BKG® BlueFlow™ Gear Pump

BKG BlueFlow Gear Pumps type EP-SE / EP-SF are used in extrusion, compounding and polymerization processes. The gear pump helps optimize the process, so the extrusion line produces optimal quality with the highest throughput possible. The gear pump has a rheologically optimized inlet and outlet geometry to guarantee a very controlled transport of the material. Temperature and pressure sensor ports are included in the pump housing.

Features

Type: EP-SE
Application: Standard polymers, low viscosity plastics, e.g. PET, PA 6
Feature:

Type: EP-SF
Application: Provides the same advantages as the EP-SE model with the additional benefit of heating the pump with a fluid

Benefits

- Reduction of stress on the extruder by means of shifting the job of building pressure to the gear pump
- Reducing extruder head pressure may yield increased throughput rate leading to maximized production efficiency
  - Elimination of output variations and pressure pulsations
  - Improves product quality
  - Reduces scrap and product defects
  - Saves polymer usage
- Allows the use of up to 100% regrind in production with consistent metering
- Improvement of the dimensional accuracy in the production of sheets and profiles
- Optimizes the surface and optical quality in the production of films, sheets and profiles
- Increased product quality in homogeneity and pellet size in compounding applications

Technical Information

- Size: 33 - 3201
- Throughput*: 7 – 12,700 kg / hr (15 – 28,000 lbs / hr)
- Specific volume: 33 – 3201 cm³ / rev (2.02 – 195.3 in³ / rev)
- Viscosity: 200 – 30,000 Pas
- Temperature: Up to 350°C (662°F)
- Heating: Electric or Fluid
- Pump outlet: max. 350 bar (5,076 psi)
- Differential pressure: max. 250 bar (3,626 psi)

Old vs. New

- Higher specific volume in a smaller housing
- Metric system
- Two melt immersion points inlet/outlet
- Different shaft sealings available: air or fluid cooling, finned seal and dynamic seal

* Higher or lower throughputs on request.