

# REACTOR DRUVATHERM® TYPE DVT 130



- High speed mixing of reactants
- Prevention of local overconcentration
- No temperature gradients in the reaction field
- Improved reaction of reactants providing higher yield and greater end product purity
- Multiphase process (reaction, heating, drying, granulation, cooling)



DRUVATHERM® Reactor DVT 130

### Mode of operation

Lödige DRUVATHERM® Reactors are batch-process, high speed reactors. A three dimensional movement of the product is generated by mixing elements, adapted to the process, rotating in a cylindrical drum.

The resultant frequent contact of the reactants amongst themselves and to the heating or cooling drum wall ensures effective reaction and maximum yield. High speed choppers fitted to the side of the machine drum provide an additional mixing effect whilst dispersing the reactants.

### Range of Application

- Cellulose derivates (CMC, HPMC, HEMC, MC)
- Starch, guar and tamarind derivates
- Chemical and special chemicals
- Intermediate pharmaceutical products
- Plastics
- Recycling



Typical shovel of a DRUVATHERM® Reactor DVT 130



DRUVATHERM® Reactor DVT 130

### Process

- Reaction
  - ➔ Reaction in homogeneous and heterogeneous phases with respect to all combinations solid / liquid / gas
- Heating
- Drying
- Granulating
- Cooling

### Optional Equipment / Performance

- Speed variation by hydrostatic drive unit or frequency regulation
- Product contact materials can be made, as required, of mild steel, any usual austenitic steels, duplex steels, titan or diverse nickel-based materials
- Pressure range to max. 40 bar
- Temperature control jacket for heating / cooling
- Temperature range to max. 650 °C
- Shafts sealed by double-action mechanical face seals
- Supply of peripheral unit parts up to a complete system