate raw materials. The clean structure of the mixer composed of U-section trough makes it easy to install in addition to the application of a complete series of accessories such as injectors of liquid additives, thermal exchange spaces for cooling or heating the mixed compound. The wide upper area allows the mixer to be loaded with the most varied systems (screws, pneumatic loaders, etc.)

- ☑ ***The wide range guarantees batches from 50 liters up to 7 m³ per working cycle***



DISCONTINUOUS HIGH TURBULENCE MIXERS MDL SERIES

The MDL Series horizontal blade mixers satisfy in many uses the demands in discontinuous mixing. The cylindrical structure of the mixer and the use of appropriately shaped mixing knives, give the powders to be amalgamated turbulences which lead to a high degree of homogenization. The very short mixing times and the flexibility to receive a complete line of accessories (such as injectors for liquid additives, thermal exchange spaces for cooling and heating the mixed compound) make it a reliable, long-lasting and especially efficient product.

- ☑ ***The range of these mixers guarantees batches from 20 liters up to 7 m³ per work cycle***



CONTINUOUS HIGH TURBOLENCE MIXERS MDG SERIES

The MDG continuous mixer is suitable for mixing powders, flakes, granular or viscous products also and above all with the addition of liquids.

The turbulence created inside the chamber by ploughshares with a special profile, allows a homogeneous mixing even between products with extremely different specific weights and grain sizes with a very short residence time, to reach flow rates up to 80/100 m³/h.

The use of special mixing tools, together with the constant feed of solid and liquid products allows the production of regular granules perfectly homogeneous. Also in this case the flow rate is around 80/100 m³/h.



AUTOMATION

- ✓ Electrical systems
- ✓ Software

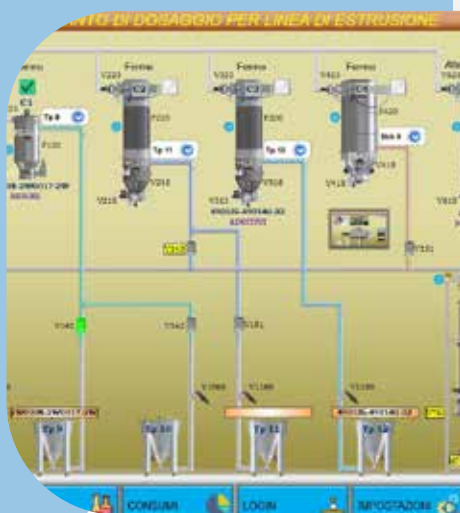


ELECTRIC PANELS

Definitive Innovation is able to supply the most varied types of electrical panels related to industrial automation and distribution, whether they are related to single machines or complete plants. Our team is able to manufacture any type of electrical panel related to industrial automation and distribution. We use software such as:

- ☑ AUTOCAD
- ☑ SPAC
- ☑ ELCAD
- ☑ EPLAN

All electrical panels are subjected to a final check and test.



SOFTWARE

Definitive Innovation is able to provide the most advanced software for:

- ✓ Data collection in industrial environments
- ✓ Data collection for tertiary sector
- ✓ Industrial automation systems
- ✓ Process control and supervision
- ✓ Factory information systems
- ✓ Automatic warehouses
- ✓ Moving lines
- ✓ Vision systems
- ✓ Teleservice

Definitive Innovation is constantly looking for innovative and ground breaking solutions to allow users to manage and monitor in an easy and immediate way the operational status of the machines at any point in the factory. With remote access technology, operators can diagnose the operating status of the machines without being on site through the use of wireless tablets that not only offer great performance and visibility, but also have a simple and user-friendly interface thanks to which you can quickly change the control window and monitor the operating status of different machines. Easy to use just like using a smartphone. The server device connects with PLC, inverter, motion controller and many other controllers to perform protocol conversion, event logging, recipe database maintenance, macro command execution and much more, ensuring security and reliability during the transmission of data and information.



WHERE WE ARE

HEADQUARTER

Via del Lavoro 16,
41030 Bastiglia (Mo) – Italy
Tel. +39 059 7470661
Fax +39 059 7470663
info@definitiveinnovation.com

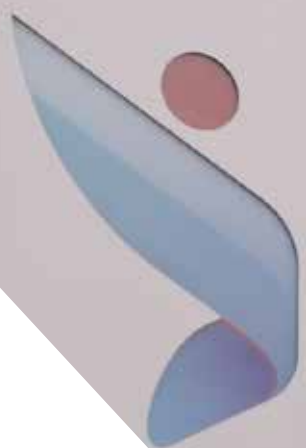


DEFINITIVE
INNOVATION



IN THE WORLD

Definitive Innovation relies on a network of professional and trained collaborators who are at your disposal in Italy, Europe and worldwide. Contact us for the reference closest to your needs.



DEFINITIVE
INNOVATION

LOADING SOLUTIONS



Via del Lavoro 16,
41030 Bastiglia (Mo) – Italy



www.definitiveinnovation.com
info@definitiveinnovation.com



+39 059 7470661 tel.
+39 059 7470663 fax.



SV Cert.
Group