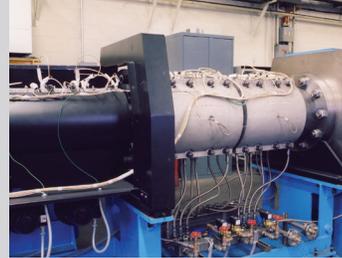




DAVIS-STANDARD®

Where your ideas take shape.

Reclaim



Scrapper® Extruder

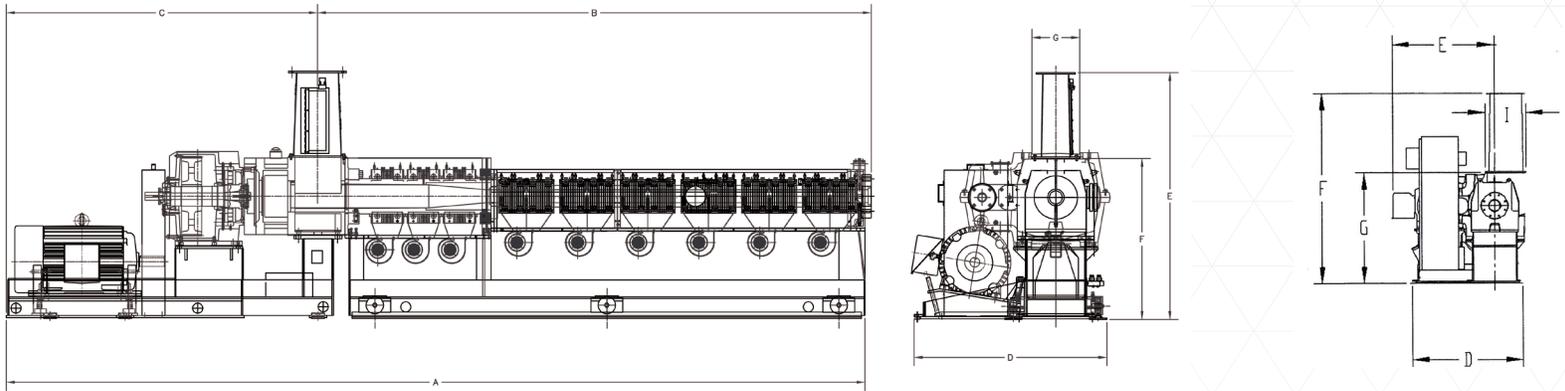
Overview

The Davis-Standard Scrapper® is a dual-diameter single screw extruder engineered for processing extremely light bulk density feed stocks. The Scrapper incorporates a large diameter feed area with a smaller diameter processing section. The feed section has an extra large opening and is water cooled. This allows the light material to reach the deep flighted screw where it is captured and forwarded through the transition into the melting/devolatilization/pumping zones.

Features

- The gear reducer, feed section, and drive motor are mounted to a rugged, fixed base.
- The transition and barrel are mounted on a rugged moveable base with casters and tracks to allow access to the screw for cleaning/removal.
- Barrel sections are bimetallic lined and the transition to the smaller diameter section is nitrided for long wear.

Scraper® Extruder



Machine Design Parameters

Model	350/600	450/800	650/1000	800/1400
Size	3 1/2 in. x 6 in. (89mm x 152mm)	4 1/2 in. x 8 in. (114mm x 203mm)	6 1/2 in. x 10 in. (165mm x 254mm)	8 in. x 14 in. (203mm x 356mm)
L/D Ratio	30:1	30:1	30:1	30:1
Standard Drive Size HP (kW)	150 (111 kW)	250 (187 kW)	500 (373 kW)	600 (448 kW)
Reduction Ratio	17:1	17:1	17:1	17:1
AGMA HP Rating @ 100 RPM	257 (192 kW) @ 1.25 SF	400 (298 kW) @ 1.5 SF	533 (397 kW) @ 1.5 SF	700 (522 kW) @ 1.5 SF
Thrust Bearing Avg. Life (Hours) @ 100 RPM, 5,000 PSI (344 bar) Continuous Operation	421,000 hrs.	453,000 hrs.	298,500 hrs.	103,500 hrs.
Maximum Internal Barrel Pressure (psi)	10,000 psi (689 bar)	10,000 psi (689 bar)	10,000 psi (689 bar)	10,000 psi (689 bar)
Heat Zone Data	Barrel Zones	5 + 1	7 + 2	7 + 2
	kW/Barrel Zone	11/24	15.6/33	24/54
Production Rates	PS Foam (lbs./hour)	250 - 500	600 - 900	1,300 - 1,800
	PE Foam (lbs./hour)	300 - 600	800 - 1,100	1,500 - 2,000

Machine Design Dimensions

Size	350/500	450/800	650/1000	800/1400
A	240 in. (6096mm)	300 in. (7620mm)	310 in. (7874mm)	470 in. (11,938mm)
B	145 in. (3683mm)	190 in. (4826mm)	270 in. (6858mm)	310 in. (7874mm)
C	95 in. (2413mm)	110 in. (2794mm)	140 in. (3556mm)	160 in. (4064mm)
D	54 in. (1371mm)	60 in. (1524mm)	60 in. (1524mm)	70 in. (1778mm)
E	85 in. (2159mm)	95 in. (2413mm)	105 in. (2667mm)	115 in. (2921mm)
F	56 in. (1422mm)	56 in. (1422mm)	63 in. (1600mm)	63 in. (1600mm)
G (L x W)	12 in. x 7 in. (304mm x 177mm)	16 in. x 9 in. (406mm x 228mm)	20 in. x 10 in. (508mm x 254mm)	28 in. x 16 in. (711mm x 406mm)