



*Quality Built
for Reliable,
Long-Term
Operation!*

PAK SINGLE SCREW EXTRUDERS

FEATURES & BENEFITS

From Stand Alone Extruders to Complete Systems
 Standard 2.0" up to 6.0" – Larger Models Available
 Designed for Maximum Flexibility and to Process the Toughest Materials
 Custom Screw Designs Tailored to Meet Your Specific Process Requirements
 A Variety of Different L/D's Available
 Designed to Accept a Variety of Screw Shank Configurations
 Floor Mounted (S-PAK) or Pedestal Mounted (S-PAK-T) Coextruder Models Available from 3/4" through 1-3/4"
 Grooved Feed (G-PAK) Extruders Available from 45mm through 150mm
 Standard AC Motor & Drive Package
 Double Reduction Gear Reducer with Heavy Duty Integral Roller Thrust Bearing for Extended Life
 Direct Coupled or Belt & Sheave Configurations Available
 Large Cast-In Water Jacket in Feed Throat for Efficient Cooling
 Flame Hardened Screw – Abrasion & Corrosion Resistant Screw Base Metals & Coatings Available
 Bimetallic Barrel with Rupture Disc for Long Life
 Alternative Construction Materials for Abrasive & Corrosive Wear Protection
 4-Bolt Swing Gate for Faster Die Changeover
 Standard Discrete Control Package or Optional "Mosaic" Microprocessor Control
 Solid State Drive Control, Mounted & Pre-Wired in Locking Cabinet
 Analog Melt Temperature & Melt Pressure Indication



Application Versatility



Complete Systems



Customized Designs



New Screw Designs &
Rebuilt Screws



Extrusion Systems

TECHNOLOGY & SERVICE FIRST!

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PAK SINGLE SCREW EXTRUDER SPECIFICATIONS

		PAK200		PAK250		PAK300		PAK350		PAK450		PAK600	
		ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC	ENGLISH	METRIC
Barrel & Screw Specifications	Screw Diameter (in/mm):	2.0	50.8	2.5	63.5	3.0	76.2	3.5	88.9	4.5	114.3	6.0	152.4
	L/D:	24:1		24:1		24:1		24:1		24:1		30:1	
	Number of Heat/Cool Zones:	3		4		5		5		5		6	
	Blower Motor CFM (Barrel Cooling):	465		465		465		465		465		495	
	Number of Barrel Zones:	3		4		5		5		5		6	
	Number of Gate Zones:	1		1		1		1		1		1	
	Number of Die Zones:	1		1		1		1		1		1	
	Heat/Cool Capacity/Zone (kW):	3		4		4		4.8		10		12	
	Maximum Melt Pressure Continuous Operation (psi/bar):	10,000	680	10,000	680	10,000	680	10,000	680	10,000	680	10,000	680
	Precision Barrel Pressure Tap Standard:	1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF		1/2-20 NF	
Electrical Specifications	Main Power Drop (1):	460/3/60		460/3/60		460/3/60		460/3/60		460/3/60		460/3/60	
	Maximum Amp Load (Amps) (2):	57.8		89.5		119.1		170.1		267.3		687	
	Main Motor Power (HP/kW):	20	15	40	30	60	45	100	75	150	112	400	300
	Nominal Speed of Main Motor (rpm):	1,750		1,750		1,750		1,750		1,750		1,750	
	Barrel Zones:	460/3/60		460/3/60		460/3/60		460/3/60		460/3/60		460/3/60	
	Gate Zone:	230/1/60		230/1/60		230/1/60		230/1/60		230/1/60		230/1/60	
Reducer Specifications	Die Zones:	230/1/60		230/1/60		230/1/60		230/1/60		230/1/60		230/1/60	
	Gear Box Rating:	40HP @ 100 rpm		120 HP @ 100 rpm		120 HP @ 100 rpm		280HP @ 100 rpm		480 HP @ 100 rpm		800 HP @ 100 rpm	
	AGMA Service Factor (3):	1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm		1.0 @ 100 rpm	
	Thrust Bearing L-10 Life (4):	1,300,000		1,900,000		1,900,000		300,000		300,000		110,000	
	Thrust Bearing Type (High Capacity):	29418E		29424E		29424E		T611		T811		T911	
	AGMA Rating (Durability & Low Noise):	12		12		12		12		12		12	
	Gear Ratio:	14.1:1		14.1:1		14.1:1		14.1:1		17.5:1		17.5:1	
	Reduction:	Double		Double		Double		Double		Double		Double	
	Screw Speed based to Based on Gear Ratio (rpm):	124.1		124.1		124.1		124.1		100		100	
	Nominal Screw Speed with Belt & Sheave (rpm):	100		100		100		100		100		100	
Installation Specifications	Extruder Length (in/mm):	70	1,778	100	2,540	106	2,686	132	3,353	(5)		(5)	
	Extruder Width (in/mm):	40	1,016	40	1,016	42	1,067	48	1,219	(5)		(5)	
	Extruder Height with Hopper (in/mm):	75	1,905	75	1,905	93	2,356	92	2,337	(5)		(5)	
	Extruder Weight (lbs/kg):	2,800	1,273	3,800	1,727	4,800	2,182	7,650	3,477	(5)		(5)	
	Barrel Centerline from Floor (in/mm):	42	1,067	42	1,067	42	1,067	42	1,067	42	1,067	42	1,067

Notes:

- PAK600 extruder requires two drops. One drop for the control cabinet and one drop for the drive cabinet.
- Maximum amp load is based on the standard AC motor & drive + the number of barrel and die zones (shown above). Any variance from the aforementioned numbers will change the maximum amp load. Electrical engineering will determine the amp load based on the order (HP, number of die zones, number of barrel zones, air conditioning, etc.)
- Rating @ SF = 1.0 @ 1750/100 rpm
- @ 5,000 psi (345 bar) @ 100 rpm
- Weights and dimensions vary based on machine content.
- PAK600 comes standard as vented and plugged.

APPLICATIONS

- Pipe • Profile • Sheet
- Medical Tubing
- Compounding & Pelletizing
- Foam Extrusion

