



DRUVATHERM® Reactor DVT

- 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



Reactor with drive unit mounted on base frame





Reactor DVT

Reactor DVT 55000 while shipment

Range of Application

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

Sizes

Model	Motor Power (kW)		Model	Motor Power (kW)	
D∨T	from	up to	DVT	from	up to
5	0,75	0,75	6300	37	315
20	1,3	3,5	8000	45	400
50	2,2	7,5	10000	55	400
130	5,5	22	12500	55	400
300	5,5	30	16000	75	400
800	7,5	55	20000	90	500
1250	7,5	90	25000	90	500
2000	11	110	30000	110	600
3000	15	200	40000	300	800
4000	22	250	50000	400	1000

DRUVATHERM® Reactor DVT 130 for processing and small-scale production

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 which is jacketed for temperature regulation.

The resultant frequent contact of the reactants ensures effective reaction and maximum yield.

Mode of Operation

The high speed mixing elements force frequent contact between the reactants and intensive contact with the heated or cooled drum wall.

In this way reactions in both homogeneous and heterogeneous phases can be carried out in any combination of solid/ liquid/gaseous, whereby the spectre of the product consistency can be liquid, pasty, lumpy or even free flowing. High speed choppers fitted to the side of the machine drum provide an additional mixing effect whilst dispersing the reactants.

Optional Equipment

- 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 range to max. 650 °C
- Shafts sealed by double-action mechanical face seals
- Supply of peripheral unit parts up to a complete system
- Drum volumes in graduated sizes from 5 litres

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