

DISSOLVING

MIXING

EMULSIFYING

HOMOGENIZING

SUSPENDING

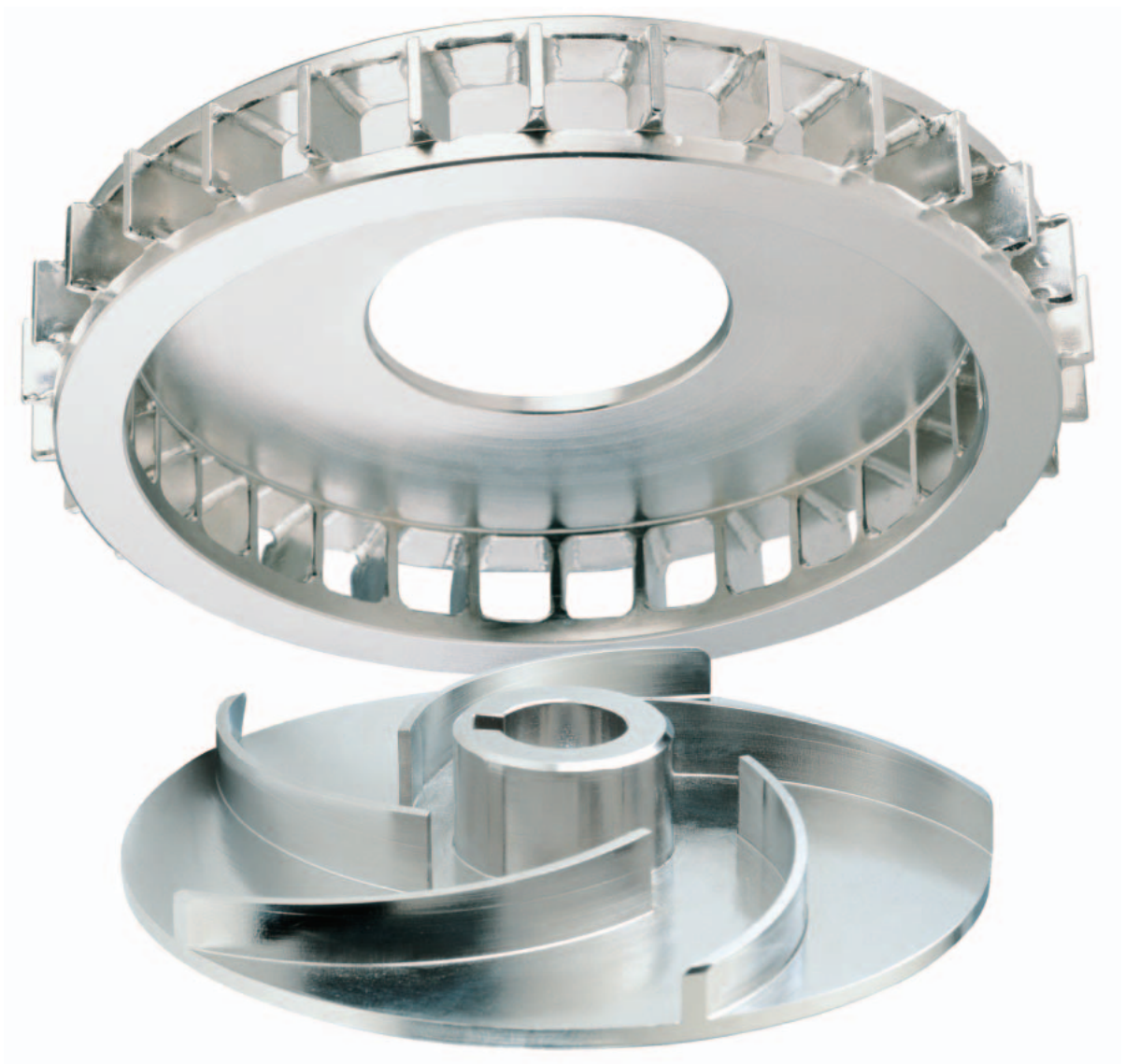
DISPERSING

GASSING

YTRON
PROCESS TECHNOLOGY

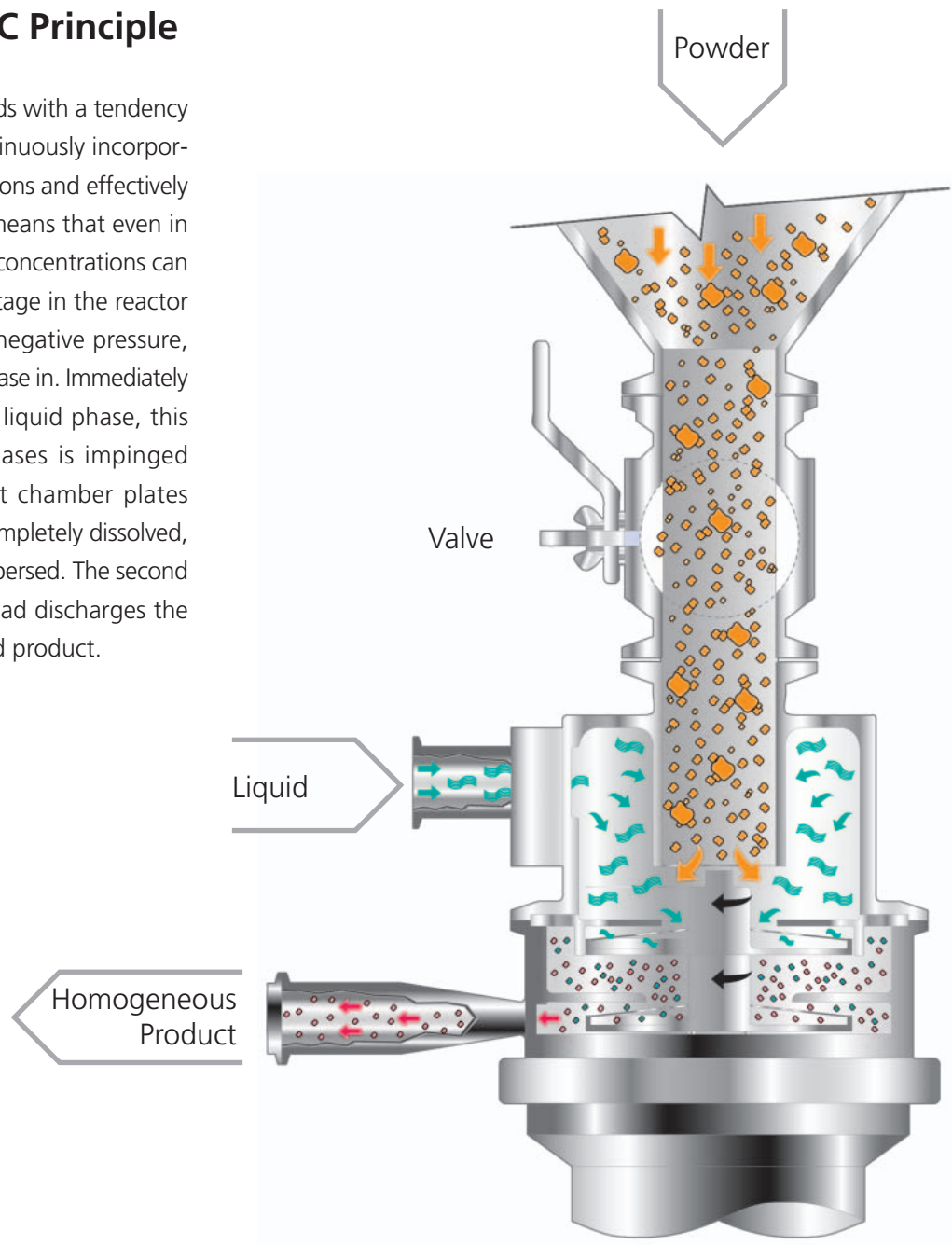


YTRON-XC



The YTRON-XC Principle

Powders and compounds with a tendency to form lumps are continuously incorporated in high concentrations and effectively dispersed inLine. This means that even in a single pass, very high concentrations can be achieved. The first stage in the reactor head creates a strong negative pressure, which sucks the solid phase in. Immediately after contact with the liquid phase, this premix of the two phases is impinged against the XC impact chamber plates where the powder is completely dissolved, de-agglomerated or dispersed. The second stage of the reactor head discharges the homogeneously wetted product.



Important Advantages of YTRON-XC

- Complete wetting out of even the most difficult to wet powders in a single pass
- Concentrations of up to 40 % are possible in a single pass
- No air entrainment other than the occluded air in the powder phase
- Batch time reduced to the minimum
- Higher product yield due to the intensive wetting of the powders
- High capacity at low energy consumption
- Significant savings due to intensive dispersing of the powders
- Low intensity mixing due to high impact frequency instead of high shear
- Feeding from BigBag or silo is also possible
- CIP and SIP options

YTRON-XC
manually fed with powders,
centrifugal liquid phase
feed pump installed



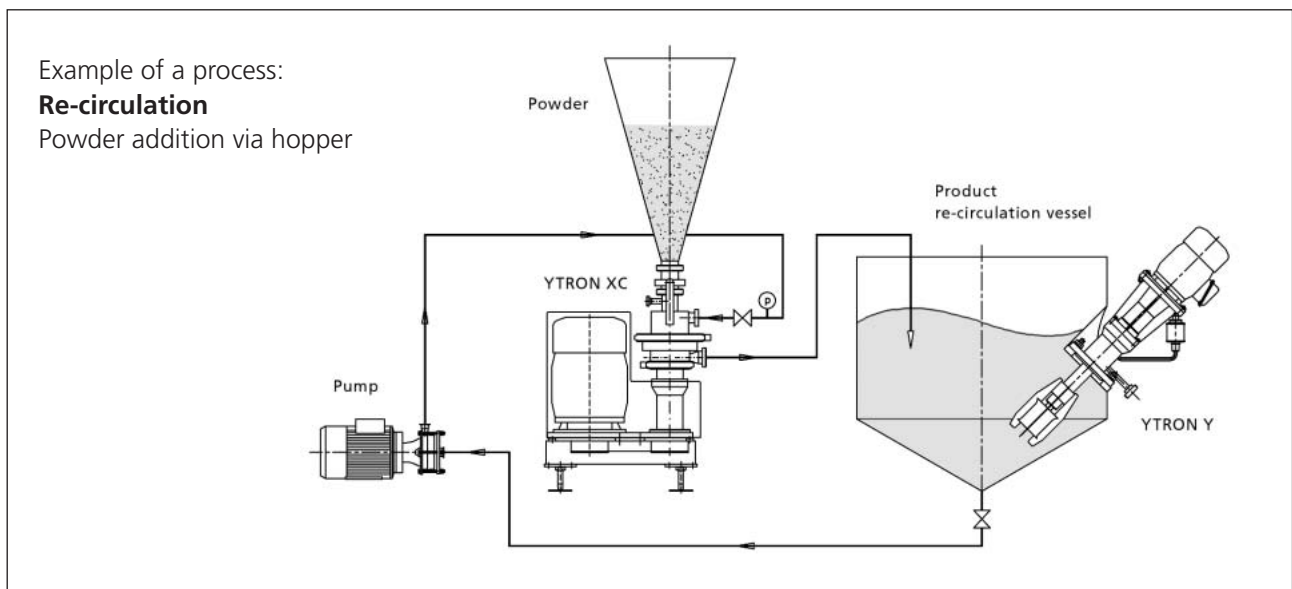
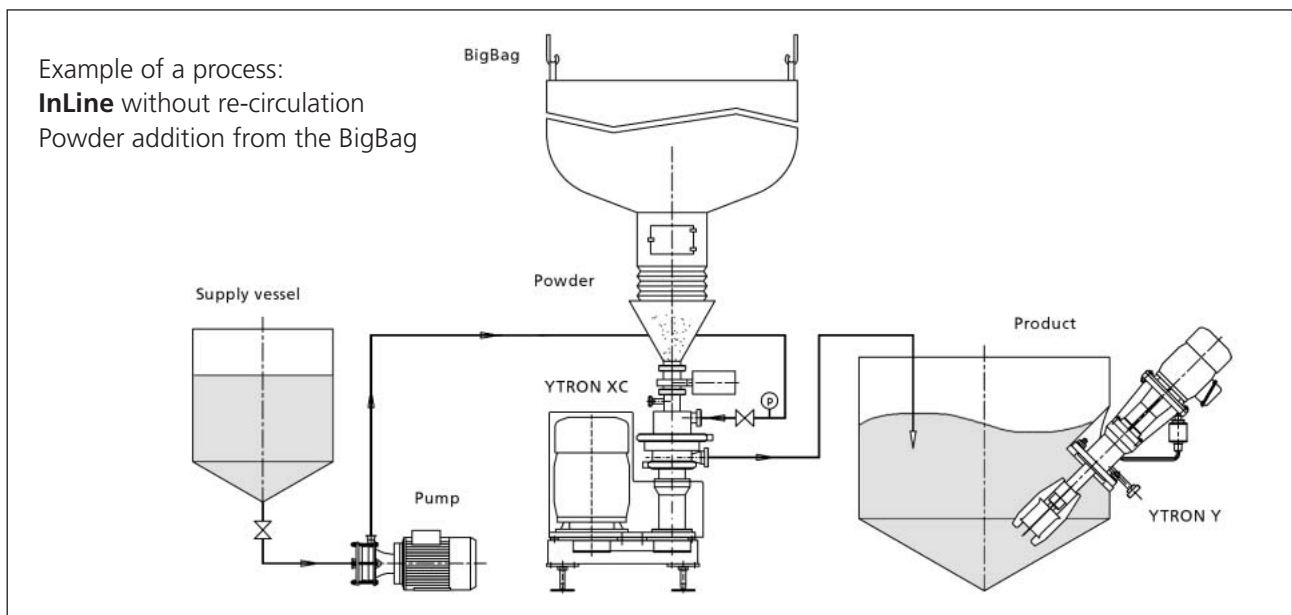
YTRON-XC with
bag-emptying station
Application: Production
of Concentrates prior to
Spray Drying

YTRON-XC - Typical Applications

- Baby Food
- Concentrates and addition of additives
- Enrichment with solids
- Fermentation broth
- Fruit drinks, Soft Drinks
- Ice cream base
- Production of liquid base for the confectionery industry
- Pudding base
- Yoghurt base

Typical Products

- Ca- and Na-Caseinate
- Cellulose based thickeners
- Cocoa Powder
- Egg powders
- Gelatin
- Gum Acacia
- Lactose
- Maltodextrin
- Methyl-cellulose types
- Milk powder
- Organic thickeners
- Pectin
- Silica
- Soy flour
- Soy protein
- Starch
- Sugar
- Tobacco powder
- ... and many more





YTRON-XC in use in the Pharmaceutical Industry



YTRON-XC with special hopper for connection to a powder feeding system
Application: Production of Baby Food

YTRON-XC
Application: White base production
in the Dairy Industry

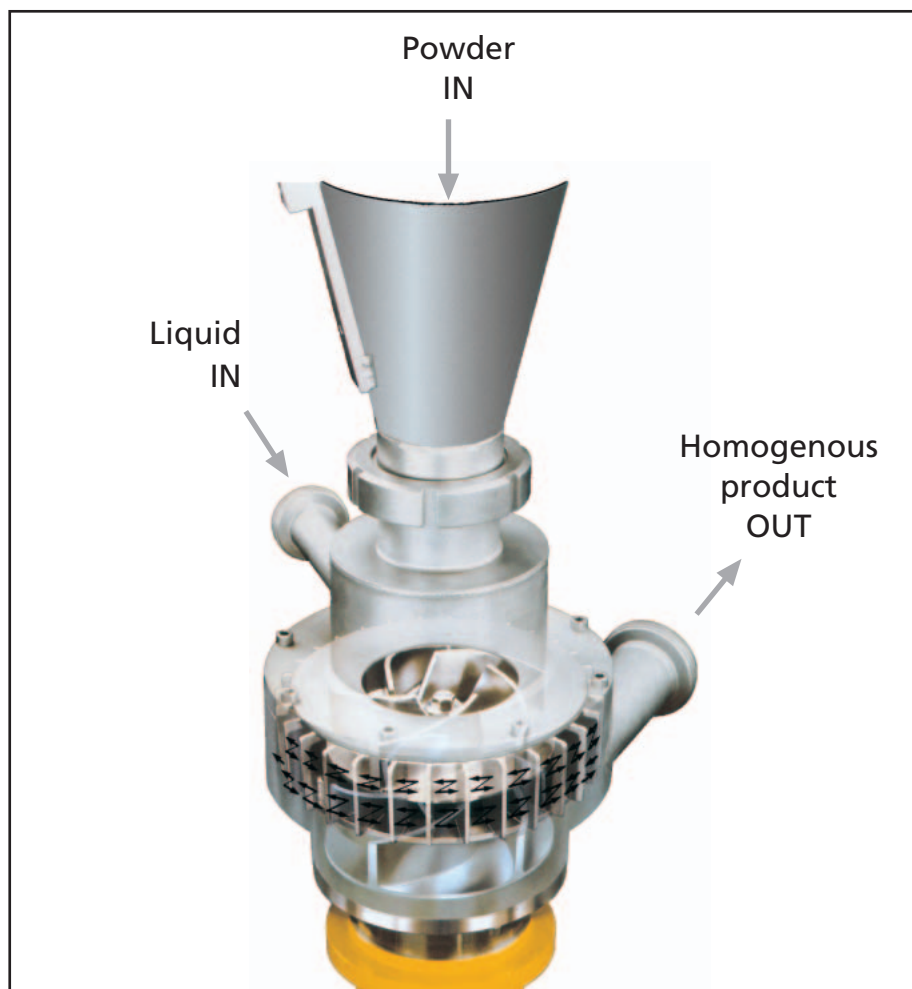


YTRON-XC

Model	YTRON-XC 1	YTRON-XC 3 / XC 215
Water/Liquid flow rate (l/h)	9,000 ... 16,000	26,000 ... 45,000
Powder capacity (kg/h) max.	4,000	11,000
RPM (1/min)	5,400	3,000
Drive power (kW)	5.50	15.0
Single acting mechanical seal	Yes	Option
Double acting mechanical seal	Option	Yes
Liquid inlet	DN 40	DN 50
Liquid outlet	DN 50	DN 80
Powder inlet	DN 50	DN 80
Standard dimensions approx. LxWxH (mm)	925x455x710*	1,020 x 770 x 1,090*

According to the application, special construction deviating from standard are available.

* mobile, without pump or powder hopper





The YTRON® range is not mass produced

YTRON® equipment and systems are carefully selected for your individual application. We therefore kindly ask you to provide as detailed as possible a description of your application containing for example:

- Components to be processed
- Viscosity at the beginning and at the end of the process
- The specific gravity (bulk density when adding powders)
- Overall dimensions and shape of the mixing vessel
- Minimum and maximum filling levels of products to be processed
- Working temperature
- Other details that may be relevant

The capacities indicated in this brochure are related to certain applications under standardised conditions. They are not necessarily valid for all products or processes.

The standard materials for the product contact parts are:

- Material 1.4301 / AISI 304
- Material 1.4571 / AISI 316 Ti
- Material 1.4435 und 1.4404 / AISI316 L

Special materials such as 1.4539, Hastelloy etc. are available on request

Fittings can be delivered various types such as
DIN 11851, DIN 11864, SMS, DS, RJT, Clamp, Flange etc.

We reserve the right to alter the design without previous notice in the interest of development.



YTRON Process Technology GmbH & Co. KG

Am Anger 25
D-83233 Bernau/Chiemsee

Tel. +49 (0)8051 / 9847 0
Fax +49 (0)8051 / 9847 0

e-mail: service@ytron.com
Internet: www.ytron.com