

Laboratory/Pilot Plant



Ystral

Application is the focus



Laboratory Series X10



Laboratory/Pilot Plant Series X40



Drives



Drive X10/25
 Voltage: 230 V 50/60 Hz
 115 V 60 Hz
 Power: 500 W
 Speed (nominal): 11.000 – 24.000 1/min
 stepless speed adjustment
 via integrated speed controller



Drive X10/25P
 Pneumatic
 Compr. air: 6 bar / 0,4 m³/min
 Power: 300 W
 Speed (nominal): 11.000 – 20.000 1/min
 stepless speed adjustment
 via integrated throttle valve



Drive X10/20 E3
 Voltage: 230 V 50/60 Hz
 115 V 60 Hz
 Power: 1.050 W
 Speed (nominal): 4.000 – 25.000 1/min
 stepless speed adjustment
 via integrated speed controller



Drive X40/38 E3
 Voltage: 230 V 50/60 Hz
 115 V 60 Hz
 Power: 1.800 W
 Speed (nominal): 4.000 – 23.500 1/min
 in 6 steps via integrated
 speed controller



Drive X40/37
 Voltage: 3 x 230 V / 3 x 380 V 50 Hz
 Power: 550 W
 Speed (nominal): 10.000 1/min
 with integrated gear drive



Drive X40/36
 Voltage: 230 V 50 Hz
 115 V 60 Hz
 Power: 650 W
 Speed (nominal): 10.000 1/min



Drive X40/39P
 Pneumatic
 Compr. air: 6 bar / 0,85 m³/min
 Power: 470 W
 Speed (nominal): 6.000 – 12.000 1/min
 stepless speed adjustment
 via integrated throttle valve

Shafts

Mechanical seal



Shaft 30D
 Mechanical seal
 ceramic/carbon
 Immersion depth: 190 mm
 (without generator)

Without seal



Shaft 40T
 with Teflon bearing
 Immersion depth: 300 mm
 (without generator)

Mechanical seal



Shaft 41G
 Mechanical seals
 as to requirements
 and applications
 Immersion depth: 320 mm
 (without generator)

Without seal



Shaft Y-MD-RG
 Shaft Y-MD-RG/S
 with reduction gear 3:1
 Immersion depth:
 Y-MD-RG: 380 mm
 without bearing
 Y-MD-RG/S: 620 mm
 with Teflon bearing
 (without generator)

Generators

Mixing



Jetstream mixing generator
 500 – 5.000 ml
 Stator dia. 30 mm



Jetstream mixing generator
 500 – 7.500 ml
 Stator dia. 45/55 mm



Dispermix-generator
 500 – 5.000 ml
 Stator dia. 40/55 mm
 Stator slots 4,0 mm



Dispersing-generator
 500 – 2.500 ml
 Stator dia. 30 mm
 Coarse: stator slots 3,0 mm



Dispersing-generator
 500 – 2.500 ml
 Stator dia. 30 mm
 Fine: stator slots 1,5 mm

Mixing



Jetstream mixing generator
 2 – 20 litres
 Stator dia. 40 mm
 (barrel mixer)
 Stator dia. 64/78 mm



**Dispersing-generator
 with cutting knives**
 2 – 20 litres
 Stator dia. 40 mm
 Coarse: stator slots 8,0 mm
 Medium: stator slots 3,0 mm
 Fine: stator slots 2,0 mm
 (not for Inline Z42)



Dispersing-generator
 2 – 20 litres
 Stator dia. 40 mm
 Coarse: stator slots 8,0 mm
 Medium: stator slots 3,0 mm
 Fine: stator slots 2,0 mm
 (also for Inline Z42)



Dissolver disc
 2 – 20 litres
 dia. 30 mm
 dia. 50 mm

Mixing



Jetstream mixing generator
 2 – 20 litres
 Stator dia. 45 mm
 (barrel mixer)



Jetstream mixing generator
 5 – 50 litres
 Stator dia. 64/78 mm
 Stator dia. 84/98 mm



Dissolver disc
 2 – 20 litres
 dia. 30 mm
 dia. 50 mm

Tools

Dispersing

Without seal

Mechanical seal

Mixing

Without seal



6G
 0,2 – 50 ml
 Shaft 6 mm
 Stator slots 0,5 mm



10G / 10F / 10MG
 30 – 150 ml
 10G: stator slots 2,0 mm
 10F: stator slots 0,5 mm
 10MG: stator slots 2,0 mm
 with cutting knives
 (generators exchangeable)



18G / 18F
 150 – 1.500 ml
 18G: stator slots 3,0 mm
 18F: stator slots 1,5 mm



25G / 25F
 500 – 2.500 ml
 25G: stator slots 3,0 mm
 25F: stator slots 1,5 mm



20DG / 20DF
 250 – 1.500 ml
 Seal: ceramic/ceramic
 Seal: ceramic/carbon
 20DG: stator slots 3,0 mm
 20DF: stator slots 1,5 mm
 (generators exchangeable)



25DG / 25DF
 500 – 2.500 ml
 Seal: ceramic/ceramic
 Seal: ceramic/carbon
 25DG: stator slots 3,0 mm
 25DF: stator slots 1,5 mm
 (generators exchangeable)



10T/Y
 200 – 1.000 ml
 Stator dia. 20/26 mm

Online Laboratory Shop
www.ystral.de

Stands/Accessories



DA1
 Digital speed indicator
 with sensor for drives
 X10/25 and X10/20



Z22
 Inline dispersing unit
 Connection:
 hose-fitting
 20 x 26 mm
 For shafts
 20DG and 20DF



AH1
 Cover hood
 for sterilisation
 of shafts/tools with
 mechanical seal



GH1
 Beaker clamping device
 for plate stand PS1



KL1
 Cross clamp
 for plate stand PS1



PS1
 Plate stand



DA2
 Digital speed indicator
 with sensor for
 drives X40



Z42
 Inline dispersing unit
 Connection:
 Hose-, threaded diary-
 or clamp-fitting
 (without generator)



RG/1
 Reduction gear
 required for mixing and
 mix-dispersing in
 combination with a
 Jetstream mixing generator
 or a DISPERMIX-generator



AD1
 Adapter to operate
 shafts from the X10
 series with drives
 from the X40 series



SKL1
 Cross clamp
 for stands
 U1 / U2
 GU1 / GU2



U1 / U2
 Stand
 Column lengths
 U1: 1.000 mm
 U2: 1.500 mm

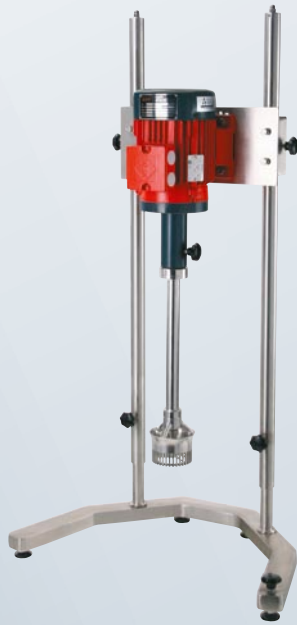


GU1 / GU2
 Stand
 Spring loaded
 Column lengths
 GU1: 1.000 mm
 GU2: 1.500 mm
 Lifting range:
 450 mm

Pilot Plant Series X50



- Drive X50/10S
- Shaft LDT-1/S
- Jetstream mixing generator
dia. 64/78 mm
- Stand SSU2 (stainless steel)



- Drive X50/10S
- Shaft LDT-1
- Dispermix-generator
dia. 86/98 mm
- Stand SSU1 (stainless steel)



- Drive X50/10S
- Shaft LDT-1/S
- Dispermix-generator
dia. 86/98 mm
- Operator interface with
frequency converter
- Lift HG10 (mild steel painted)



- Drive X50/10FU
- Shaft LDT-1/S
- Dispersing-generator
dia. 70 mm
- Operator interface for drive
with integrated frequency converter
- Lift HG19 (stainless steel)

Production series X100/X200

Production machine with exchangeable shafts

- Removable / exchangeable shafts
- Exchangeable generators
- Easy to clean
- No interruption of production
during cleaning
- Batch sizes approx. 50 – 2000 litres
- Available generators:
 - Jetstream mixer
 - Mix-disperser (DISPERMIX)
 - Disperser (rotor/stator)
 - Disperser (dissolver)
 - Stirrer

Series X100: 2,2 und 4,0 kW
Series X200: 5,5 und 7,5 kW



Pilot plants/Production systems

Pilot plant/Production systems

- For product development and production
- For scale-up
- Batch sizes approx. 3 – 50 litres
- Process technologies:
 - Induction of powder into liquid
 - Inline dispersing
 - Jetstream mixing, mix-dispersing,
batch dispersing in the vessel
 - Induction of powder from hopper or
directly from any type of container
 - All drives controlled by
frequency converter
 - Piping, armatures, sensors
 - Modular design



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Scope of supply:

- Jetstream mixers
- DISPERMIX mix-dispersing machines
- Batch dispersing machines
- Inline dispersing machines
- TDS powder wetting machines
- Processing systems

- Consulting
- Planning
- Project planning
- Machine manufacturing
- Processing systems
- Commissioning
- Service

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