

IKA®

IKA® magic PLANT



designed
to work perfectly

The most versatile laboratory reactor
available today

magic PLANT basic

ULTRA-TURRAX® UTC T25

Vessel cover with connections for:

- feeding of product
- pH-measurement
- vacuum
- ULTRA-TURRAX® UTC T25
- flow breaker

2 l vessel

PT 100 connection
in the cover or the vessel bottom



Intelligent coupling of tools:



Propeller



Anchor



Vessel tiltable

The ideal small laboratory plant for:

- Perfect mixing and homogenizing of liquid to pasty products
- Strong stirrer drive for a speed range of 0 – 2000 min⁻¹ and reversible direction of rotation
- Double jacketed and insulated vessel for heating and cooling
- Vessel vacuum-tight up to 5 mbar for perfect product deaeration
- Pressure range -1 / 2,5 bar
- Optional ULTRA-TURRAX® UTC T25 for perfect emulsions and suspensions

| Technical data | |
|--------------------------------|--|
| magic PLANT | |
| Useful volume | 2 l |
| Working pressure | -1 up to 2,5 bar |
| Max. temperature in the vessel | 150 °C |
| Dimensions (L x W x H) | 430 x 520 x 670 mm |
| Voltage : | 1 x 230 V, 50 Hz |
| Agitator | |
| Speed | 0 – 2.000 min ⁻¹ |
| Stirring tools | - anchor (0 – 350 min ⁻¹) - propeller (0 – 2.000 min ⁻¹) - spiral agitator for drying (0 – 350 min ⁻¹) - flow breaker |
| Motor power | 400 W |
| Disperser T25 | |
| Motor power | 500 W |
| Speed | 3.400 – 24.000 min ⁻¹ |
| Max. viscosity | 5.000 mPas |



Vessel can be taken out and placed on a support. Spare vessels for versatile R&D work

magic PLANT inline



Vessel cover can be lifted by means of electrical spindle

Circulation loop

3-way valve for circulation or product discharge

PT 100 in the circulation loop



Cover with agitator can be swiveled aside for easy product feeding.



Tray can be removed

- The latest development in dispersing technology for the finest and most stable emulsions and suspensions
- Circulation of the product through the circulation loop by the single or three stage rotor-stator system of the connected laboratory dispersing machine magic LAB®
- Complete discharge of the product which is pumped out by means of the magic LAB®



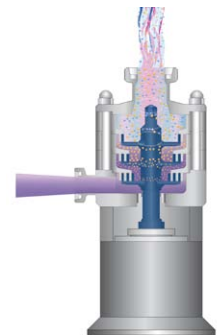
IKA® magic LAB®

The tiny but powerful laboratory dispersing machine, designed for mixing, dispersing, wet milling.

Technical data

magic LAB®

| | |
|---|---|
| Motor power | 900 W |
| Speed range (40 m/s) | 3.000 – 26.000 min ⁻¹ |
| Voltage | 1 x 230 V, 50 Hz |
| Process pressure | up to 2,5 bar |
| Product temperature: | |
| - in continuous operation | up to 80 °C |
| - in short time operation (max. 18 min/h) | up to 120 °C |
| Material of wetted parts | stainless steel AISI 316L |
| Sealing material | PTFE-compound |
| Elastomeres | Standard FPM optional EPDM (FDA), FFPM |



DISPAX-REACTOR® DR module with three rotors and three stators for fine emulsions and suspensions

magic PLANT powder



Discharge by complete tilting of the drying vessel



Inclined working position for perfect mixing



Special powder agitator

Efficient but gentle mixing of all free flowing solids, including products with different bulk densities and particle sizes. Mixing is done by means of a special spiral agitator, intensively mixing the product in radial and tangential directions. Inclined position for optimum drying of various humid solids of different free flowing behaviour as well as different bulk densities at uniform humidity and temperature distribution in the whole product area

- For drying of powders and granules
- For homogenizing, mixing and coating of powders
- Better mixing and drying result by inclination of the complete mixing vessel
- Complete discharge either through a special valve at the vessel bottom or by tilting of the vessel
- Special stirrer geometry
- Stirrer speed can be adapted to the product characteristics

From emulsions and suspensions up to powdery material for a wide range of industries



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