

Optional Equipment

- Various roller feeder ratios
- Stainless steel hopper and adapter
- Lo-Boy base design
- Special liners
- Optional breaker plates
- Screw removal system (manual, auto)
- Full laboratory instruments
- Jog reverse

- Coordinated drive
- Clean room grade
- Special paint
- Extrusion heads
- Air pads or casters
- Pivot assembly
- Dual hinges
- Stock temperature indication
- Left hand feed (standard is right feed)

MACHINE DESIGN PARAMETERS*

Size	1 ½ inch (40mm)	2 ½ inch (65mm)	3 ½ inch (90mm)	4 ½ inch (115mm)	6 inch (150mm)
Extruder Weight (approx.) w/ Common Base Package	4,900 lbs. (2223 kg)	5,700 lbs. (2585 kg)	9,000 lbs. (4082 kg)	14,000 lbs. (6350 kg)	18,000 lbs. (8165 kg)
Center Line	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)
Length	57 in. (1448mm)	84 in. (2134mm)	114 in. (2896mm)	142 in. (3607mm)	179 in. (4547mm)
Screw Removal	47 in. (1194mm)	77 in. (1956mm)	90 in. (2286mm)	115 in. (2921mm)	152 in. (3861mm)
Width	48 in. (1219mm)	54 in. (1372mm)	64 in. (1626mm)	67 in. (1702mm)	72 in. (1829mm)
Number of Barrel Zones	3	4	4	4	4
Standard Feed Strip	3/8 x 2 3/4 in. (10mm x 70mm)	3/8 x 3 3/4 in. (10mm x 95mm)	3/8 x 4 3/4 in. (10mm x 121mm)	3/8 x 6 1/4 in. (10mm x 159mm)	3/8 x 6 1/4 in. (10mm x 159mm)
Standard Feed Widths	2.0 in	5.0 in	7.25 in	6.5 in	8.0 in
Gear Ratio	6.53:1	17.26:1	24.73:1	25.35:1	24.29:1
Thrust Bearing B-10 Life @ 100 RPM 5,000 psi	500,000 hrs.	544,000 hrs.	421,000 hrs.	453,000 hrs.	509,000 hrs.
Standard HP	15 HP (11 kW)	40 HP (30 kW)	75 HP (56 kW)	150 HP (112 kW)	250 HP (187 kW)
Standard Timing	0-50 RPM	0-45 RPM	0-45 RPM	0-45 RPM	0-45 RPM
Maximum Rating	.33 HP/RPM	.76 HP/RPM	1.58 HP/RPM	3.00 HP/RPM	5.44 HP/RPM
Service Factor	1.25 SF	1.25 SF	1.25 SF	1.50 SF	1.50 SF
Drive and Temperature Control**	83 FLA	122 FLA	215 FLA	312 FLA	480 FLA
Water***	15 GPM	20 GPM	30 GPM	40 GPM	50 GPM
Inlet and Outlet Pipe Size	1 1/4 in. (30mm)	1 1/2 in. (40mm)	1 1/2 in. (40mm)	1 1/2 in. (40mm)	1 1/2 in. (40mm)
Closed Loop Capacity Tank	6.3 gallons (24 liters)	12 gallons (45 liters)	18 gallons (68 liters)	26 gallons (98 liters)	31 gallons (117 liters)
Air Requirement (static)	30 psi	30 psi	30 psi	30 psi	30 psi

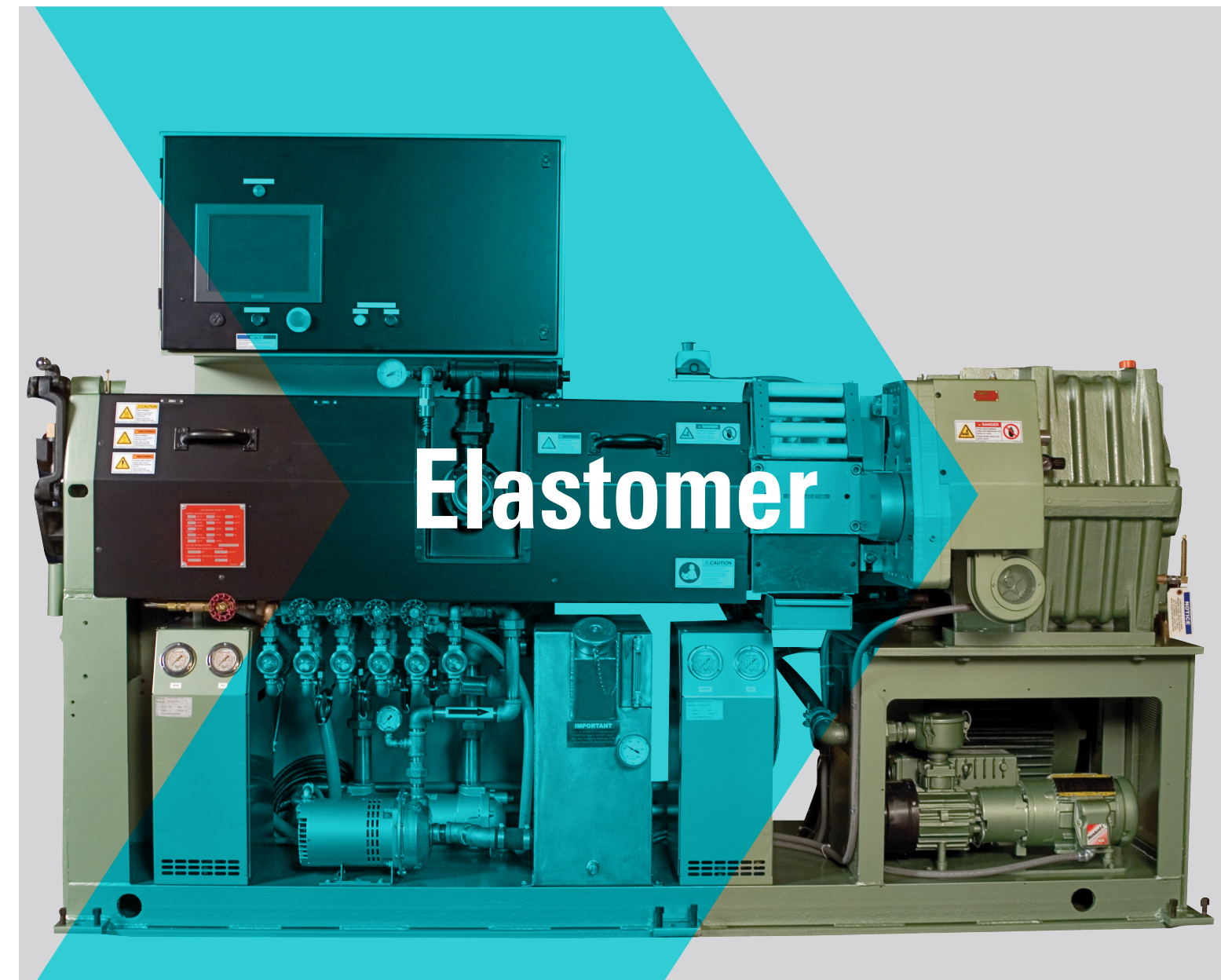
*Dimensions shown are 20:1 L/D and are based on standard voltage 460/3/60.

**Based on standard drive and temperature control system.

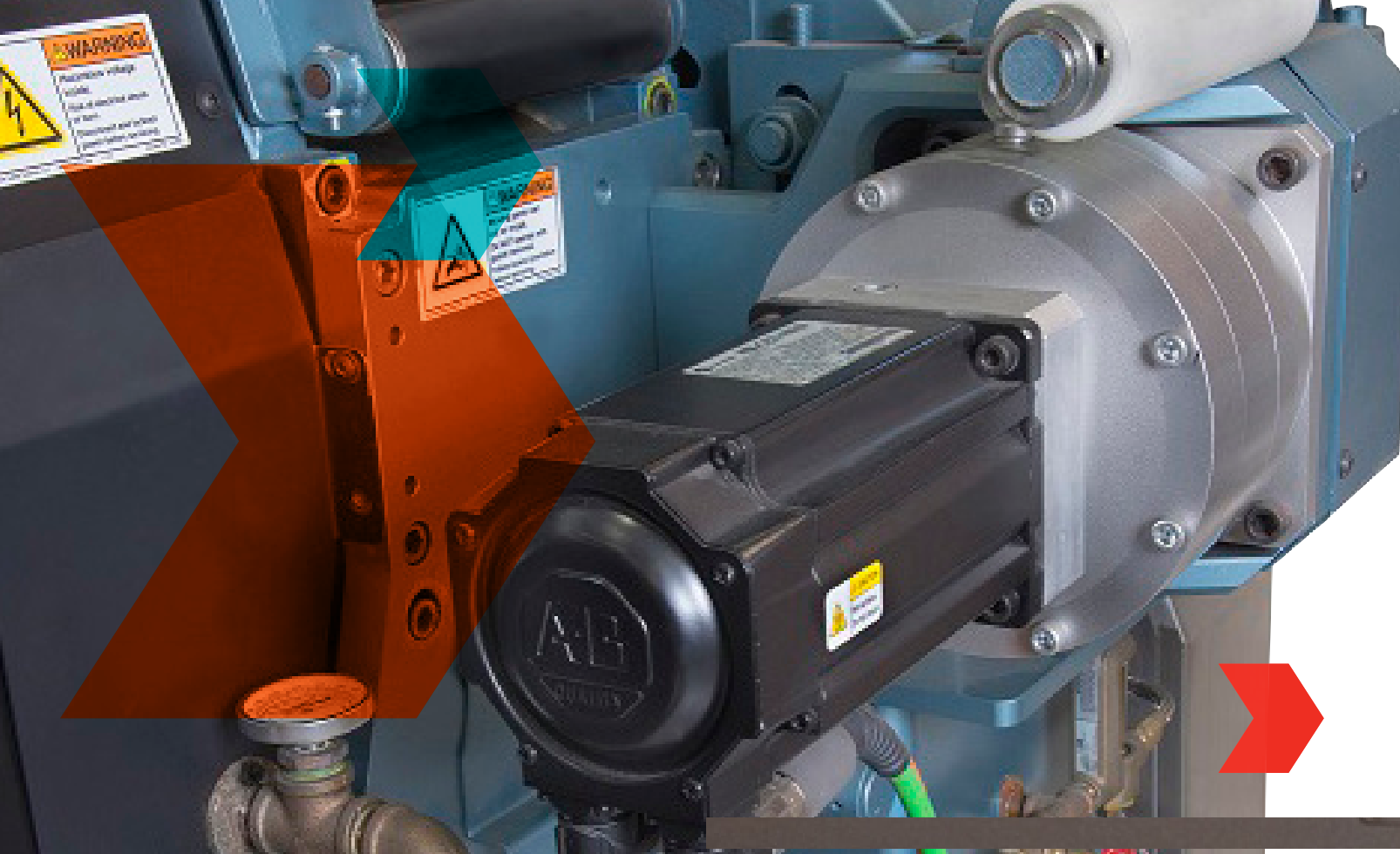
***Normal temperature profiles.



Where your ideas take shape.



Multipurpose Cold Feed (DSRE & DSREV) Rubber Extruders

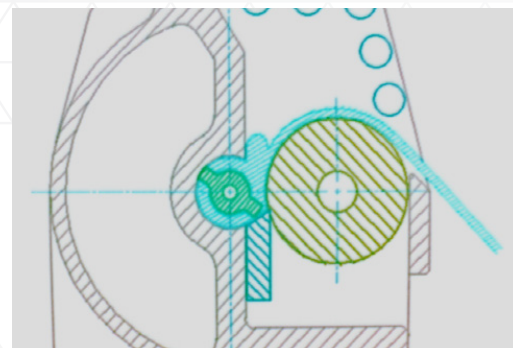


Overview

Davis-Standard's multipurpose cold feed rubber extruders are technologically advanced, reliable, and built for longevity. These extruders can accommodate a wide range of rubber extrusion applications with custom designs available for unique process requirements. All extruders are equipped with the latest feedscrew and control system technology.

Features

- Barrel diameters from 1 ½-inch (40mm) to 8 inches (200mm) with L/D ratios of 20:1
- Standard with unique pneumatic roller feeder to compensate for feedstrip variations
- Multi-zone temperature control via double cast aluminum heater coolers



Pneumatic Feeder

Superior Gearcase

- Versatile design for a range of capabilities.
- Built with greater rigidity, improved thermal capacity, longer life, and quiet operation.
- Horizontally mounted, double and triple reduction parallel shaft reducer with integral thrust bearing for simplicity and economy.
- Reducers supplied with elastomer oil seals.
- Thrust shaft is mounted on pre-loaded radial bearings that compensate for heavy bull gear radial loading and maintain screw-to-barrel alignment.

Feeder Roll

- Automates feed roll regulation with minimal operator requirements.
- Feed roll rate regulated by a pneumatically-controlled torque-sensing clutch driven from the main thrust shaft.
- Uniform, consistent feed rate that automatically compensates for feed strip size variations.
- Capability to improve extrusion stability and reduce problems related to size control (when used with the proper feedscrew), resulting in material savings and an increase in product capabilities.

Options:

- Dual feed roll designs available for feed stocks other than slab, strip, or pellets.
- Servo driven feed roll

Extrusion Heads

Head Clamp

- Double swing bolts for uniform, symmetrical clamping by drawing tapered flanges with the breaker plate, assuring positive sealing and extrusion head alignment.
- Easy opening handle and stay-open positioning.

Hinged Head Support

- Hinges available mounted on the left, right, or both sides.
- Hinges enable rapid head closure and alignment.
- Heads may be swung completely to the side of the machine for preheating, cleaning, and tooling changes.

Barrel

- Wear-resistant liner of iron/boron bimetallic cast into a 4140 steel barrel assembly.
- Harder alloys optionally available.
- Barrel designed for operating pressures up to 10,000 psi.
- Multi-zone temperature control via double cast aluminum heater/coolers.

- Each heater/cooler designed for maximum heat transfer characteristics through the use of double pass serpentine seamless Incoloy® cooling tubes that provide high velocity turbulent flow.
- Each barrel supplied with a single pressure transducer hole tapped into the breaker plate area.
- Vacuum vented machines equipped with a vent stack installed and a vent plug shipped loose.
- Cylinder barrel includes four tapped deep-well thermocouple holes with a thermocouple and adapter wired to a side-mounted wiring channel. Each zone is furnished with needle valve flow control, controller actuated solenoids, and flow meters all piped into a common inlet and outlet manifold.
- Barrel zones are integrally mounted and incorporate a self-contained, closed-loop water system with stainless pump, heat exchanger, and water saving temperature regulated valve for connection to a plant water outlet.
- Barrel supplied with rupture disc for overpressure protection.

Mechanical Features And Associated Equipment (Standard)

DSRE

- Gear box
- Pneumatic roller feed
- Clamp
- Hinge
- Closed loop water system
- Four deep-well thermocouples in liner/wiring channel
- Unit supplied pre-wired and mounted on common base
- Manifold piping
- Stock screw, cooling pipe, and union
- Break plate, screens, or spacer ring
- Belts, sheaves, and belt guard
- Pressure transducer and indicator with high alarm shutdown
- Maintenance manuals
- Extruder stock screw
- Temperature control system
- Drive system
- Pressure alarms (hi-low)

DSRV

- Vacuum venting system
- Vent stack assembly
- Barrel with vent plug