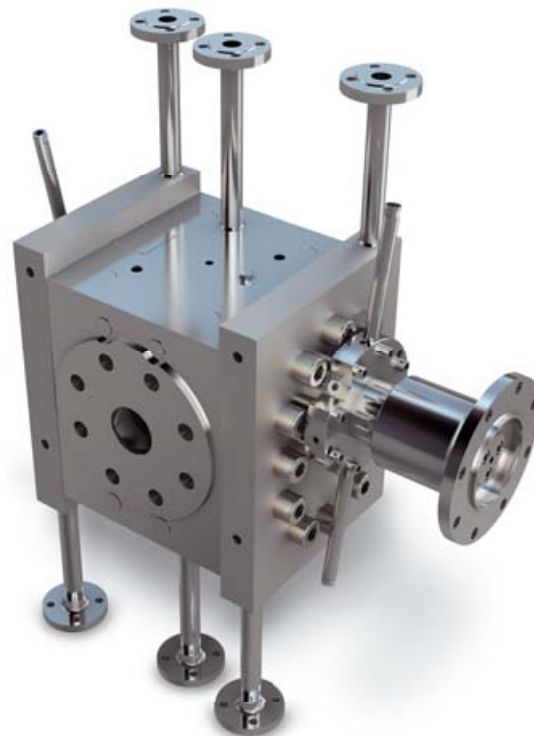
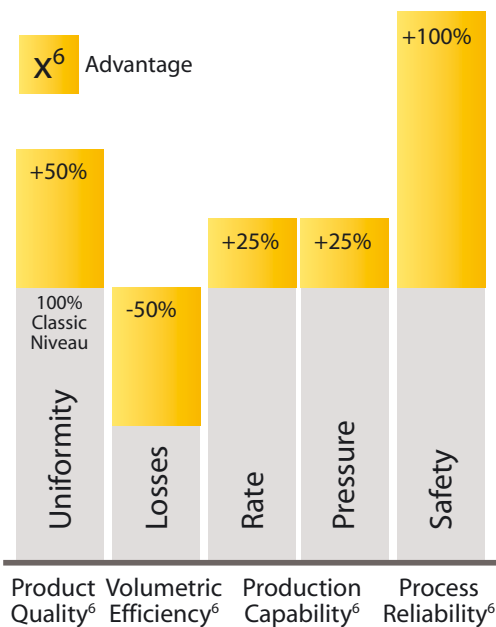




thermorex⁶ TR/TB/TP

Booster pump for the polymer industry



Polymer processes require pumps that gently process both high and low viscosity plastic melt through the system.

Specifically designed, low compression teeth allow the thermorex[®] - x⁶ class transfer, booster or metering gear pump to achieve both high pressure and low shear. The plastic melt is conveyed with a constant, precise flow even at high discharge pressures - and this also for low viscosity products like Prepolymers, where former pump generations reached their limits. Additionally, their high efficiency and long service life will enhance the capacity of any given production plant.

Product **Quality**⁶

- **Cool flow** Advanced bearing geometry to improve your product quality

Volumetric **Efficiency**⁶

- **Instant Flexibility** Reduced back-flow to offer you the choice between higher differential pressure or boosted throughput rate

Production **Capability**⁶

- **Augmented Torque** high torque to extend your differential pressure range

Process **Reliability**⁶

- **Balanced Bearings** Unique self-centering shafts to maximize your process stability



thermorex⁶ TR/TB/TP

Booster pump for the polymer industry

x⁶ class

Technical specifications:

Housing, cover:	Alloy- / Carbon Steel - other materials on request
Gear shafts:	Nitrided steel / tool steel
Bearing:	Tool steel / ALBr / special materials
Shaft seals:	Viscoseal, vispac [®] , double mechanical seal with barrier system
Pump heating:	Heated with oil: max. 350°C, at max. 15 bar with saturated or superheated steam: max. 40 bar
Installation:	The thermorex [®] gear pump can be flanged into the line, or also directly to mixer, kneader or extruder
Viscosity:	Up to 20'000 Pas; up to 100 Pas for thermorex ⁶ TP
Temperature:	Up to 350°C
Suction side:	<ul style="list-style-type: none"> ■ thermorex⁶ TR Pump with one seal (on drive side) Inlet pressure: up to 15 bar * ■ thermorex⁶ TB Pump with extended shaft (2 seals required) Inlet pressure: up to 100 bar * ■ thermorex⁶ TP Prepolymer transfer pump with one seal (drive side). Inlet pressure: up to 15 bar *
Flange connections:	■ ANSI or DIN standards

*depending on the sealing type

Pumping media

- Cellulose acetate
- Elastomers
- Epoxy resin
- Phenolic resin
- Polyacrylonitrile
- Polyamide
- Polycarbonate
- Polybutylene Teraphthalate
- Polyethylene Teraphthalate
- Polymethylmethacrylate
- Polypropylene
- Polystyrene (incl. ABS, EPS)
- Polysulphone
- Silicone
- SBR Latex
- And others

Accessories

- High-precision monitoring systems for pressure and temperature

Model range	thermorex ⁶ GU		thermorex ⁶ EV		thermorex ⁶ EP	
Δp	up to 250 bar		up to 200 bar		up to 320 bar	
Discharge pressure	up to 350 bar (100 bar for thermorex ⁶ TP)		up to 300 bar (100 bar for thermorex ⁶ TP)		up to 400 bar	
Pump size	Spec, volume [cm³/rev]	Capacity [m³/day]	Spec, volume [cm³/rev]	Capacity [m³/day]	Spec, volume [cm³/rev]	Capacity [m³/day]
80	385	16-60	481	21-80	308	13-53
100	764	33-122	977	42-160	611	26-99
125	1,550	57-216	1,930	71-275	1,210	44-170
160	3,080	92-363	3,850	119-469	2,460	74-291
200	6,110	153-623	7,820	197-799	4,890	122-498
224	8,570	197-816	11,000	248-1,023	6,860	158-653
250	12,200	256-1,076	15,300	312-1,314	9,550	224-942
280	17,200	325-1,394	21,500	407-1,744	13,400	259-1,112

Remarks:

Combination of maximum temperatures, maximum flow rates and maximum pressure is not simultaneously possible in all cases. The indicated flow capacity range and the maximum discharge pressure of the pump are strongly dependant on the characteristics of the medium to be pumped. Please contact Maag Pump Systems for specific applications.