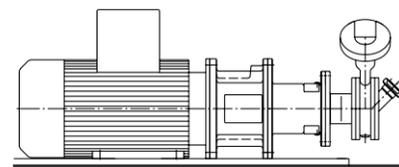


Dust and loss-free emptying of containers, feeding of powder, dosing and adding, wetting and dispersing to a completely agglomerate-free result – all processing steps in one machine – the **ystral** "Conti-TDS". By combining all the processing steps into one machine, enormous rationalisation potential is offered. Production time is minimised, partial processing steps are completely avoided, production cost is reduced to a minimum. The basic idea of the Conti-TDS technology is that not only the powder is wetted, but also dispersed into a liquid under vacuum. Agglomerates are avoided, better reactivity, higher efficiency of the raw material and higher product quality are the results.



Function:

The Conti-TDS system is based on the principle of an inline dispersing machine. A rotor-stator system transports and disperses liquid with high shear energy. The liquid that flows through the dispersing chamber builds up a high induction vacuum. This vacuum inducts powder without dust or

Process:

Typical installation is operation in recirculation, attached to a vessel. The machine may be attached to several vessels or may be placed on casters and installed to vessels in different working areas. It is easy to integrate the machine into existing processing systems. A continuous process may be

Conti-TDS

Powder inducting, wetting and dispersing



ystral
samples of applications

Food:
Salad sauces
Baby food
Milk drinks
Aromatics

Cosmetics:
Toothpaste
Shampoo
Natural cosmetics
Shaving foam

Pharmaceuticals:
Rub-in gels
Tablet coatings
Cough syrup
Gelatine solutions

Chemistry:
Artificial resin
Cleaning detergents
Fibres
Plant fertilisers
Foils

Paints/Lacquers:
Paints
Offset printing inks
Textile colours
Dispersion paints

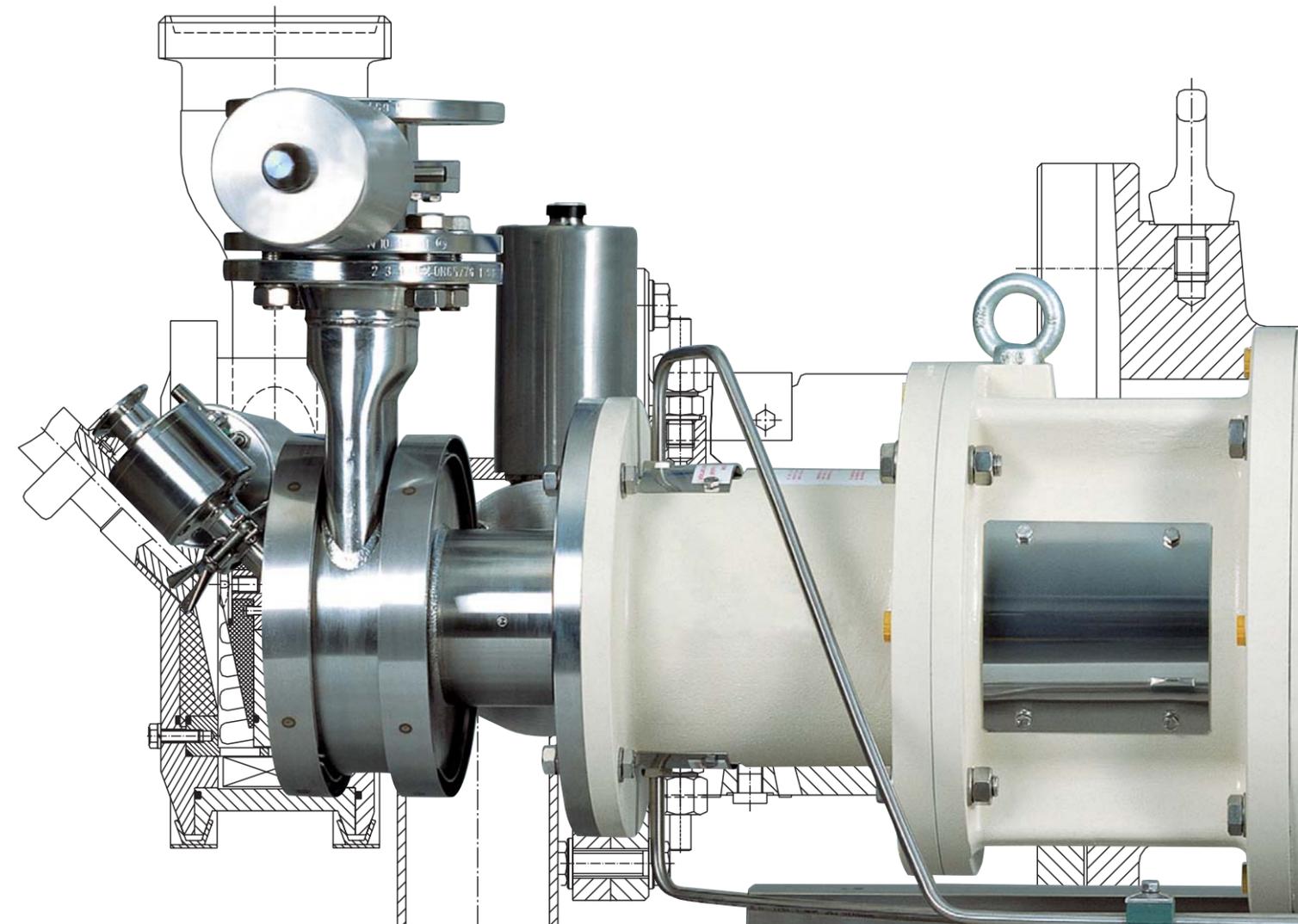
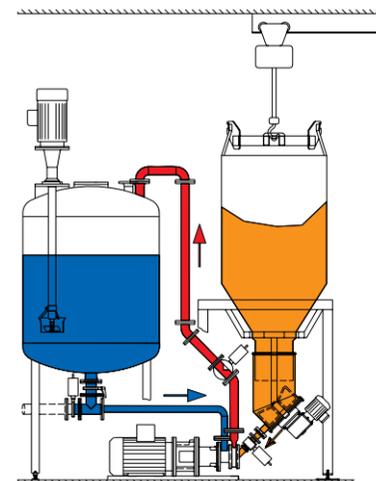


wastage, from any possible container directly into the liquid. Induction may be done directly from a paper sack, powder hopper, container, barrel, Big-Bag or silo. After powder induction, the machine may be used as an inline dispersing machine to circulate and further disperse the product.

realised by using two vessels working in flip-flop, a combination of batch and storage tank or as a min/max processing system. Several powders may be inducted and dosed in a given sequence; swelling and dispersing time can be adjusted. De-aeration is no problem. Product changes are easy to handle. Continuous inline process is possible as well with the same machine. For extremely high viscosity products such as offset printing inks, silicon sealants, knifing filler or glue, the machine is used in combination with a volumetric pump.

Principles:

The dispersing of the liquid causes an enormous enlargement of the liquid surface that is used for the wetting process. The vacuum causes an expansion of the air content in the powder to a multiple of the original. The distance in-between the powder particles are enlarged proportionally which facilitates penetration and increases the wetting capability of the liquid. Even difficult to wet powders, spontaneously swelling or sticky powders may be treated without any problem.



Technical data	
Power	5,5 – 200 kW
Voltage	230 / 400 / 500 V, 50 Hz, special voltages
Speed	1.500 / 3.000 min ⁻¹ , step-less up to 3.600 min ⁻¹ with frequency converter
Dispersing chamber	Stainless steel 1.4571/1.4404, special materials tools are exchangeable, fast clamping, type of seal and material depends on the application, CIP cleaning
Liquid flow rate	2,4 – 90 m ³ /h
Powder induction rate	up to 15 t/h
Maximum viscosity	2.000 – 200.000 mPas (depends on type and assignment of the machine)

Function principle Conti-TDS

