

**TSE****TELFORD SMITH  
ENGINEERING**

# Extruders

Quality Components = Quality Extruder = Quality Product

## Excellence in Extruder Engineering since 1927.

With more than 80 years experience, Telford Smith Engineering is well equipped to provide a solution for your plastics processing application.

Recycling, compounding, sheet, pipe and profile extrusion are just a few of our many areas of expertise. Consult one of our experienced process engineers and we will find the solution which best suits your processing requirements.

### Fabricated Extruder Base

TSE Extruder bases are fabricated from heavy duty mild steel plate to ensure precise alignment of the barrel in relation to the gear reduction unit.

An adjustable barrel support allows precise alignment during installation which is a crucial factor in ensuring extended service life for the screw and barrel.

Extruder bases may be supplied in various configurations to suit specific customer requirements ie. left or right hand, various centre lines heights, vertical extrusion, etc.

### Main Drive Motor

Standard TSE extruders are equipped with DC motors, however, AC motors are available on request. All motors are equipped with tacho feedback for screw speed control.

High capacity fans and air filters ensure cool, clean air is delivered to the motor windings. Customers may nominate preferred motor suppliers.

### Vee Drive

Standard extruders equipped with heavy duty vee belts and pulleys. Extruders with motors in excess of 342kW are equipped with a direct drive coupling.

### Machine Guarding

Sectioned sheet metal guards are provided to protect operators from heat, contact with electrical components and moving parts. Machine guarding designed to all allow easy access for service and maintenance procedures.

### Gearbox & Thrust Section

High quality, double reduction gear reducer. Forced feed oil lubrication system with gear pump, oil flow and temperature monitoring device.

All gear boxes equipped with heat exchanger to ensure constant operating conditions.

### Feed Hopper

Fabricated mild steel, powder-coated, hopper with shut off gate and material discharge chute. Alternative hopper designs available on request to suit specific customer requirements.

### Barrel & Feed Section

Standard barrels are manufactured from high grade alloy steel and nitrided. The feed section is integrated with the extruder barrel for improved heat transfer and performance. Expect improved feeding and performance from your Telford Smith extruder.

Optional bimetallic barrels are available for abrasive materials and offer an extended operating life. Downstream barrel openings for venting and feeding are available on request.

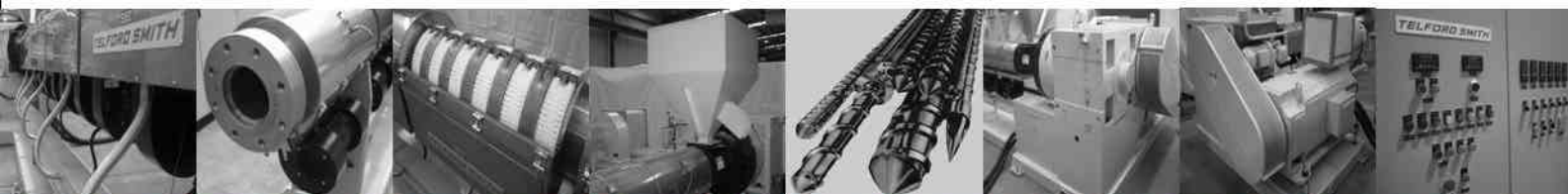
All barrels are tapped for optional rupture plugs and/or melt pressure & temperature probes.

Barrel flanges may be manufactured to suit screen changers, melt pumps and various accessories. Optional mechanical or hydraulic head clamps are available on request.

### Screw

Telford Smith offer a range of high performance extruder screws for various applications. Typical materials include: LDPE, LLDPE, HDPE, PP, HIPS, ABS, PET, UPVC, Flexible PVC, Nylon.

Depending on application and material we offer several screw types including: Metering screws, barrier screws, two stage screws for venting, screws with various types of mixing heads.



[WWW.TELFORDSMITH.COM](http://WWW.TELFORDSMITH.COM)

# Extruders

**Quality Components = Quality Extruder = Quality Product**

## Barrel Heating & Cooling

Standard Telford Smith extruders are equipped with high quality heating and cooling assemblies comprising:

- Multiple ceramic heater bands with tensioning device to ensure close heater contact with the barrel surface.
- Multiple alloy cooling fins for efficient heat transfer and cooling control.
- Insulated stainless steel covers ensuring operator safety and heating efficiency.
- High capacity cooling fans

Precise heating control allows optimum performance of the extruder at high throughputs.

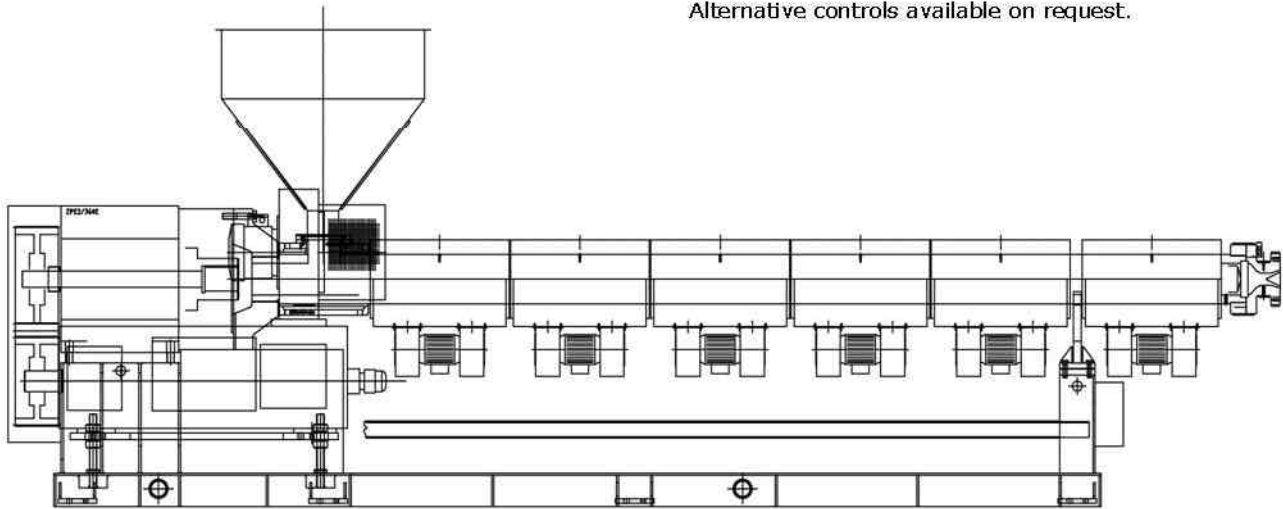
## Control Cabinet

Free standing control cabinet manufactured to IP55 standards for water and dust resistance.

Features include:

- Eurotherm DC drives – alternative drives on request
- Solid state heating control
- Digital temperature controllers
- Mains isolator
- Digital screw rpm indicator
- Emergency stop
- Air recirculation fan and filter
- Melt Pressure & Temperature Instruments
- 7 x 24 hour digital preheat timer

Alternative controls available on request.



<b>TSE</b>		<b>60</b>	<b>75</b>	<b>90</b>	<b>120</b>	<b>150</b>	<b>160</b>	<b>200</b>
Screw Diameter	mm	60	75	90	120	150	160	200
Ratios	L/D	26	26	26-36	30-36	30-36	30-36	30-36
Motor Power	kW	37	65	125	220	376	440	650
Screw Speed	RPM	140	130	130	120	100	90	90
Barrel Zones	#	4	4-5	5-6	6-7	6-7	6-7	6-7
kW/Barrel Zone	kW	5	6	9	12	15	15	20
Barrel Heating	Type	Flexible Ribbed Ceramic Heaters with Alloy Heat Dissipators and Insulated Covers						
Barrel Cooling	Type	High Capacity Fan						
Extrusion Height	mm	1000	1000	1000	1000	1000	1000	1000
Output	kg/hour	100	250	350	900	1500	1600	2300
Notes	1. Alternative Length/Diameter (L/D) Ratios and Extrusion Heights as per Customer request. 2. Higher Outputs and Drive Motor Powers available on request 3. All Extruders available with Water-cooling System or Barrel Venting 4. Standard Extruders supplied with 2 Die Heating Zones 5. Typical Outputs based on Extruder running at 100RPM with Material of Density 0.95g/cm3							

### Telford Smith Engineering Pty Ltd

Phone +61 (0)3 9798 6200  
 Fax +61 (0)3 9798 6299  
 Email email@telfordsmith.com.au  
 19 Fiveways Boulevard,  
 Keysborough 3173 Victoria Australia



### Your Dealer

