Mixing systems and components for plants

Mixing
Filtering
Valves
Monitoring
Extraction
Conveying
Mix has been developing and manufacturing Mixing Systems (Mixers, Dryers, Reactors, Granulators, Sterilizers, Stirred Bunkers) and Industrial Components (Dust Collectors, Loading Bellows, Butterfly Valves, Slide Gates, Silo Accessories) for bulk solids handling (powders, granules, fibres, pastes) used in different fields of application: Food processing, Pharma, Chemical, Plastic, Ecology, Cosmetic, Industry, Feedstuff and Laboratory.

- Established in 1990
- Sales Network:
  - MIX Deutschland GmbH
  - MIX India Bulk Handling Pvt.Ltd.
- Turnover: 70% Export - 30% Italy
- Extension: 22,000m² of which 12,000m² covered

**TECHNOLOGY**
- Research & Development
- Test Laboratory
- Analysis of the customer’s requirements

**QUALITY**
- Quality control for incoming materials
- Quality control for the whole production line
- Final Quality inspection

**SERVICE**
- Technical and sales advice
- Laboratory Tests
- Service during installation

**INNOVATION**
- Special machineries designed on demand
- Patent for Industrial Inventions
- Enrolled at the Italian Department for Research
BUSINESS MANAGEMENT
The business management system is in compliance with the rules:
• ISO 9001 - Quality Management System Certificate
• ISO 14001 - Environmental Management System Certificate
• ISO 45001 - Occupational Health and Safety Management System Certificate

PRODUCTS
MIX products are:
• "Machinery", accompanied by the EC DECLARATION OF CONFORMITY
  (as per European Directive 2006/42/EC)
• "Partly-completed machinery", accompanied by the DECLARATION OF INCORPORATION
  (as per ATTACHMENT II, part 1, section B of the European Directive 2006/42/EC)
• "Not Machines"

The MIX products can also be compliant with Directives:
• ATEX 2014/34/UE
• PED 2014/68/UE
• Food regulation (EC) n. 1935/2004

MIX mixers obtained the TÜV ITALIA CERTIFICATION:
• TÜV IT 15 ATEX 055 X - EC-Type Examination
• TÜV IT 15 ATEX 062 Q - Production Quality Assurance Notification

PATENTS
The Industrial Patents obtained, the Patent Applications filed and the enrolment to the
Italian Department of Research (502811WU) reward MIX commitment and allowed MIX
to become a recognized reference in Industrial sector. The technological results achieved
place MIX among the Leader Companies in designing and manufacturing of Mixing
Systems and components for Bulk Solids Handling.
MIXING WITH THE RIGHT PARTNER
Customers purchasing MIX mixer obtain technology - experience - support and industrial patented solutions with undeniable advantages with regards to technical and economic.

PRODUCTS
Mixers, Stirred Bunkers, Granulators, Dryers, Reactors, Sterilisers

PROCESS
Batch or Continuous

VOLUMETRIC CAPACITY
From 2 to 50,000 liters

APPLICATION
Atmospheric, vacuum, under pressure, with heat exchanger

MIXING TECHNOLOGY
ploughshare, MIX-paddles, fourfold screw ribbon

MATERIAL
Carbon Steel, wear-resistant steel and stainless steel
Mixing systems and components for plants
Filtering
FILTER WITH THE CORRECT PHILOSOPHY

Air pollution, with dusts emitted into the atmosphere, causes detrimental effects to people and things. Technological progress and environmental protection, job and health, economy and ecology must proceed hand in hand; a need for the present, and a commitment for the next future.

PRODUCTS
Dust collectors and accessories

PROCESS
Fan-assisted, Dust collection, Pressure and vacuum filtration

FILTERING SURFACE
1÷135m² (Bag filters)
4÷435m² (Cartridge filter)

VERSION
Atmospheric, vacuum, ATEX (also Resistant to explosion pressure impact) and high and low temperatures

CLEANING SYSTEMS
To air compressed in counter-current

MATERIAL
Carbon Steel and stainless steel
INTERCEPTING WITH RELIABILITY
The prerogatives pursued by MIX for interception equipment are reliability and service, to make the product available at the opening phase of the valve, to regulate the flow rate, and to avoid damage to things or people at the closing phase.

PRODUCTS
Butterfly valves, slide valves, to pinch valves with actuators

PROCESS
Interception

DIMENSIONS
DN100 ÷ DN400 (Butterfly valves)
DN250, DN300 (Butterfly valves for silos)
DN150 ÷ 800 (Slide valves)
DN80, DN100 (Pinch valves)

VERSION
Atmospheric, resistant to high temperatures

MATERIAL
Alluminium, carbon Steel and stainless steel
Mixing systems and components for plants
Monitoring

MONITORING BY CHECKING THE INFORMATION
Priority for the control of the plant is the timely availability of information on the status of each containers, silos, hoppers. MIX monitoring components ensure a timely detection of the data that, collected and analyzed, allow to protect the plant and improve its efficiency.

PRODUCTS
Overpressure and depression valves, manhole, overpressure meters, level gauges

PROCESS
Monitoring systems

MATERIAL
Alluminium, carbon Steel and stainless steel
**Extraction**

**EXTRACTING WITH THE CONSERVATIVE FLUIDIZATION**

MIX fluidization systems allow the blowing of dehumidified air to preserve the integrity of the products and manage an uniform flow distribution to optimize the smoothness of the aerated products.

**PRODUCTS**

Pad, disc, aeration nozzles

**PROCESS**

Aeration, Extraction

**MATERIAL**

Carbon Steel and stainless steel, sinterized
Conveying

**PRODUCTS**
Loading bellows

**PROCESS**
Conveying

**TRAVEL**
800÷8,000mm
(other travels on demand)

**VERSION**
Inner duct with metal pipes

**DUST COLLECTION SYSTEMS**
with built-in filter or with prearrangement only

**MATERIAL**
Carbon steel, wear resistant material, Stainless steel

**CONVEYING PRESERVING THE ENVIRONMENT**
The technical solutions applied to MIX Loading Bellows guarantee, in complete safety, high load performance, resistance to abrasion (with internal metal telescopic tubes) and protection of the environment (with built-in dust collection and recovery systems).
MIX components for screw conveyors ensure interchangeability with other solutions and excellent wear resistance. In addition, MIX gearboxes feature a patented solution that injects compressed air into the seal to allow the fluidization of the product.
MIX firmly believes in the importance of research, development and innovation. Recently MIX enhanced its internal Testing Facility with brand new machineries and is now able to execute trials with harder parameters. The handling of chemical reactions and physical variations, the measurement of moisture content of the products and the increase or decrease of pressure and temperature in the mixer is now fully automated.

**PROCESSING WITH INNOVATION AND EXPERIENCE**
MIX is able to support its partners during the whole design phase of the mixer, carrying out specific tests at its own laboratory.

**EXPERIENCE**
To the benefit of the Customer

**CONTROL**
Of all parameters, during every step of the whole process

**PARAMETERS**
Temperatures up to +180°C, pressure up to +5bar and in vacuum

**GUARANTEE**
That the achieved results are repeatable on the industrial mixers

**RESEARCH**
Enrolment at the Italian Department for National Research 502811WU
MIX guarantees the confidentiality of the processed information and that the results obtained during trials in the testing facility are scalable and repeatable with industrial mixers. It is now much easier to determine the characteristics of each raw material and, therefore, identify the most suitable mixing techniques for obtaining the desired final result.

**Powders, Granules, Fibers, Pastes** can be tested in the new laboratory, even in classified hazardous atmosphere (ATEX).