



Product Range



Conveying station for liquids containing solids / high consistencies

Type: SDF 80

This flap-controlled compressed-air diaphragm pump type SDF 80 is a compact conveying station to handle especially high-viscosity substances and mixtures of materials with a high rate of solids.



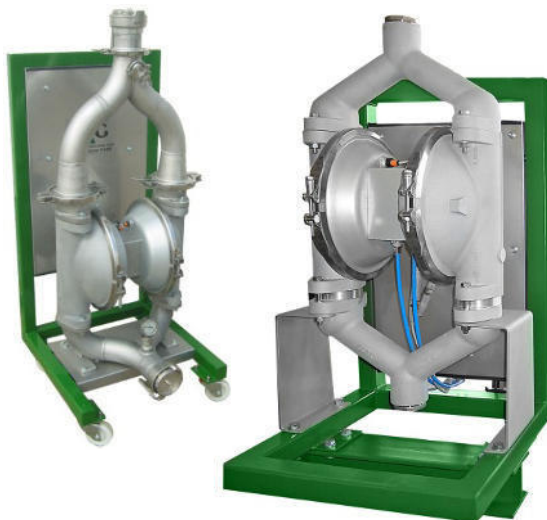
The significant characteristics of the station are:

- ▶ Conveying high-viscosity substances up to 100,000 mPas and high rate of solids
- ▶ Self-priming (underpressure up to 0.7 bar) and safe to run dry
- ▶ Conveying pressure up to 3.5 bar
- ▶ Conveying capacity up to 4 m³/h
- ▶ Variable adjustment of the plant according to the properties of the conveyed material
- ▶ Integration of the plant in extended technological workflows
- ▶ Cleaning programme to wash the plant

Compressed-air-diaphragm pump for viscous materials and powders

Type: SDF / SDP 80

This compact compressed-air-diaphragm pump type: SDF/SDP 80 is designed and manufactured especially for the conveying of several high-viscosity substances and mixtures of materials with a high rate of solids, as well as powders and granulate.



The significant characteristics of the station are:

- ▶ Compact and robust conveying system
- ▶ Gentle conveying of shear-sensitive and abrasive materials
- ▶ Self-priming and safe to run dry
- ▶ Conveying pressure up to 6,0 bar
- ▶ Conveying of high-viscosity substances with a high rate of solids
- ▶ Conveying of powders (bulk density up to 0,5 kg/l)
- ▶ Conveying of granulates (lightweight substances)

Dosing unit for additive

Type: DS-F / 60-200 / 4-120

This compact dosing unit is designed and manufactured especially for the volumetric dosing of viscous additives and aggressive substances.

The plant conception and the several specific equipments are created and carried out according to the especial requirements and tailor made the customer specific job definitions.

The significant characteristics of the dosing unit are:

- ▶ Volumetric dosing
- ▶ Discharge pressure: up to 10 bar
- ▶ Variable dosing range: 1 : 800(1000)
- ▶ High dosing accuracy: 0.5% – 1.0%
- ▶ Lowly pulsation



Mobile dosing plant for solid containing dispersions

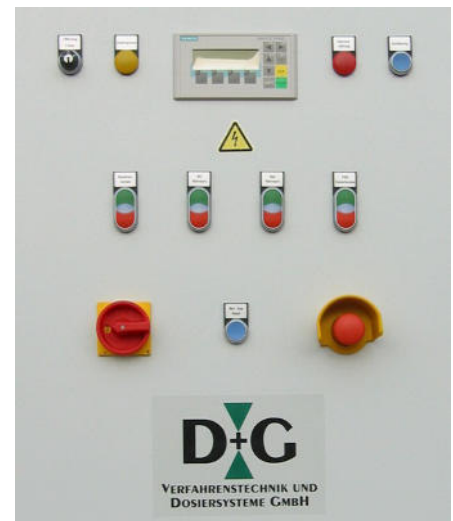
Type: DS-F / R 100

This compact dosing plant is designed and installed especially for the flexible dosing of liquid, viscous dispersions and suspensions with high solids content (up to 60 % solids content) from a hopper or a changeover container at alternating sites.

All procedural, metrological and control components are assembled on the compact mobile receiving frame of the dosing station.

The significant characteristics of the dosing plant are:

- ▶ Gravimetric dosing
- ▶ Variable dosing range: 2.0 – 120 l/h
- ▶ Dosing accuracy: 0.5 – 1.0 %
- ▶ Delivery pressure: up to 40 bar
- ▶ Volume tank: 100 - 250 l
- ▶ Simple handling over operator panel



IBC emptying and dosing plant for solid containing dispersions

Type: DS-F / R / 2 x IBC 1000

This compact dosing plant is designed and installed especially for emptying and dosing of liquid, viscous dispersions and suspensions with high solids content (up to 60 % solids content) from a changeover container. All procedural, metrological and control components are assembled on the compact mobile receiving frame of the dosing station.

The significant characteristics of the dosing plant are:

- ▶ Gravimetric dosing
- ▶ Variable dosing range: 2.5 – 60 l/h
- ▶ Dosing accuracy: 0.5 – 1.0 %
- ▶ Connect several (up to 6 parts) dosing pumps with different dosing range
- ▶ Delivery pressure: up to 40 bar
- ▶ Simple handling over operator panel



Barrel emptying and dosing system for paste like products

Type: DS-F / 2 x 100 / 5 - 50

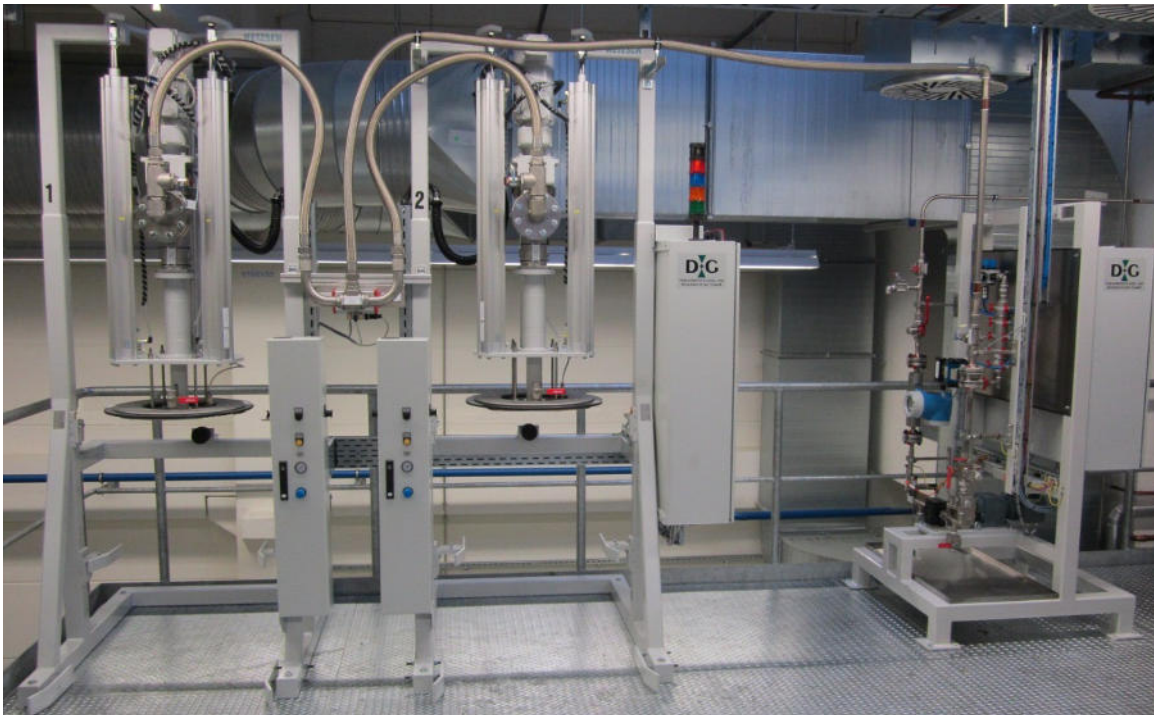
This dosing barrel emptying and dosing system is designed and installed especially for the dosing of paste like products with high solids content (up to 60 % solids content) from a barrel or a drum at extruders.

The progressing cavity pump of the barrel emptying system conveys the product from the drum to the extruder and generates a constant pressure on the infeed of the metering pump.



The significant characteristics of the dosing system are:

- ▶ Gravimetric dosing
- ▶ Variable dosing range: 5.0 – 50 l/h
- ▶ Dosing accuracy: 0.5 – 1.0 %
- ▶ Discharge pressure metering pump: up to 100 bar
- ▶ Discharge pressure progressing cavity pump: up to 16 bar
- ▶ Container size: 30 - 200 l
- ▶ Simple handling over operator panel



barrel emptying for 2 barrels

dosing station

Dosing plant for liquid resin from a storage tank

Type: DS / F / 26000

This emptying and dosing plant is designed and installed especially for the automatic dosing of liquid (viscous), melted resin from a central storage tank to different mixing hoppers at several sites. All procedural, metrological and control components are assembled on the compact, receiving frame with weatherproof housing of the dosing station. All components which are in contact with the product are electrically heated and protected against loss of heat.



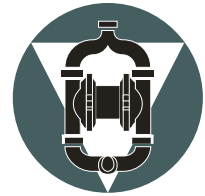
The significant characteristics of the dosing plant are:

- ▶ Volumetric dosing
- ▶ Variable dosing range: 50 – 100 l/min
- ▶ Dosing accuracy: 0.5 – 1.0 %
- ▶ Temperature of product: up to 200°C
- ▶ Inertization with nitrogen
- ▶ Simple handling over operator panel





DASAG powder pump Type SD characteristics and operating principle



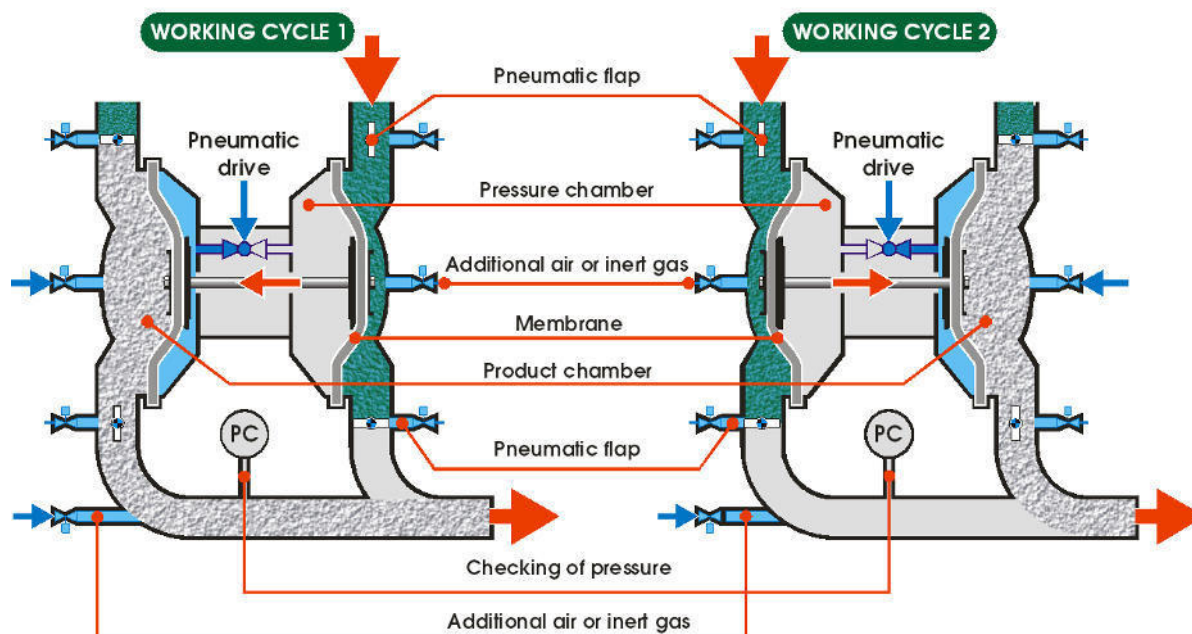
The DASAG powder pump with its own functionality and the resulting advantages is used in handling and processes with powdered compounds. Whether as a mobile compact unit or conveyor station in combination with container scales, container emptying stations and suction amplifier - the powder pump become the heart of many processes in powder processing industries.

The significant characteristics of the pump are:

- ▶ naturally aspirated via short suction line with light powders
- ▶ support good feeder with suction support from the support unit
- ▶ conveying by displacement with low additional air in the flow rate
- ▶ gentle transport due to low flow speed
- ▶ low pressure ratios and low conveying air portion require a relatively small dust removal system

On the container of the powder pump is a flexible docking system installed with a spring loaded clamping frame. It can be adapted to the parent container spouts. In the mobile version of the compact unit it is possible to drive and to convey from several containers such as silos, bunkers etc. by relatively simple handling

The working principle of the DASAG powder pump:



BigBag-metering station with powder pump (DASAG)



The plant consists of the following essential parts and functional groups:

- ▶ Load lifting cross with docking connection and filter bag
- ▶ Big bag receiving frame with integrated guide sled
- ▶ Receiving table for big bag
- ▶ Receiving construction for the docking system and the powder pump, altogether designed as a weighing frame
- ▶ Hand-operated on-docking system with passage adapter to the powder pump
- ▶ DASAG Powder pump with weighing compensator after the pressure spout
- ▶ Control system with SIWAREX module and a SPS S7-300 with OP3 panel to control all functions of the plant.

Objectives:

- ▶ Steady metering
- ▶ Dust-free handling within a closed system
- ▶ Adjustable flow volume and flow velocity
- ▶ Partly emptying of the Big bags
- ▶ Possibility to feed back the excessive material into the big bag
- ▶ Flexible, autarkic concept of design

Powder pump for additives

Typ: SDP 40

This compact pneumatic dosing and conveying system equipped with a compressed-air-diaphragm pump (size 40) is designed and manufactured especially for the dosing of several fine-grained materials. The charging / weighing of the materials are carried out in a weighing hopper. The conveying flow (mass flow) of the compressed-air-diaphragm pump is variable adjustable. The product are conveyed / dosed with this system to destinations with over pressure inside.

Application:

- ▶ Powder
- ▶ Fine grained products / bulk material
- ▶ Powdered additives
- ▶ Chemical products

Performance:

- ▶ Voltage: 230 V
- ▶ Compressed air for drive:
up to 6,0 bar

Features:

- ▶ Compact dosing and conveying system
- ▶ Volume storage hopper up to 100 l
- ▶ Balance (3 – 300 kg)
- ▶ Pneumatic conveying system
- ▶ Conveying flow / mass flow adjustable
- ▶ Conveying to destinations with over pressure inside
- ▶ Simple handling over operator panel



Flexible filling unit for bigbags, barrels, cartons and buckets

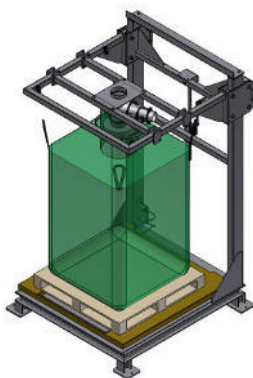
Type: AS-S / V / BB-F-K-E

This flexible filling plant is designed and manufactured for the dosing free flow bulk materials and granulates to bigbags, barrels, paperboard containers and buckets. On the outlet of the metering vibratory feeder a special adapter is mounted, on which the current connectors for filling to the different packages can be assemble easily.



The significant characteristics of the unit are:

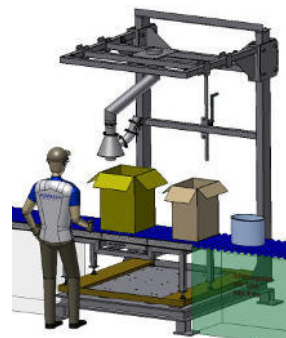
- ▶ Gravimetric dosing
- ▶ Dust-free filling operation
- ▶ Filling in several sizes and kinds of packages
- ▶ Vibrating table for better material allocation in the bigbag
- ▶ Capacity: 30 – 100 kg/min
- ▶ Weighing system 1: 600/1200 kg
- ▶ Weighing system 2: 30/60 kg



filling bigbag



filling barrels



filling cartons and buckets

Filling unit and palletisation unit for moulds

Type: AS-F / X / P 25-100

This filling plant is designed and manufactured for the dosing of viscous and abrasive materials to moulds.

The abrasive product (with steel fibres) is filled in moulds with metering pumps (screw pumps) with servodrive and without of air inclusions.

On the outlet of the metering pump is mounted a special flexible adapter (slender spout) with a pneumatic closing devices, by wath is avoided the delaydrop of the product.

After the filling operation the moulds are palletise on plates automatically.

Application:

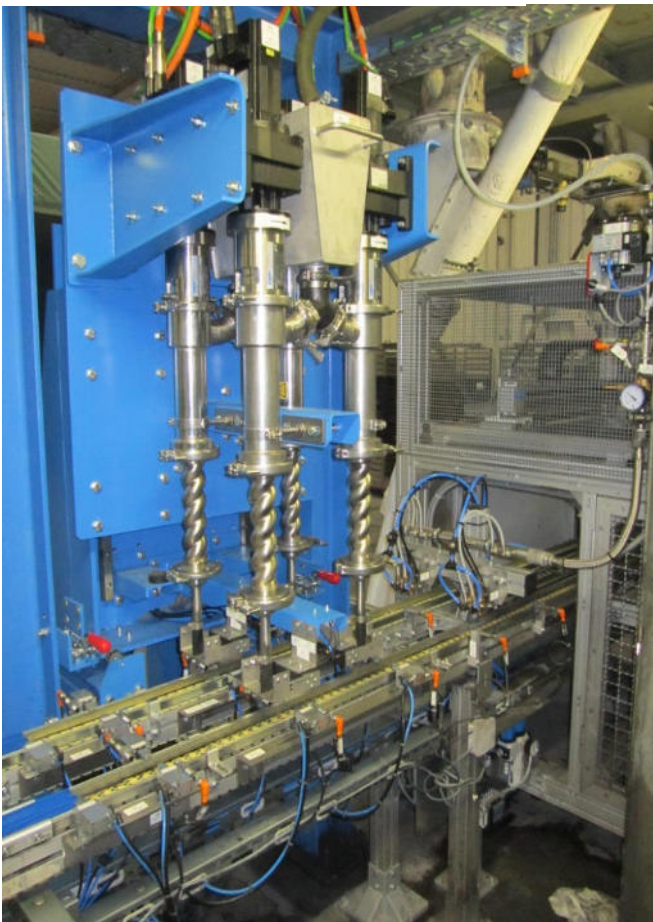
- ▶ Like paste and abrasive materials
- ▶ Liquids containing solids
- ▶ Additives
- ▶ Chemical products

Performance:

- ▶ Voltage: 230 / 400 VAC
- ▶ Drive power: 1,5 – 3,0 kW
- ▶ Compressed air: up to 6,0 bar

Feature :

- ▶ Volumetric dosing
- ▶ Filling process free from air
- ▶ Dosing accuracy: 1 – 5 % (product-dependent)
- ▶ Filling capacity: 3 fillings/min
- ▶ Dosing range: 25 – 100 ml
- ▶ Automatic filling and palletising process



filling unit



palletisation

Coordinate dosing and filling unit

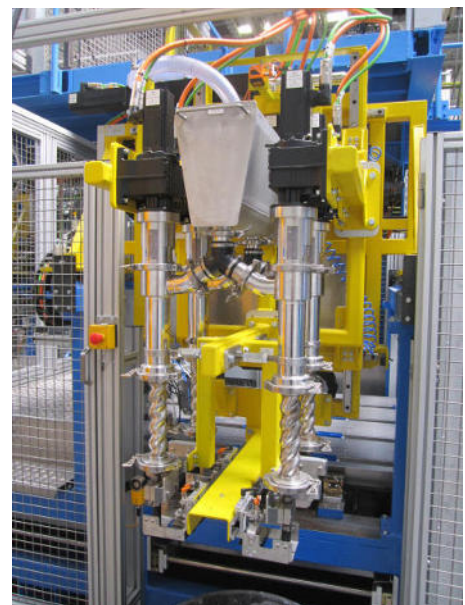
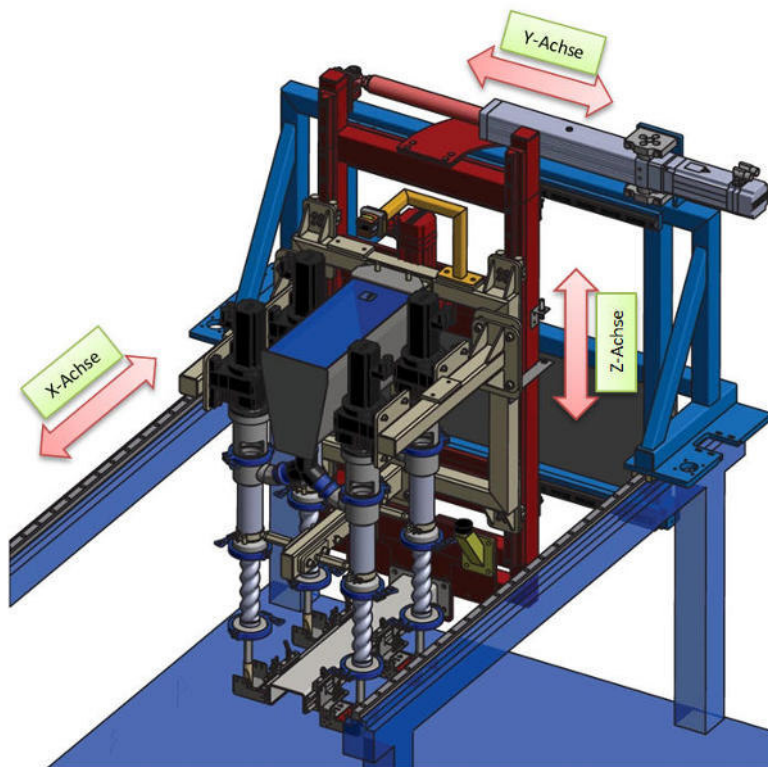
Typ: AS-F / X / P 25- 100 / 3D

This coordinate dosing and filling plant is designed and manufactured for the dosing of viscous and abrasive materials to moulds and bins. The viscous product is volumetric dosed / filled in moulds or bins with metering pumps (e.g. screw pumps) with servodrive. During the dosing process the metering pump (pumps) including dosing valve is moved on 3 levels (X-axis; Y-axis; Z-axis), in order to reach a quick and uniform product-propagation of the viscous products into the moulds / bins.

After the dosing / filling operation the moulds / bins are palletised automatically.

Feature:

- ▶ Volumetric dosing
- ▶ Filling process free from air
- ▶ Dosing accuracy: 1 – 5 %
- ▶ (product-dependent)
- ▶ Dosing range: 25 – 10,000 ml
- ▶ Automatic filling and palletising proces



Application:

- ▶ Like paste and abrasive materials
- ▶ Adhesives
- ▶ Pottants; sealing compounds
- ▶ Additives
- ▶ Chemical products

Performance:

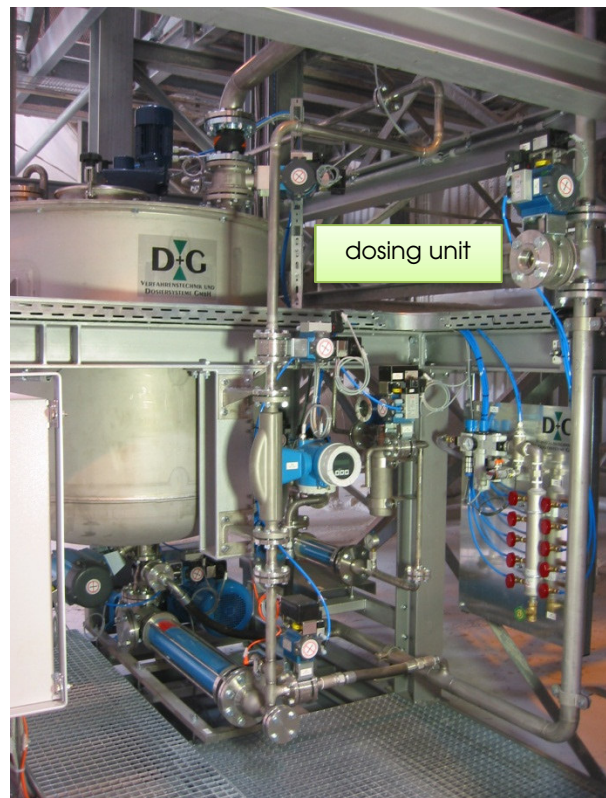
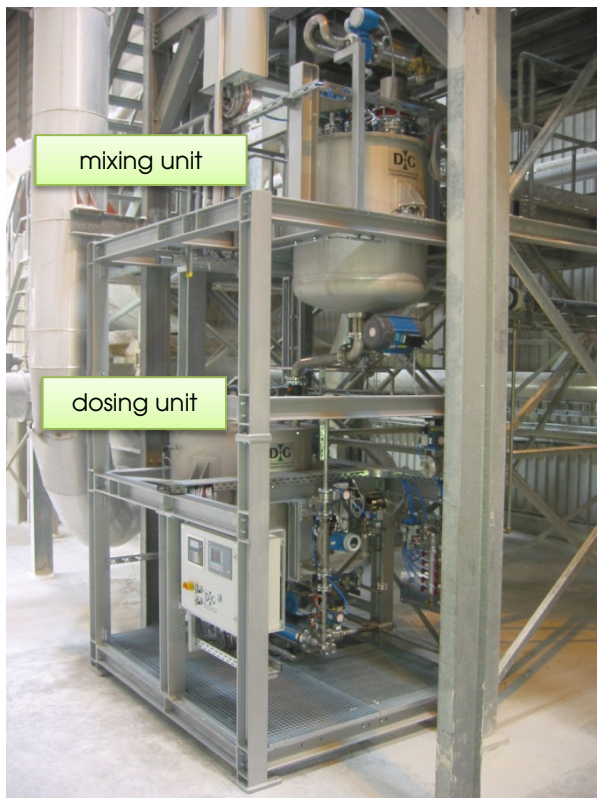
- ▶ Voltage: 230 / 400 VAC
- ▶ Drive power: 0.5 – 5.0 kW
- ▶ Compressed air: up to 6.0 bar

Dosing and mixing plant for suspensions / dispersions

Type: DSM-FS / 700-1200

This compact dosing and mixing plant is designed and installed for the automatic production of different solid containing suspensions und dispersions.

The plant is built modular and consists of the mixing unit and the dosing unit, which are assembled and connected together.



The significant characteristics of the plant are:

- ▶ Modular construction of the plant
- ▶ Fully automatic operating plant
- ▶ Communication with the superordinate control
- ▶ Production of different recipes
- ▶ Variable adjustable dosing quantities
- ▶ Continuous quality control

Continuous dosing and mixing plant with dynamic inline-mixer

Type: KMD-F / 5-1 / 6000

This compact dosing and mixing unit is developed and manufactured especially for the continuous production of several dispersion-adhesives.

The several raw/basic materials are dosed gravimetric oriented at the main flow from there raw dispersion.

The capacity and equipment for dosing and mixing can be designed and manufactured tailor made corresponding to the specifications and job definitions.



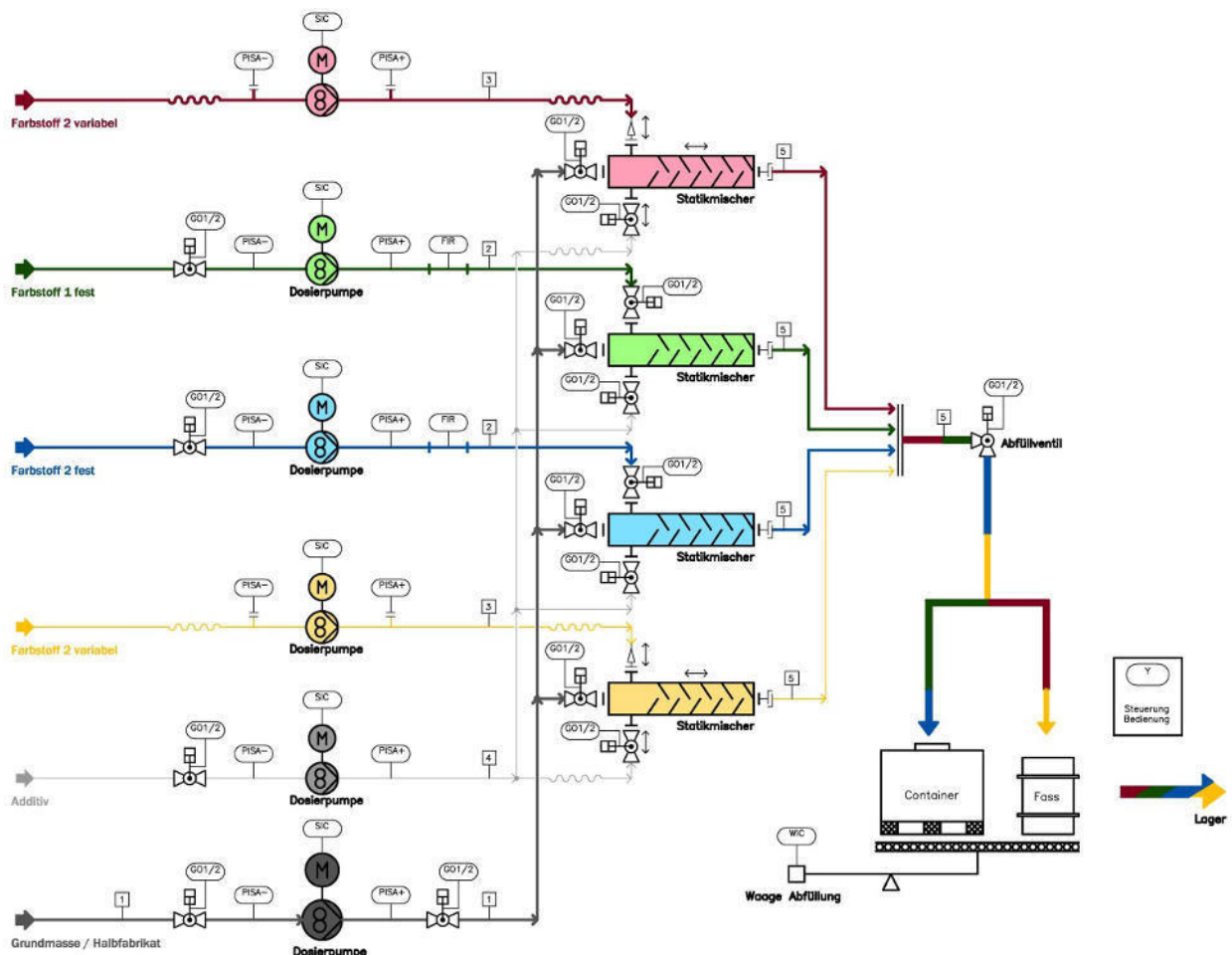
The significant characteristics of the plant are:

- ▶ Gravimetric dosing
- ▶ Pressure in the mixing head: 1.0 – 16 bar
- ▶ Flow rate: 600 – 6000 l/h
- ▶ Variable dosing range: 0.5 – 99.5 % (oriented at the main flow)
- ▶ Dosing accuracy: 0.5 – 1.0 %
- ▶ Connect several (up to 6 parts) dosing pumps with different dosing rate

Continuous dosing and mixing plant with static mixers

Type: KMS-F / 6-5 / 5000

This compact dosing and mixing unit is designed and manufactured especially for the continuous production of several high-viscosity coloured mixtures. The pasty pigment and the additives are dosed simultaneously volumetric oriented at the main flow from the raw pasty compound. The plant conception in particular the capacity and equipment for dosing and mixing can be designed and manufactured tailor made corresponding the specifications and the job definitions.



The significant characteristics of the plant are:

- Volumetric dosing
- Pressure in the static mixer: up to 100 bar
- Flow rate: 100 – 6000 l/h
- Variable dosing range: 0.5 – 99.5 % (oriented at the main flow)
- Dosing accuracy: 0.5 – 1.0 %
- Connect several (up to 6 parts) dosing pumps with different dosing rate

Mixing plant for vacuum degassing of viscous products

Typ: MB-F / WR-60

This mixing plant is designed and manufactured especially for the automatic vacuum degassing of abrasive and viscous products (special concrete with steel fibres).
With this plant, air inclusions that are generated during the production (mixing solid and liquid materials) in the batch mixer before are deleted from the viscous product



The significant characteristics of this plant are:

- ▶ Operation pressure: -1.0 up to +3.0 bar
- ▶ Easy disassembly of the devices for cleaning
- ▶ Automatic operation and continuous process monitoring
- ▶ Integration in superordinate control

Essential components:

- ▶ Mixing hopper with agitator
- ▶ Pump for emptying
- ▶ Vacuum degassing (vacuum pump, pressure control valve)
- ▶ Cleaning for hopper (nozzles)



Continuous dosing and mixing plant with inline-homogenizer

Typ: KMD-F / 2-1 / 300

This compact dosing and mixing unit is developed and manufactured especially for the continuous production of several emulsions and dispersions.

The several raw materials are dosed volumetric oriented at the main flow (basic product, semi.finished products). The capacity and equipment for dosing and mixing can be designed and manufactured tailor made corresponding to the specifications and procedural job definitions.

Application:

- ▶ Dispersions, emulsions, suspensions
- ▶ Adhesives
- ▶ Surface coatings
- ▶ Different mixtures

Performance:

- ▶ Voltage: 230 / 400 VAC
- ▶ Drive power: 3 – 15 kW
- ▶ Compressed air: up to 6 bar

Feature:

- ▶ Volumetric dosing
- ▶ Shear rate variable adjustable
- ▶ Flow rate: 200 – 2000 l/h
- ▶ Variable dosing range: 0.5 – 99.5% (oriented at the main flow)
- ▶ Dosing accuracy: 1.0%



IBC Dosier- und Mischanlage

Typ: DMU – F - / A - 1000

This compact IBC dosing and mixing unit is developed and manufactured especially for the batch production of several product mixtures.

The several raw materials (activator, binder) are dosed gravimetric oriented at the main product (basic product, semi-finished products) in the IBC on the balance of the mixing unit. The construction and equipment for dosing and mixing can be designed and manufactured tailor made corresponding to the specifications and procedural job definitions.

Feature:

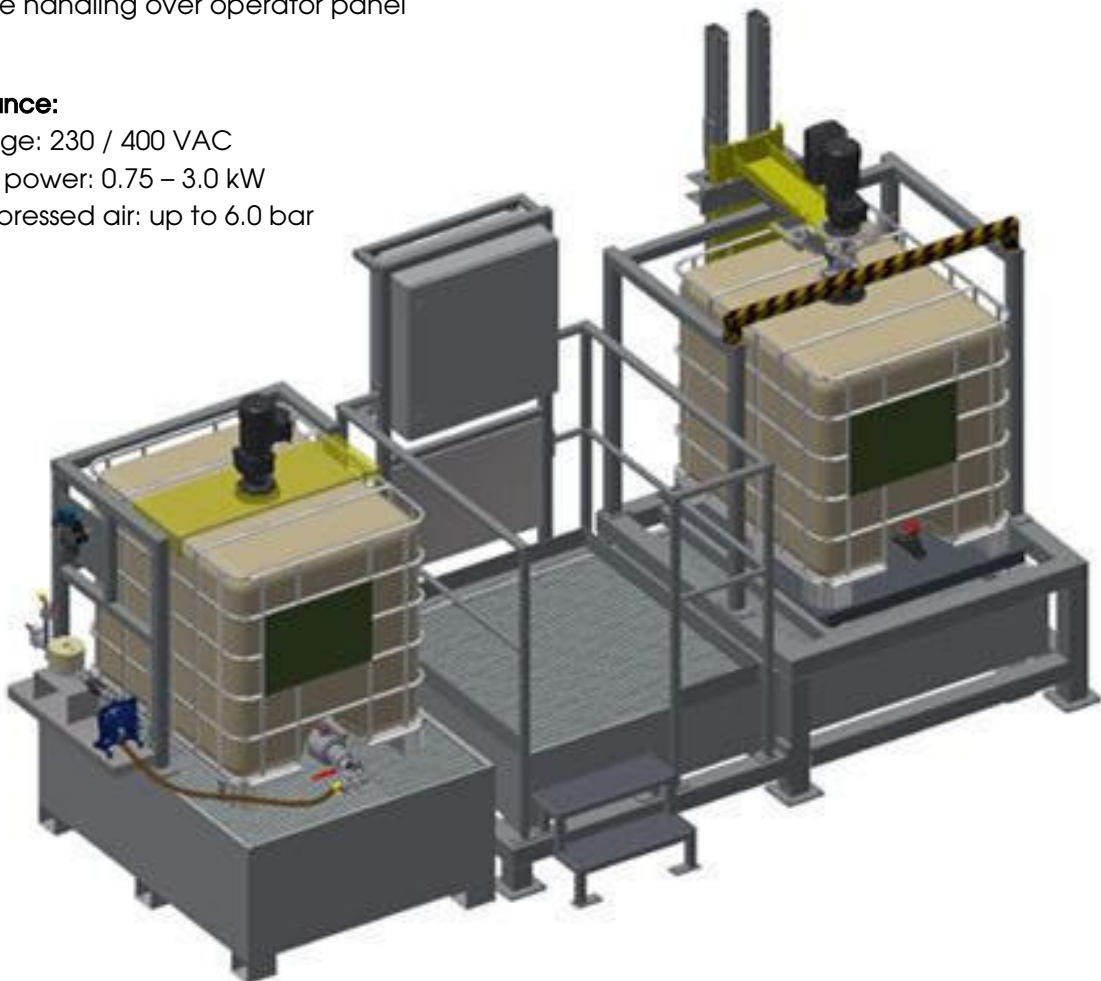
- ▶ Gravimetric dosing
- ▶ Dosing accuracy: 1.0%
- ▶ Dosing several raw materials
- ▶ Automatic dosing and mixing process
- ▶ Simple handling over operator panel

Anwendungen:

- ▶ Dispersions, suspensions
- ▶ Adhesives
- ▶ Surface coatings
- ▶ Different mixtures

Performance:

- ▶ Voltage: 230 / 400 VAC
- ▶ Drive power: 0.75 – 3.0 kW
- ▶ Compressed air: up to 6.0 bar



Supply unit for nozzle assembly

Type: DS-F / 120-40 / 0.8-9.0

This supply unit for nozzle assembly is designed and installed especially for the continuous manufacturing of aqueous solution and the dosing of this watery solution to two rotation-nozzles-systems on the converting machine.

The supply unit for nozzle assembly consists of the dosing unit, the backflow conveying unit and the control cabinet with control system.

Feature:

- ▶ Automatic operation and continuous process monitoring
- ▶ Integration in superordinate control
- ▶ Variable dosing range: 800 – 9000 ml/min
- ▶ Gravimetric and volumetric dosing
- ▶ Dosing accuracy: 1.0 – 2.0 %



Dosing unit:

- Storage hopper for liquid products (additive) and mixtures (aqueous solution)
- Water dosing (flow control valve, flowmeter)
- Additive dosing (diaphragm metering pump)
- Dosing of the watery solution (gear metering pump; flowmeter)
- Plate heat exchanger for cooling backflow



Backflow conveying unit:

- Collecting hopper with solid-separation
- Measuring backflow (flowmeter)
- Conveying backflow / watery solution (gear metering pump)

Screening plant with metal separator for granular products

Type: SAF / 3-4000

This screening plant is designed and manufactured especially for the screening of crystalline bulk materials. The bucket elevator conveys the product from Bigbag emptying and dosing unit to the screening machine. The screening machine sieves the product in 3 fractions (oversize, undersize, good-fraction). Between the outlet of the screening machine and the storage hopper of the filling unit a metal separator is installed.



Feature:

- ▶ Exchangeable screen frames
- ▶ Automatic screen cleaning
- ▶ Mesh size: 0.2 – 8.0 mm
- ▶ Flow rate: 1000 – 5000 kg/h
- ▶ Combination with metal separator / magnetic separator

Filter unit for liquids

Type: FA-D / B-2 / P

This flexible compact filter system is designed and manufactured especially for the continuous filtration of liquids at alternating sites.

The pump of the filter unit conveys the fluid material from the mixing tank or the storage tank across the filling machine in different packages (buckets, barrels, containers).



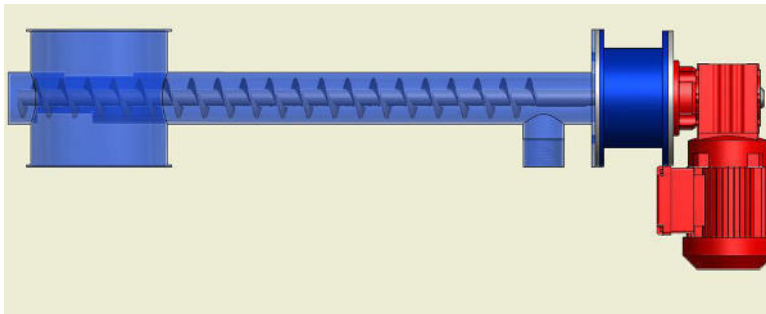
Feature:

- ▶ Single filter unit or double filter unit
- ▶ Several sizes and types of filters
- ▶ Mesh size: 5.0 – 500 μm
- ▶ Flow rate: 600 – 12000 l/h
- ▶ Optimal emptying of residue with compressed-air-diaphragm pump
- ▶ Continuous process control
- ▶ Simple handling over operator panel

Sampling systems for powder, bulk materials and granulates

Sampler:

- ▶ Mounting in gutter-pipe line and hoppers according to the customer-supplied local situations
- ▶ adapted for dry free flowing powders, bulk materials and granulates



Sample collector and distributor:

- ▶ Samples are collected in customized sample cup



Control:

- ▶ flexible regulation of the time interval of the sampling and time intervals between the sampling cycles



Double drum rolling mixer type: FRM / 2-200 / ATEX

This compact double drum rolling mixer is designed and manufactured especially as a customer specific unit for producing homogenous mixtures (resin-dissolutions) in 2 drums. The drums are loaded in the drum rolling mixer with a mechanical tipping with integrated lifting devices and are unloaded with the same equipment after the mixing and dissolving process.



Die wesentlichen Merkmale des Fassrollmischers:

- ▶ Produce homogenous mixtures, dissolves and emulsions
- ▶ Compact and robust unit
- ▶ Drum size up to 200l (300 kg)
- ▶ Construction according to the drum handling system
- ▶ Variable adjustment of the speed and operating time

Dynamic mixing units

This compact dynamic inline mixing units are developed and manufactured especially for the continuous production of highly viscous products.

The inline mixers are carried out corresponding to the specifications and procedural job definitions (quantity of raw materials, necessary shear rate, flow rate, drive power).

Feature:

- ▶ Flow rate: 300 – 6.000 l/h
- ▶ Variable range of rotation speed
- ▶ Shear rate up to 1.000.000 l/min
- ▶ Good self cleaning
- ▶ Easy disassembling

Application:

- ▶ Sealing compounds
- ▶ Adhesives
- ▶ Surface coatings
- ▶ Different mixtures

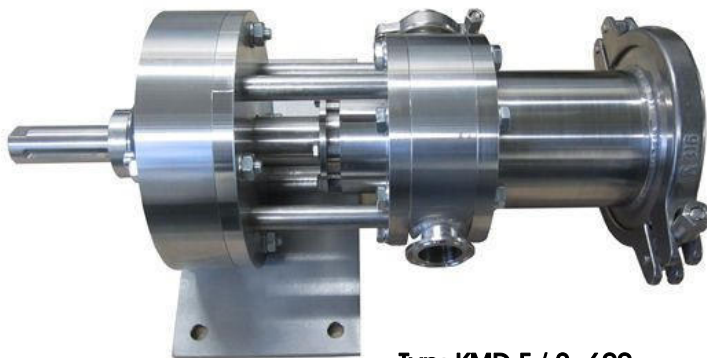
Performance:

- ▶ Voltage: 230 / 400 VAC
- ▶ Drive power: 3.0 – 15 kW
- ▶ System pressure: up to 16 bar



Typ: KMD-F / 3- 6000

- ▶ Flow rate: 50 – 100 l/min
- ▶ Volume mixer: approx. 3.500 ml



Typ: KMD-F / 2- 600

- ▶ Flow rate: 5 – 10 l/min
- ▶ Volume mixer: approx. 750

Push floor discharge system

The push floor dosing system are developed and manufactured especially for the continuous and apportion discharging of paste-like, solids-bearing and bad flowable products.

The material is dosed over the discharge crack on the complete discharge width according to the target quantity on the defined surface (belt width).

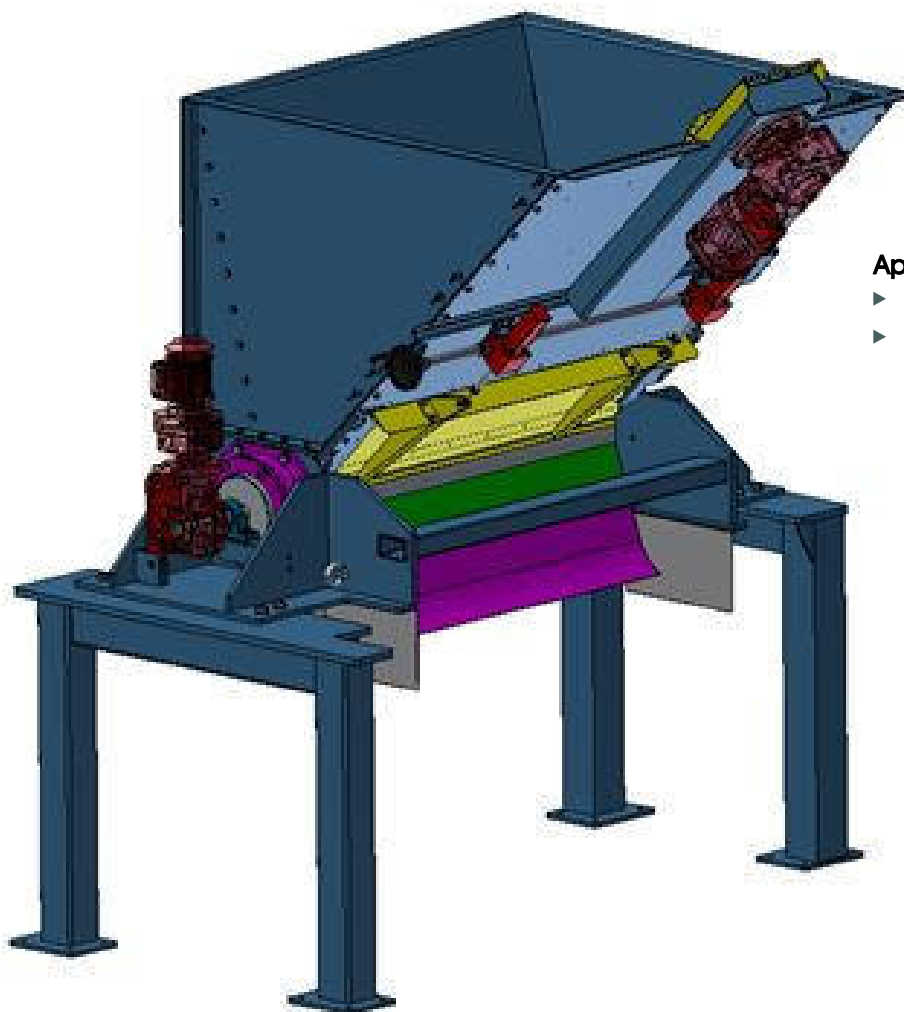
The discharge quantity / dosing capacity and the flow behaviour of the product depend on the gap width, the rotation speed of the discharge roller as well as the amplitude swing und the frequency of the push floor.

Performance:

- ▶ Voltage: 400 VAC
- ▶ Drive power discharge roller: 0.25 – 15 kW
- ▶ Drive power push floor: 3,0 – 15 kW

Feature:

- ▶ Flow rate: up to 6.000 kg/h
- ▶ Discharge width: up to 1.500 mm
- ▶ Variable discharge system
- ▶ Automatic adjustment of gap width
- ▶ Robust design
- ▶ Safe and reliable function



Application:

- ▶ Solids-bearing products
- ▶ Abrasive products

Dosing valve, pressure actuated

These pneumatic operated valves are developed and manufactured especially for the dosing of liquid and highly viscous products to different continuous mixing units.

The dosing valve are opened by compressed air and closed by spring force.

The locking piece is directly located on the outlet, so that the product is not able to outflow uncontrollably or blocking (strain hardening, crystallise) on the orifice outlet after the closing operation.

The design of the dosing valves are carried out corresponding to the specification, as well as the technological parameters (pressure, flow rate), product parameters (viscosity) and the constructional conditions (form/ shape, dimensions) on the mounting place (static mixer, dynamic inline-mixer, extruder).

Application:

- ▶ Adhesives, binder
- ▶ Pigment pasts
- ▶ Emulsifiers
- ▶ Reactive, solids-bearing products

Feature:

- ▶ Flow rate: 0.3 – 120 l/h
- ▶ System pressure: up to 160 bar
- ▶ Robust design
- ▶ Safe and reliable function
- ▶ Easy disassembling

Performance:

- ▶ Control voltage: 24 DVC / 230 VAC
- ▶ Control pressure: 6 – 8 bar



Dosing valve for for pigment in extruder



Dosing valve for adhesives in dynamic inline-mixer