PIPE, PROFILE & TUBING

SUPER BLUE® EXTRUDERS

The high-performance, cost-competitive Super Blue® extruder model is engineered for custom profile and tubing applications as well as fiber, sheet, and 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, bimetallic barrel and heated clamp arrangement, DSBM-T™ barrier mixing feedscrew, integrated control cabinet, and digital speed and meters.

AT A GLANCE

- Rugged design that is easy to maintain and energy efficient.
- Increased torque capacity to handle high viscosity resins.
- Supported by a three-year warranty and variety of DSB® barrier screw designs.
- 24:1 models are available in 2-inch (50mm), 2 ½-inch (63mm), 75mm, 3 ½-inch (90mm), 100mm, and 4 ½-inch (114mm). 30:1 models are available in 3 ½-inch (90mm), 100mm, and 4 ½-inch (114mm).

P: 860-599-1010 | 1 Extrusion Drive | Pawcatuck, CT 06379 | www.davis-standard.com

SUPER BLUE® EXTRUDERS

Model	2 in.	2 ½ in.	75mm	3 ½ in.	3 ½ in.	100mm	100mm	4 ½ in.	4 ½ in.
Nominal Screw L/D Ratio	24:1	24:1	24:1	24:1	30:1	24:1	30:1	24:1	30:1
Screw Diameter	50.8mm	63.5mm	75mm	88.9mm	88.9mm	100mm	100mm	114.3mm	114.3mm
Gearbox Ratio	17.56:1	17.26:1	17.26:1	17.39:1	17.39:1	17.39:1	17.39:1	17.36:1	17.36:1
HP Rating @ 100 Screw RPM 1.25 Safety Factor	50 HP (37.3 kW)	160 HP (120 kW)	160 HP (120 kW)	256 HP (191 kW)	256 HP (191 kW)	256 HP (191 kW)	256 HP (191 kW)	400 HP (298 kW)	400 HP (298 kW)
Thrust Bearing L_{10} Life (hrs) @ 5000 psi & 100 Screw rpm	398,000	544,000	179,000	421,000	421,000	421,000	421,000	453,000	453,000
Maximum Barrel Operating Pressure (psi)	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Extruder AC Drive	20 HP (15 kW)	40 HP (30 kW)	50 HP (37.3 kW)	75 HP (57 kW)	125 HP (93 kW)	100 HP (75 kW)	150 HP (112 kW)	200 HP (149 kW)	250 HP (186 kW)
Number of Heat Zones	3 Barrel / 3 Die	4 Barrel / 3 Die	4 Barrel / 3 Die	4 Barrel / 3 Die	5 Barrel / 3 Die	5 Barrel / 3 Die	6 Barrel / 3 Die	5 Barrel / 5 Die	6 Barrel / 5 Die
Watts / Barrel Zone	5,600	7,000	7,000	11,000	11,000	11,000	11,000	15,600	15,600
Watts / Die Zone	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Center Line Height	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)	42 1/4" in. (1080mm)
Extruder Weight	4,000 lbs. (1815 kgs)	4,500 lbs. (2041 kgs)	4,800 lbs. (2177 kgs)	7,200 lbs. (3265 kgs)	9,300 lbs. (4218 kgs)	9,300 lbs. (4218 kgs)	10,400 lbs. (4717 kgs)	13,300 lbs. (6032 kgs)	14,300 lbs. (6485 kgs)
Overall Width	36 in. (914mm)	42 in. (1066mm)	45 in. (1143mm)	64 in. (1625mm)	64 in. (1625mm)	64 in. (1625mm)	64 in. (1625mm)	64 in. (1625mm)	64 in. (1625mm)
Overall Length	75 in. (1905mm)	97 in. (2463mm)	110 in. (2794mm)	134 in. (3403mm)	148 in. (3759mm)	148 in. (3759mm)	164 in. (4165mm)	166 in. (4216mm)	186 in. (4724mm)
Overall Height	86 in. (2184mm)	86 in. (2184mm)	86 in. (2184mm)	88 in. (2235mm)	88 in. (2235mm)	88 in. (2235mm)	88 in. (2235mm)	88 in. (2235mm)	88 in. (2235mm)
Warranty	3 Year	3 Year	3 Year	3 Year	3 Year	3 Year	3 Year	3 Year	3 Year

DRIVE UNIT

AC drive and power unit is engineered for a range of polymer requirements. Molded 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 bimetallic 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.