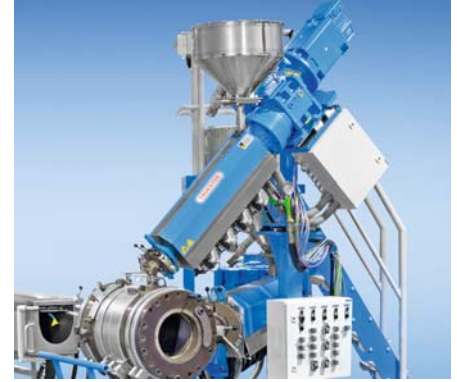


# Extruders PXA/PXF for Plastics Processing



**TROESTER**

EXCELLENCE IN EXTRUSION.



# Extruders PXA/PXF for Plastics Processing

**TROESTER Extruders for the processing of plastic compounds play an important part in the cable industry, worldwide.**

The PX series is used to provide the insulation and sheathing of electrical cores, conductors and cables; either as a single extruder or an extruder group, depending on the task in hand. Around 80 years of experience in the development and construction of screw extruders underpin the design and processing concept on which TROESTER extruders are built.

The PX extruders designed according to the latest developments in process technology. Continuously improvements and comprehensive testing in the TROESTER R & D department in conjunction with computer simulations provide the basis for an optimal extruder and screw design. This optimization process is further aided by the wide-ranging extrusion tests and trials carried out in cooperation with compound manufacturers.

Extruder control is via a modular automation system. This is assembled in line with the requirement profile and controls, regulates and optimizes the extruder as a single unit or as part of a combined system.

Additionally TROESTER offers a comprehensive range of accessories for plastics extruders such as screw carriages, ejector mechanisms etc., to assist in quick, cost-effective and trouble-free maintenance and handling by customer personnel.

## Main Advantages of TROESTER Extruders PXA/PXF for Plastics Processing

- > Suited to a wide range of applications
- > Excellent production capabilities
- > High throughput values with the retention of excellent linearity
- > Extremely low pressure fluctuations
- > High output at low pressure
- > Stable melt temperature
- > Rapid assembly and commissioning
- > Low-maintenance design for an extended service life
- > Comprehensive range of extruder accessories
- > TROESTER in-house screw development and manufacturing (customized to special requirements)
- > Ongoing optimization through extrusion trials with compound manufacturers
- > High safety standards



## Technical Data

### Extruder size

screw diameters: 30, 45, 60, 75, 90, 105, 120, 135, 150, 175, 200 mm  
barrel lengths: 20 D, 25 D, 30 D

### Extruder Type

- > **Type PXA** (electrical heated and air-cooled design): high-performance ceramic heater bands are fitted for electric heating, integrated cooling elements with powerful radial fans for air cooling.
- > **Type PXF** (fluid-temperature controlled design): barrel temperature is controlled by water or oil heating/cooling units.
- > **Type PXV** (vertical design): Vertical arrangement of extruder type PXA or PXF, fixed or movable frame for flexible application.

### Screw design

- > **Type TS**  
The TROESTER TS screw is excellently suited for most cable materials. Round barrier flights ensures a controlled separation between the granules and melt, as well as the gentle shearing of materials. This allows a single screw to be used for a range of cable materials.
- > **Type S<sub>spez</sub>**  
The TROESTER S<sub>spez</sub> 3-zone screw is used for all materials which require a simple, constant material conveying. The detailed configuration is dependent on the application.

### Barrel and screw materials

A high-precision centrifugal process is used to produce TROESTER extruder barrels. Special alloys are applied if extruder processing is to involve corrosive or abrasive materials. Bright-finished screws made of nitrided steel ensure a long service life for most materials used in the cable industry.

## Extruder Output

Extruder	PVC	PE (LD)	PE (MD/HD)	XLPE (4201)
Screw diameter [mm]	Output Range [kg/h]			
30	23 – 40	16 – 20	20 – 25	–
45	60 – 100	45 – 55	50 – 65	–
60	135 – 225	95 – 120	115 – 140	60 – 70
75	220 – 370	155 – 195	185 – 230	95 – 105
90	310 – 520	220 – 275	260 – 330	130 – 145
105	415 – 690	295 – 370	350 – 440	165 – 180
120	540 – 900	385 – 480	455 – 570	210 – 230
135	670 – 1110	475 – 595	565 – 705	250 – 275
150	790 – 1315	565 – 705	665 – 830	300 – 330
175	1020 – 1695	725 – 905	860 – 1075	380 – 415
200	1285 – 2145	920 – 1150	1085 – 1360	460 – 500