

# Dense-Phase Master

The Dense-Phase Master represents the next generation of gentle conveying of powder/granulate solutions for the process industry.

## Flexible powder conveying

Dense-phase pressure conveying systems use compressed air to push the product from a sending pressure vessel through a pipeline to one or several destinations.

The powder movement is controlled by adjustable air valves in connection with pressure transmitters, which keep a constant pressure.

The system is a robust design in stainless steel, with few moving parts. The system is delivered with a pneumatic control panel with regulation valves, flowmeters and pressure sensors for achieving the highest level of economical and gentle powder transport.

## Benefits of the Dense-Phase Master

The Dense-Phase Master provides our customers with smaller filter area, minimal maintenance and better economy. All achieved through innovative design.

The Dense-Phase Master is an energy-effective and flexible powder conveying system.

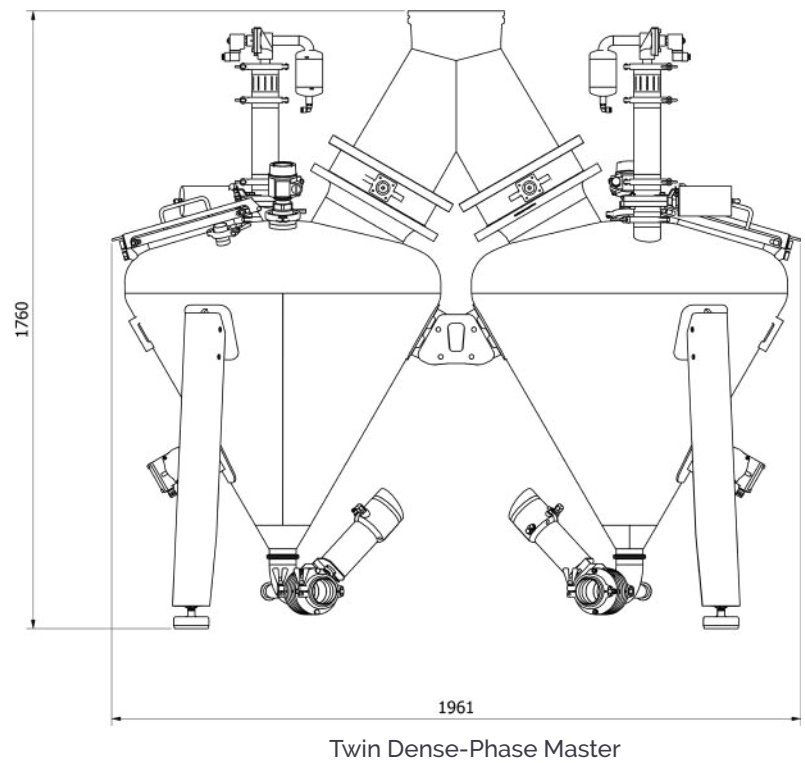
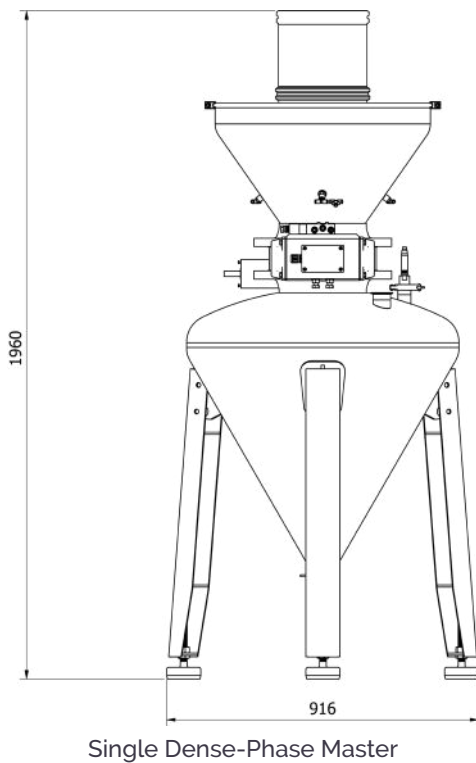
- **Low energy consumption/high efficiency**
- **Fast and easy installation**
- **Low service cost – few wear parts**
- **Hygienic design in application with EHEDG**
- **Customisable design according to capacity and product**



The system is manufactured according to the EN 1935/2004 and the pressure tank according to (PED) 2014/68/EU.

- **High conveys capacities over long distances to several receivers**
- **Low conveying velocity (1-10 m/s)**
- **Operational pressure (<7 bar typical 1-3 bar)**
- **Efficient and gentle handling of abrasive and fragile material**

## Technical data



### Connections

Supply of dry compressed air according to the specifications in the actual quoted system (typical, up to 7 bar and from 50 to 200 m<sup>3</sup>/h hour, depending on the capacity and the distance).

Power supply: 3x400 VAC, 50 Hz + PE

## Equipment

### Standard equipment

- Pre-hopper with level indicator, fluidising and filter
- Sending pressure vessel with level sensor, valves and injector
- Pneumatic control cabinet
- Regulation valves
- Flowmeters
- Pressure sensors
- Safety valves and contra valves to control the airflow for the product conveying
- Moveable control cabinet

### Optional equipment

- Twin system, with two sending vessels to provide continuous conveying and lower installation height
- PLC system for control of the system
- Air injectors to fluidise the product to reduce friction
- Line boosters to assist during the pipeline
- Pulsed air supply to break up the product into plugs in the pipeline
- Inline product sampler
- Magnet and metal detection
- Weighing system for recording the sending capacity to the dedicated receiver
- Pipeline and 2-way valves