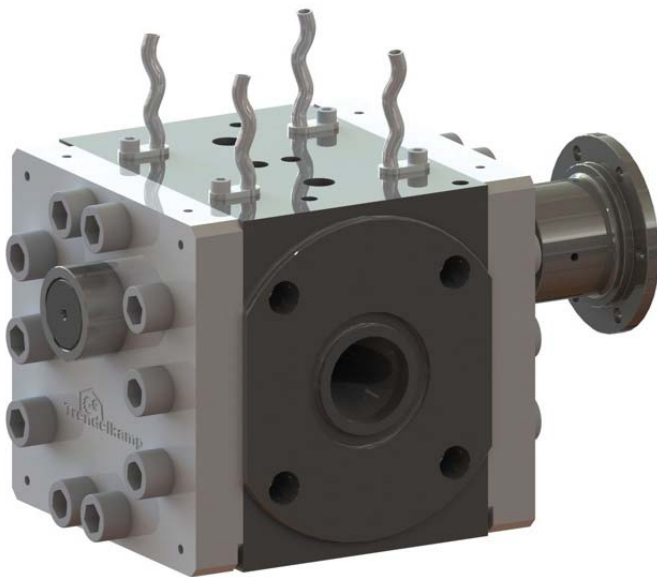


Extrusion Gear Pump TEP

for Thermoplastics



- Advanced technology
- Optimized flow channels
- Highly reliable operation
- Efficient

The TEP extrusion gear pump is a reliable positive displacement pump for thermoplastics.

It is used to build melt pressure in extrusion lines. The melt pump can be used to maintain a consistent pressure at the die or to compensate for pressure loss and fluctuation of a filtration system.

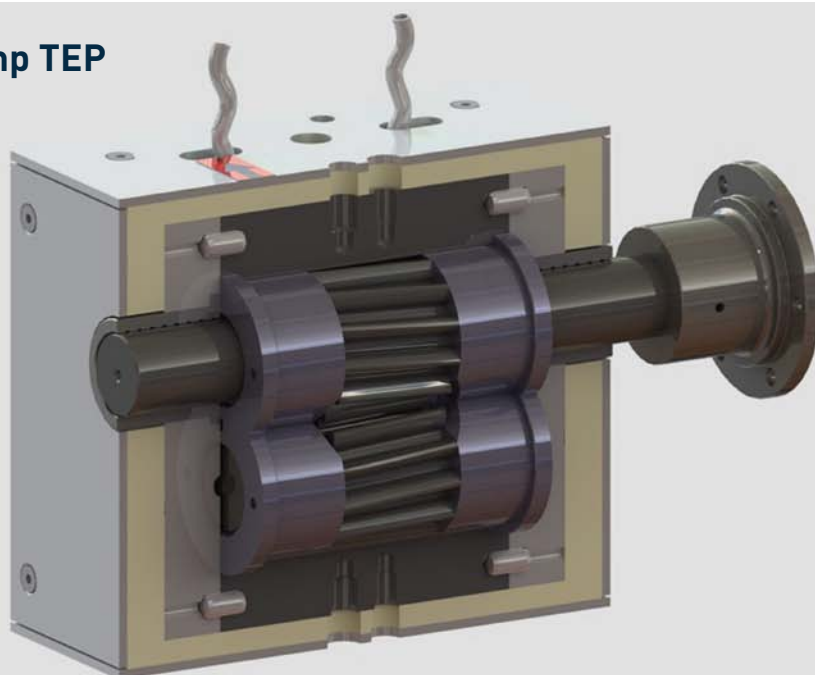
Benefits:

- Advanced bearing technology
- Energy efficient insulated housing
- Integrated pressure and temperature sensor bores
- Highly reliable operation

Options:

- Nitriding steel or stainless steel design
- Oil, steam or electrical heating
- Special coatings for abrasive/corrosive applications
- Assembly unit including drive, cart and controls
- Hazardous area design

Extrusion Gear Pump TEP



Functional Principle:

The melt pump is equipped with two helical gears and one of them is driven by a motor unit. The extruder fills the gears from the suction side and the rotating gears displace the polymer to the discharge side. As the gears turn a precise amount of polymer is metered and by adjusting the gear rotation speed the throughput rate can be adjusted. The gear rotation speed is controlled and kept within a tolerance of less than 1%. The pump bearings are designed to use the polymer for self lubrication.

The polymer is guided through the bearing and flows back into the main flow. For shear sensitive polymers however, the polymer is discharged and is not guided back into the main flow.

Design Features:

- Inlet pressure: min. 5 bar/max. 120 bar
- Differential pressure: max. 250 bar
- Operating temperature: up to 300°C
- Viscosity: 300 - 20,000 Pas

Applications:

- Underwater pelletizing
- Compounding
- Sheet/Film
- Profile/Pipe



Melt Pump Unit with Drive and Support Cart

Extrusion Gear Pump TEP >>> Data based on: Polyolefin's, Viscosity: 1,000 - 2,800 Pas at 10s ⁻¹			
Model	Specific Volume	Throughput Rate	Heating Power
TEP 36	25.5 cm ³ /rev	30 - 130 kg/h	1.3 kW
TEP 45	45 cm ³ /rev	40 - 220 kg/h	3.2 kW
TEP 56	90 cm ³ /rev	80 - 400 kg/h	3.2 kW
TEP 70	176 cm ³ /rev	140 - 700 kg/h	5.0 kW
TEP 90	364 cm ³ /rev	270 - 1,300 kg/h	12.0 kW
TEP 110	706 cm ³ /rev	350 - 2,300 kg/h	16.0 kW

Further models upon request.