

## LABORATORY MIXING GRANULATOR WITH INTERCHANGEABLE VESSELS





- Mixing and granulating in one single unit
- Interchangeable vessels with 1, 5, 10 or 15 l volume
- Design in compliance with GMP
- User-friendly, integrated control unit
- System ready to run



MGTL with 1 l vessel

# Laboratory Mixing Granulator with interchanngeable vessels

The Laboratory model MGTL is an innovative new development and completes the practice-proven range of Lödige Mixing Granulators . The same process steps can be carried out in the Laboratory Mixing Granulator as in production machines:

- Mixing
- Moistening
- Granulating

The MGTL is supplied ready to run with CE declaration of conformity.

#### **Mode of Operation**

A three-arm mixing impeller rotates close to the bottom of the vertical, cylindrical mixing vessel causing the product to circulate like a vortex. Mixing times are minimum and the mixing quality is excellent, even if the properties of the product components are extremely different. If necessary a separately driven chopper (5, 10 and 15 l vessels only) disagglomerates any lumps in the product, ensure uniform wet granulation and provides streak-free intermixing of colorants, for example in the cosmetic industry.

#### Sizes

Mixer type	Total volume in litres	Working volume in litres	Drive power in kW
MGTL 1	1	0,9	2,85
MGTL 5	5	4,5	2,85
MGTL 10	10	9	2,85
MGTL 15	15	13,5	2,85



View into the 5 l vessel with chopper



1 l vessel with PTFE inlet for feeding and thermometer

#### **Range of Application**

Functions and equipment make the MGTL the ideal Mixing Granulator for product and process development and for production of small batches in the following industries:

- Pharmaceutical industry
- Spices industry
- Cosmetics industry
- And others



Sample product: tablet masses

#### **Standard Equipment**

- Product contact parts: Stainless steel 1.4404 (equivalent to AISI 316 L) polished surface; surface roughness < 0,8 μm</p>
- Housing: stainless steel 1.4301 (equivalent to AISI 304)
- Ratio diameter/height of vessels enables extrapolation to production machines
- Liquid addition with airless nozzle
- Control unit with Touch Screen panel
- Rotation speed of the mixing impeller can be regulated depending on the size of vessel
- Operating voltage: 400 V, 50 Hz, three-phase
- Qualification documentation DQ, IQ,OQ (in German or English)
- Product temperature and power consumption measurement to define the final point of granulation

#### **Optional Equipment**

- Interchangeable vessels 1, 5, 10 and 15 l
- Chopper unit (for 5, 10 und 15 l vessel)

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