

Delta Series, 2 1/2 inch (65mm) to 6 inch (150mm) Horizontal Single Screw Extruders

Engineered and manufactured for top performance and durability utilizing precision manufactured long life components to add reliability and productivity to your operation. Built-in accordance with your specific requirements and materials to be processed. Sizes ranging from 2 1/2" to 6" with various L/D ratios and downstream equipment available. Rugged equipment built without compromise for long term productivity and performance.

Features:

- Bimetallic Lined Barrels
- Solid Cast Aluminum Heat/Cool Elements
- Solid State or Mercury Relays
- Air or Liquid Cooled

Ideal for the following industries:

- Profile
- Pipe
- Compounding
- Reclaim
- Wire and Cable
- Sheet

*Built without
compromise.*



DELTAPLAST MACHINERY LTD.

130 Staffern Drive, Concord, Ontario L4K 2X3 Canada Tel: (905) 669-2966 Fax: (905) 669-2336

Extruder Drive

Digital DC, AC vector or brushless DC drive systems available for all polymer applications. Connected to gear reducer via fully guarded matched belts and sheaves allowing interchangeability to meet different torque and speed requirements.

Gear Reducer

Double reduction parallel shaft helical reducer with generous mechanical and thermal ratings. Self contained splash type oil bath.

Thrust Assembly

Heavy duty cylindrical roller type bearings mounted in a separate thrust housing with its own oil bath which does not allow any cross contamination with the gear reducer.

Feed Throat

High density class 40 iron casting jacketed for water cooling. The large rectangular feed hole is tangential to the bore, which has a pressed fit removable bimetallic liner. A powder seal is fitted in the rear of the feed throat. A high capacity hopper complete with sight glass and dump chute is included. An optional dual shutter magnet box is also available.

Barrel Heating and Cooling

Processing control achieved via cast aluminum heating elements, each zone individually shrouded to guide cooling air directly over barrel elements. Cooling air

provided by externally mounted blowers. Liquid cooling via closed circuit cooling pump system optionally available.

Barrel

Centrifugal cast bimetallic lined barrel, base material 4140 or JP38 tube steel, precision machined taper grip flanges threaded and welded for added strength. Designed for maximum operating pressures of 10,000 PSI. Optional superior corrosion, wear resistant and vented barrels available.

Base

Heavy duty structural steel base provides for exact alignment between all plastification components. Extruder components including motor control panel and transformer pre wired in a compact unitized package for easy component accessibility and minimal installation time. The front barrel support is heavy duty weldment with horizontally inserted dowel pins allowing for linear barrel expansion. The adjustment feature of the front barrel support allows for precise barrel alignment.

Screw

Single stage metering type, base material pre hardened 4140, chrome plated, colmonoy hardened flights, and optional coring for cooling. Special performance designs engineered to suit individual applications for superior outputs and melt quality available including barrier type and special mixing sections.

Clamp

Three piece taper grip clamp with single swing bolt fastening capability provides positive seal and alignment between barrel and die flange. Two piece double hinged swing bolt design and adjustable hinged die support optionally available.

Control Cabinet

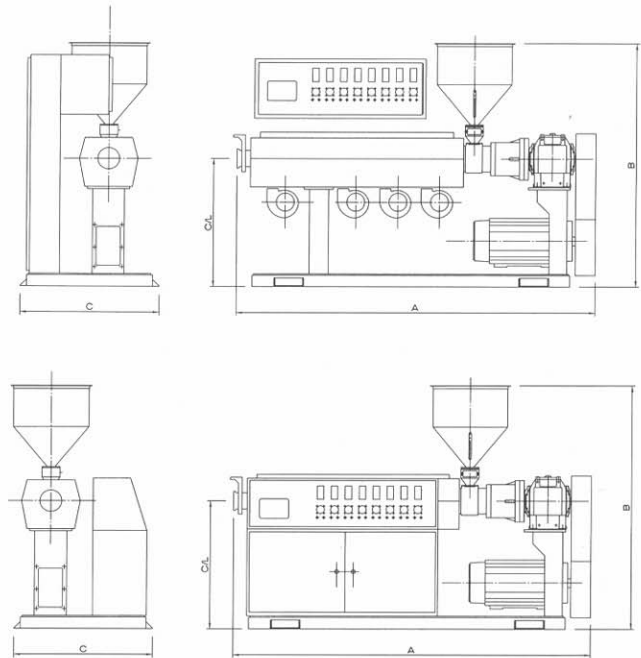
Base mounted control panel containing microprocessor based temperature controllers, circuit breakers, ammeters, load contactors, and control transformer for each barrel and die zone. The drive operator keypad station containing the following; speed regulation, start/stop, screw speed indicator, load indicator as well as other drive data and fault indicators which are remote mounted near head on operator side. A die heating stepdown transformer is included. Power requirements 460/3/60 standard, 230/3/60 or 575/3/60 available.

Optionally available Deltatech PLC-based touchscreen extrusion control system with multi microprocessor control, PID temperature control, closed loop speed control, direct access menus, full drive synchronization capability, alarm diagnostics, and RS232 communications.

SIZE	RATIO	APPROXIMATE WEIGHT	A	B	C	C/L
2-1/2 in 65 mm	24:1	5800 lbs. 2635 kg.	102 in 2590 mm	80 in 2035 mm	42 in 1065 mm	42 in 1065 mm
2-1/2 in 65 mm	30:1	6150 lbs. 2795 kg.	117 in 2975 mm	80 in 2035 mm	42 in 1065 mm	42 in 1065 mm
3 in 75 mm	24:1	8200 lbs. 3725 kg.	124 in 3150 mm	84 in 2135 mm	48 in 1220 mm	42 in 1065 mm
3 in 75 mm	30:1	8500 lbs. 3865 kg.	142 in 3605 mm	84 in 2135 mm	48 in 1220 mm	42 in 1065 mm
3-1/2 in 90 mm	24:1	9300 lbs. 4225 kg.	136 in 3455 mm	84 in 2135 mm	48 in 1220 mm	42 in 1065 mm
3-1/2 in 90 mm	30:1	9800 lbs. 4455 kg.	157 in 3990 mm	84 in 2135 mm	48 in 1220 mm	42 in 1065 mm
4-1/2 in 120 mm	24:1	15200 lbs. 6910 kg.	174 in 4420 mm	88 in 2235 mm	78 in 1980 mm	42 in 1065 mm
4-1/2 in 120 mm	30:1	16700 lbs. 7590 kg.	201 in 5105 mm	88 in 2235 mm	78 in 1980 mm	42 in 1065 mm
6 in 150 mm	24:1	22000 lbs. 10000 kg.	225 in 5715 mm	97 in 2465 mm	90 in 2285 mm	42 in 1065 mm
6 in 150 mm	30:1	25000 lbs. 11365 kg.	261 in 6630 mm	97 in 2465 mm	90 in 2285 mm	42 in 1065 mm

SIZE	L/D RATIO	STD. DRIVE HP	REDUCTION RATIO	AGMA HP RATING	THRUST BEARING AVG. B10 LIFE HOURS	# OF ZONES	TOTAL KW	CFM
2-1/2 in 65 mm	24:1	40	16:1	90	650,000	4	24.5	400
2-1/2 in 65 mm	30:1	50	16:1	90	650,000	5	28.0	400
3 in 75 mm	24:1	60	16:1	142	350,000	4	28.0	525
3 in 75 mm	30:1	75	16:1	142	350,000	5	35.0	525
3-1/2 in 90 mm	24:1	75	16:1	142	350,000	4	36.0	525
3-1/2 in 90 mm	30:1	100	16:1	213	350,000	5	42.5	525
4-1/2 in 120 mm	24:1	150	16:1	304	410,000	5	58.5	850
4-1/2 in 120 mm	30:1	200	16:1	705	410,000	6	70.0	850
6 in 150 mm	24:1	250	16:1	705	325,000	5	96.0	1100
6 in 150 mm	30:1	300	16:1	705	325,000	6	112.0	1100

Please note: Our continuous improvement of product lines may make dimensions and specifications subject to change without notice.



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Printed in Canada