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Extruder



Euro Blue® II Extruders

Overview

The high performance, cost competitive Euro Blue® II Extruder model is engineered for custom profile and tubing applications as well as basic wire and cable processes. Advantages of this design include double reduction gearboxes with helical carburized gears, an integral high capacity thrust bearing, cast iron feed section, four-zone bi-metallic barrel assembly and heated clamp arrangement, DSBM-T™ barrier mixing feedscrew, integrated control cabinet, and digital speed and ammeters.

Features

- Fast delivery – In-stock machines can be delivered as quickly as one week based on customer location
- Rugged design that is easy to maintain and energy efficient
- Available in 50mm, 60mm, 75mm, and 90mm sizes in 24:1 and 30:1 configurations
- Two-year warranty and support from D-S Brookes' UK-based technical and aftermarket services

Euro Blue® II Extruders

Model	EB50	EB60	EB60	EB75	EB75	EB90	EB90
Nominal Screw L/D Ratio	24:1	24:1	30:1	24:1	30:1	24:1	30:1
Screw Diameter	50.8mm (2 in.)	63.5mm (2.5 in.)	63.5mm (2.5 in.)	75mm	75mm	88.9mm (3.5 in.)	88.9mm (3.5 in.)
Gearbox Make	Davis-Standard	Davis-Standard	Davis-Standard	Davis-Standard	Davis-Standard	Davis-Standard	Davis-Standard
Gearbox Ratio	17.56:1	17.26:1	17.26:1	17.26:1	17.26:1	17.39:1	17.39:1
HP Rating @ 100 Screw RPM 1.25 Safety Factor	35 HP (26 kW)	160 HP (120 kW)	160 HP (120 kW)	160 HP (120 kW)	160 HP (120 kW)	256 HP (191 kW)	256 HP (191 kW)
Thrust Bearing L-10 Life (Hrs) @ 5000PSI and 100 Screw Rpm	398,000	544,000	544,000	179,000	179,000	421,000	421,000
Bi-Metallic DS1000 Barrel	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximum Barrel Operating Pressure (PSI)	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Davis-Standard DSBM-T Barrier Mixing Screw	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Extruder AC Drive Rating	20 HP (15 kW)	40 HP (30 kW)	40 HP (30 kW)	50 HP (37.3 kW)	75 HP (57 kW)	75 HP (57 kW)	125 HP (93 kW)
Nominal Max Screw RPM	100	100	100	100	100	100	100
Number of Heat Zones	3 Barrel / 5 Die	4 Barrel / 5 Die	5 Barrel / 5 Die	4 Barrel / 5 Die	5 Barrel / 5 Die	4 Barrel / 5 Die	5 Barrel / 5 Die
Zone Controller	Eurotherm 3208	Eurotherm 3208	Eurotherm 3208	Eurotherm 3208	Eurotherm 3208	Eurotherm 3208	Eurotherm 3208
Watts / Barrel Zone	5,600	7,000	7,000	7,000	7,000	11,000	11,000
Watts / Die Zone	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Digital Screw Speed Meter	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Digital Drive Load Meter	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Centreline Height	39.375 in./1000mm	39.375 in./1000mm	39.375 in./1000mm	39.375 in./1000mm	39.375 in./1000mm	39.375 in./1000mm	39.375 in./1000mm
Extruder Weight	4,000 lbs./1815 kg	4,500 lbs./2041 kg	4,500 lbs./2041 kg	4,800 lbs./2177 kg	4,800 lbs./2177 kg	7,200 lbs./3265 kgs.	7,200 lbs./3265 kgs.
Overall Width	36 in./914mm	42 in./1066mm	42 in./1066mm	45 in./1143mm	45 in./1143mm	64 in./1625mm	64 in./1625mm
Overall Length	75 in./1905mm	97 in./2463mm	97 in./2463mm	110 in./2794mm	110 in./2794mm	134 in./3403mm	134 in./3403mm
Overall Height	86 in./2184mm	86 in./2184mm	86 in./2184mm	86 in./2184mm	86 in./2184mm	88 in./2235mm	88 in./2235mm
Warranty	2 Year	2 Year	2 Year	2 Year	2 Year	2 Year	2 Year

Drive Unit

AC drive and power unit is engineered for a range of polymer requirements. Moulded notch V-belt technology enables positive transmission of power from the motor to the gear reducer.

Gear Reducer

Double reduction, helical gearing is simple and durable. Unique built-in circulatory lubricating system supplies the gear mesh, all radial tapered roller bearings, and integral assembled thrust bearing. The thrust shaft is mounted on pre-loaded radial bearings to maintain perfect screw-to-barrel alignment. A low gear tooth velocity provides quiet operation. Gearing is manufactured to AGMA specifications.

Feed Section

Consists of machined, high-strength casting cored for water cooling, and a two diameter-long feed opening for receiving polymers from a hopper with a slide gate. Hopper features dump drain and fixed screen guard for operator safety during feeding.

Barrel and Feedscrew

The one piece bi-metallic barrel is designed for operating pressures up to 10,000 psi and is matched with a high-performance DSBM-T™ barrier screw as standard.

Temperature Control

Each zone is equipped with cast aluminum heaters. Blowers are used for air cooling and zones are isolated to prevent air leakage. Dual hoods provide thermal protection.

Control Cabinet

Controls are easily accessible with plug-in temperature controllers for each barrel and die zone. The drive control station contains a screw speed indicator, drive load meter, and pilot on-off controls. A step-down die transformer is included. Die wiring plugs directly into the control cabinet and conforms to CE standards.