

HR³™ 103mm

Co-rotating Twin-Screw Extruder

High Rate, High Reliability, High Return -
Ideal for masterbatch compounding



Screws	
Diameter	103mm
Rotation	Co-Rotating
Length	28-52 L/D
Screw Center Distance (mm)	84
Screw Do/Di Ratio	1.59
Flight Depth (mm)	19.0
Free Area, 2-Flight (cm ²)	61.5
Shafts	24 Tooth Involute Spline
Drive System	
Std. Gearbox Ratios	2.92 / 4.3 / 5.8
Screw Speeds	600 rpm
Motor @ 1750 rpm	1400 hp
Motor Equivalent in Watts	1044 kW
Voltage Options	380 / 415 / 460 / 575 Volt
Standard Motor Controller	AC

Barrels		
Form	Square, Flanged	
Length	412 mm	
Cooling	Internal Liquid Cooling	
Open Barrel Heat Zone	12.5 kW Aluminum	16.6 kW Bronze
Closed Barrel Heat Zone	15.5 kW Aluminum	23.6 kW Bronze
Controls		
Controller	Ethernet PLC with Color Computer Interface	
Heat/Cool Zones	Up to 16 Standard (additional upon request)	
Size & Utilities		
Installed Cooling Capacity (gearbox and barrel)	143 tons (1,810,100 kJ) [528 kW] @1000 hp	
Typical Cooling	32 tons (405,056 kJ)	
Est. Power Requirements*	1346A Power, Minimum Breaker 1800 Amps	
Centerline Height	1155 mm [45.5 in]	
Length, 48D	9308 mm [366 in]	
Width	1225 mm [48.5 in]	
Height (top of motor)	1675 mm [66 in]	
Weight (approx.)	15000 kg [33000 lb]	

* - Standard Machine Configuration: 1 Feed Barrel, 9 Solid Barrels (6 Aluminum, 3 Bronze/Cast Iron), 1 Vent Barrel, Gear Box Lube 40mm and Up, Barrel Cooling Pump, Main Motor Blowers 400 hp and Up

