

Optional Equipment

- Common base
- OCS, drive cabinet and motor, mounted and wired
- Completely piped
- Air pads or casters
- Pivot assembly
- Dual hinges
- Vacuum venting system
- Vent stack assembly
- Stock temperature and vent plug indication
- Various roller feed ratios
- Stainless steel hopper and adapter
- Lo-Boy base design (lower than typical)
- Special liners
- Jacketed Barrel (for select L/D lengths)
- Optional breaker plates
- Screw removal system (manual, auto)
- Full laboratory instruments
- Jog reverse
- Precision drive regulation
- Coordinated drive
- Clean room grade
- Special paint
- Slab feeder
- Motor driven feed roll
- Dual feed roll designs available for feed stocks other than slab, strip, or pellets

Machine Design Parameters\*

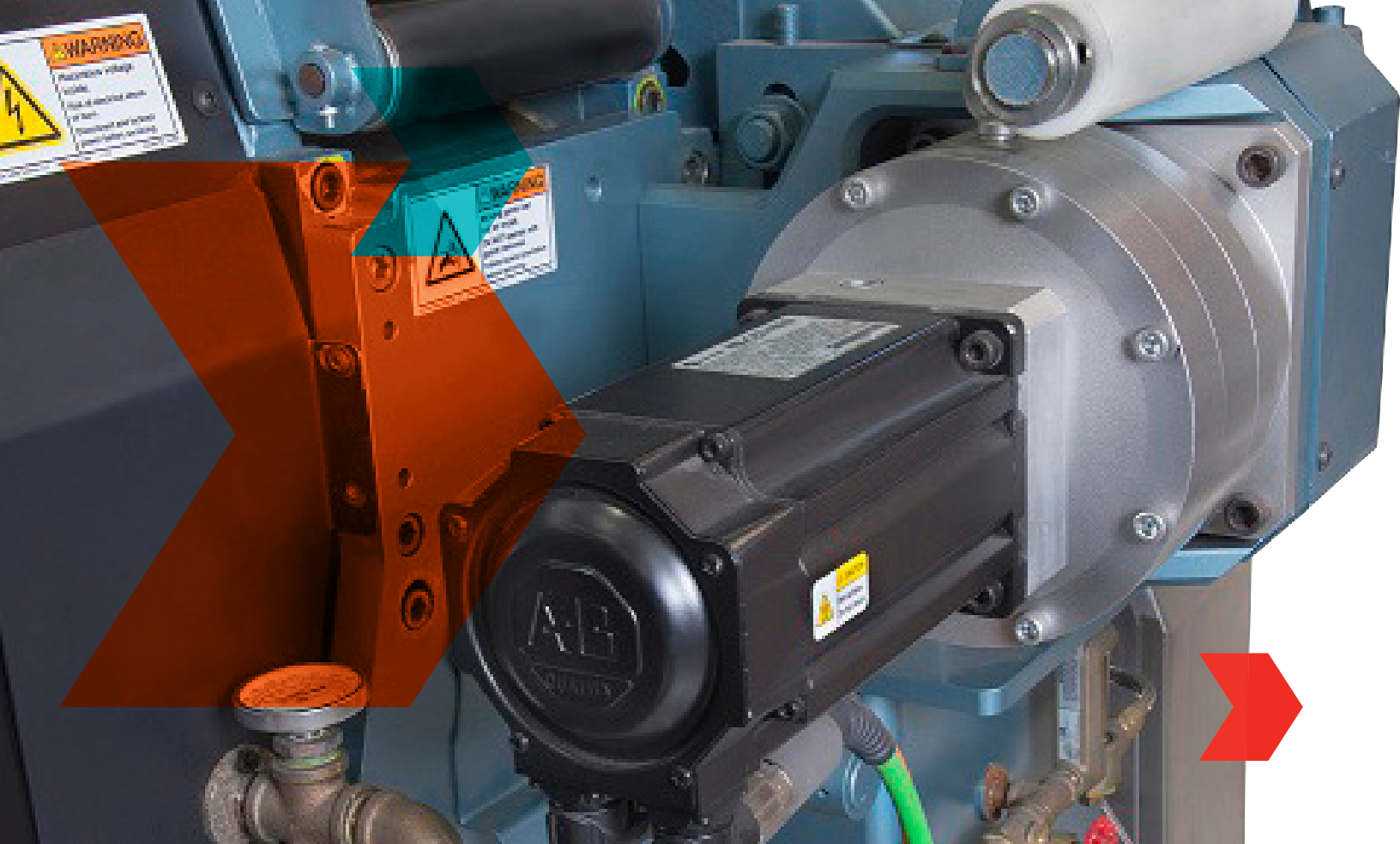
Size	2 ½ inch (65mm)	3 ½ inch (90mm)	4 ½ inch (115mm)	6 inch (150mm)
Extruder Weight (approx.) w/ common base package	3,750 lbs. (1701 kg) 5,700 lbs. (2585 kg)	5,950 lbs. (2699 kg) 9,000 lbs. (4082 kg)	9,650 lbs. (4377 kg) 14,000 lbs. (6350 kg)	12,300 lbs. (5579 kg) 18,000 lbs. (8165 kg)
Center Line	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)	42 1/4 in. (1073mm)
Length	84 in. (2134mm)	114 in. (2896mm)	140 in. (3556mm)	179 in. (4547mm)
Screw Removal	77 in. (1956mm)	90 in. (2286mm)	115 in. (2921mm)	152 in. (3861mm)
Width	54 in. (1372mm)	65 in. (1651mm)	68 in. (1727mm)	72 in. (1829mm)
Number of Barrel Zones	4	4	4	4
Standard Feed Strip	3/8 in. x 2 3/4 in. (10mm x 70mm)	3/8 in. x 3 3/4 in. (10mm x 95mm)	3/8 in. x 4 3/4 in. (10mm x 121mm)	3/8 in. x 6 1/4 in. (10mm x 159mm)
Standard Feed Widths	5.0 in	7.25 in	6.5 in	8.0 in
Gear Ratio	17.26:1	24.73:1	25.35:1	24.39:1
Thrust Bearing B-10 Life @ 100 RPM 5,000 psi	544,000 hrs.	421,000 hrs.	453,000 hrs.	509,000 hrs.
Standard HP	40 HP (30 kW)	75 HP (56 kW)	150 HP (112 kW)	250 HP (186 kW)
Standard Timing	0-45 RPM	0-45 RPM	0-45 RPM	0-45 RPM
Maximum Rating	.76 HP/RPM	1.58 HP/RPM	3.00 HP/RPM	5.44 HP/RPM
Service Factor	1.25 SF	1.25 SF	1.50 SF	1.50 SF
Drive and Temperature Control**	113 FLA	164 FLA	301 FLA	430 FLA
Water***	20 GPM	40 GPM	50 GPM	60 GPM
Inlet and Outlet Pipe Size	1 in. (25mm)	1 1/2 in. (40mm)	1 1/2 in. (40mm)	1 1/2 in. (40mm)
Vertical Stack TCU System	15 GPM	30 GPM	30 GPM	50 GPM
Air Requirement (static)	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



Elastomer

Cold Feed DSR Rubber Extruders

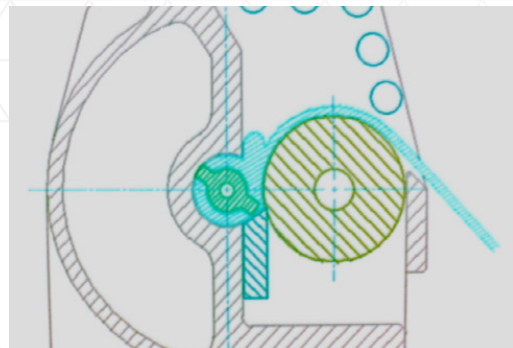


## Overview

Davis-Standard's 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 2 ½ inches (65mm) to 6 inches (150mm) with L/D ratios of 10.5:1, 12:1, 15:1, 17:1 and 20:1.
- Standard with unique pneumatic roller feeder to compensate for feedstrip variations.
- Improved output stability.
- 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.
- Leak-free, non-contacting labyrinth oil seals with lifetime guarantee, eliminating expensive oil seal maintenance.
- 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.
- See optional equipment.

## 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.

- Pressure transducer hole tapped into the breaker plate area.
- Vacuum vented machines equipped with a vent stack installed and a vent plug shipped loose.
- Barrel supplied with rapture disc for overpressure protection.

## Mechanical Features And Associated Equipment (Standard)

- Gear box
- Pneumatic roller feed
- Clamp
- Hinge
- Stock screw cooling pipe and union
- Breaker plate, screens or spacer ring
- Belts, sheaves, and belt guard
- Pressure transducer and indicator with high alarm shutdown
- Maintenance manual
- Pressure alarms (hi-low)

## Associated Equipment (Required)

- Extruder stock screw
- Temperature control system
- Vertical stack TCU shown
- Drive system
- Extrusion heads