

Flawless implementation. Expert support.

Davis-Standard is recognized globally as the leader in high-performance converting and extrusion systems. But our capabilities go far beyond our equipment. They extend to our professional training experts, laboratory personnel, design engineers, and hands-on field engineers who work with you every step of the way. Your success is our success.

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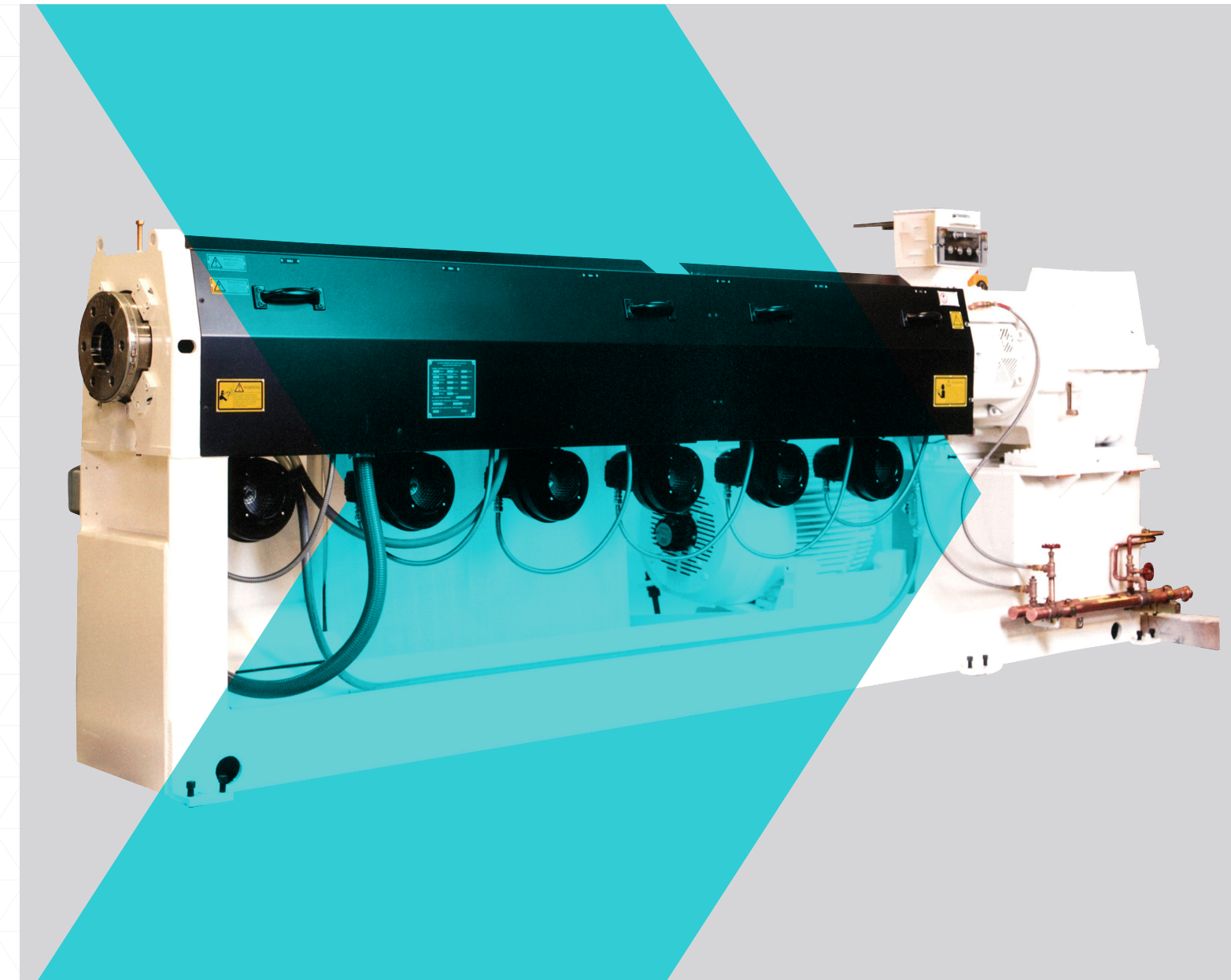
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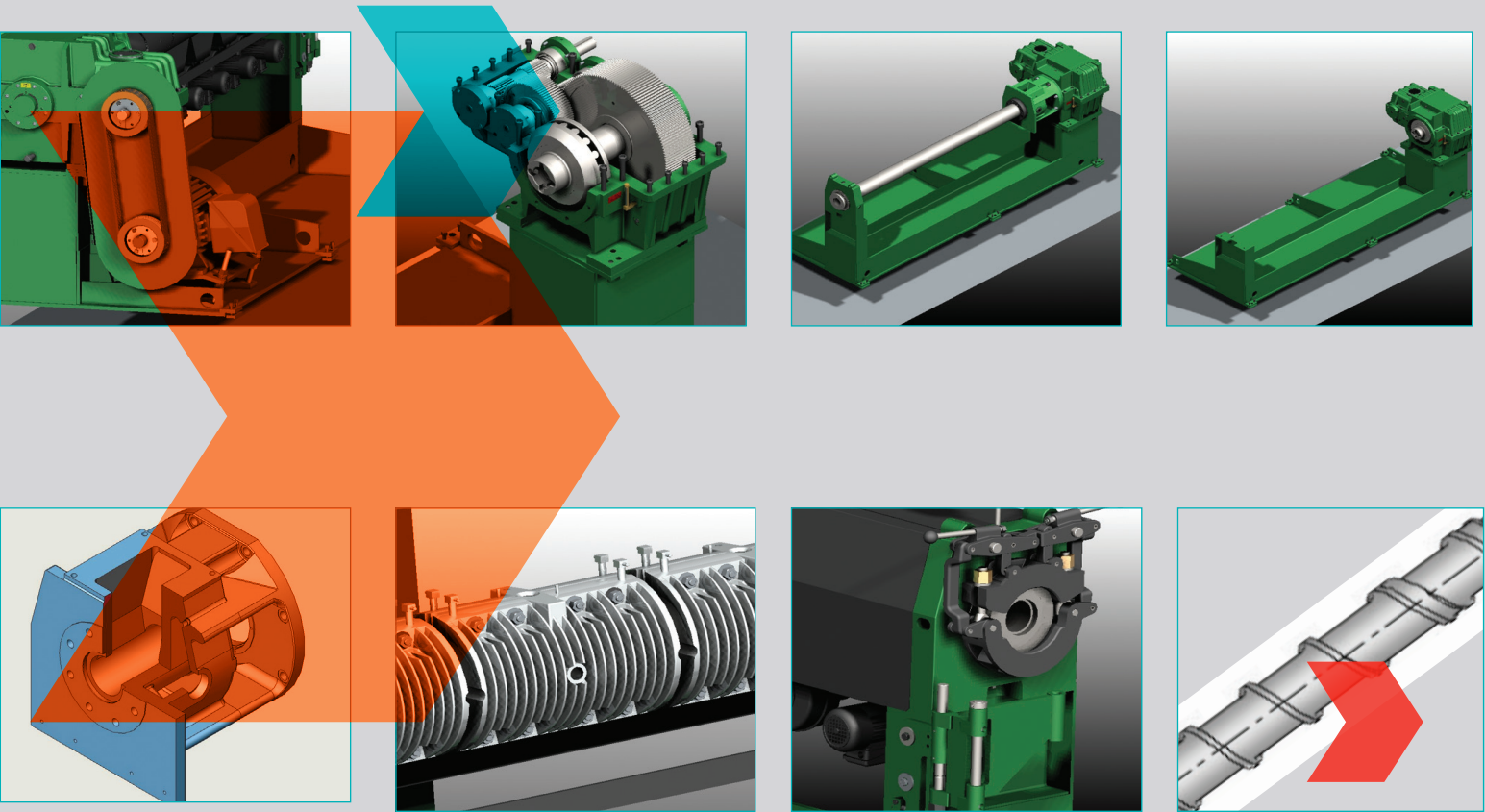
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Fibermaster® II Series Extruders



The Fibermaster® II extruder is built for peak performance at a low operating cost. A popular choice among industry-leading OEMs, this extruder is ideal for demanding fiber production requirements including monofilament, multifilament, spunbond, and meltblown processes. The Fibermaster is widely used within the hygienic, medical disposable, hazardous materials, filtration, staple fiber, carpet, and furniture markets. It has also been effective in laboratory and university/college environments for research and development. Advantages include the capacity to process a variety of resins, including materials with a high recycled content, and a versatile design for processing complex bi-component structures.

Features

- Heavy duty construction and front barrel support to withstand overhung loads and thermal expansion stresses
- Superior energy efficiency component by component, including thermal expansion helical gear cases, fully cored feed throats, and individual zone cooling capabilities
- Design flexibility for accommodating screen changes and melt pump or manifold connections
- Extensive feedscrew technology for processing PA 6, PA 66, PET, PP, PBT, PE, PPS, TPU, CO-PET, all nylons, and emerging resins
- Can be combined with another Fibermaster or other Davis-Standard extruder to achieve “A” and “B” output ratios from 80/20 to 50/50 to 20/80

AVAILABLE OPTIONS

- Casters, wheel pads, air pads for extruder mobility
- Manual or motorized screw ram assembly (screw removal jack)

MACHINE DESIGN PARAMETERS

	L/D Ratio	Standard Drive Size (HP)	Nominal Reduction Ratio*	AGMA HP Rating @ 100 RPM @ 1.25 SF	Thrust Bearing Bio Life (HRS) @ 100 RPM, 5,000 PSI Cont. Operation	Maximum Internal Barrel Pressure (PSI)	Weight	Length	Width	Height	BBL Zones	KWI Barrel Zone**	
2 inch	24:1	20	17:1	50	389,000	10,000	4,350 lbs. 1970 kgs.	75 in. 1905mm	42 in. 1070mm	73 in. 1855mm	3	5.6	
	30:1	20	17:1	50	389,000	10,000	4,550 lbs. 2065 kgs.	87 in. 2210mm	42 in. 1070mm	73 in. 1855mm	4	5.6	
2 1/2 inch	24:1	50	17:1	160	544,000	10,000	6,300 lbs. 2860 kgs.	99 in. 2515mm	49 in. 1245mm	76 in. 1930mm	4	7	
	30:1	60	17:1	160	544,000	10,000	6,500 lbs. 2950 kgs.	110 in. 2795mm	49 in. 1245mm	76 in. 1930mm	5	7	
75mm	25:1	75	17:1	160	179,000	10,000	6,500 lbs. 2950 kgs.	113 in. 2870mm	49 in. 1245mm	76 in. 1930mm	5	7	
	30:1	75	17:1	160	179,000	10,000	6,900 lbs. 3130 kgs.	127 in. 3225mm	49 in. 1245mm	76 in. 1930mm	6	7	
3 1/2 inch	24:1	125	17:1	256	421,000	10,000	9,500 lbs. 4310 kgs.	132 in. 3355mm	52 in. 1320mm	82 in. 2085mm	4	11	
	30:1	125	17:1	256	421,000	10,000	9,800 lbs. 4445 kgs.	148 in. 3760mm	52 in. 1320mm	82 in. 2085mm	5	11	
100mm	26:1	150	17:1	256	192,000	10,000	10,400 lbs. 2065 kgs.	148 in. 3760mm	52 in. 1320mm	82 in. 2085mm	5	11	
	30:1	150	17:1	256	192,000	10,000	11,000 lbs. 4490 kgs.	164 in. 4165mm	52 in. 1320mm	82 in. 2085mm	6	11	
4 1/2 inch	24:1	200	17:1	400	137,000	10,000	14,300 lbs. 6486 kgs.	165 in. 4191mm	63 in. 1600mm	86 in. 2184mm	5	15.6	
	30:1	200	17:1	400	137,000	10,000	14,500 lbs. 6577 kgs.	186 in. 4724mm	63 in. 1600mm	86 in. 2184mm	6	15.6	
130mm	25:1	300	17:1	400	58,000	10,000	15,100 lbs. 6849 kgs.	207 in. 5258mm	63 in. 1600mm	86 in. 2184mm	6	15.6	
	30:1	300	17:1	400	58,000	10,000	15,600 lbs. 7076 kgs.	222 in. 5639mm	63 in. 1600mm	86 in. 2184mm	7	15.6	
6 inch	24:1	400	17:1	530	257,000	10,000	18,500 lbs. 8391 kgs.	243 in. 6172mm	70 in. 1778mm	94 in. 2387mm	5	24	
	30:1	400	17:1	530	257,000	10,000	19,100 lbs. 8663 kgs.	270 in. 6,858mm	70 in. 1778mm	94 in. 2387mm	6	24	
* Other ratios available.											Our continuing program of product and process improvement may make changes necessary in specifications and data contained herein without notice. Due to variations in material, die, and other process requirements, actual outputs in the field may vary.		
** At 240/480V. Customer voltage requirements may affect wattage.													

DRIVE UNIT

Matched belts and sheaves are interchangeable to meet different torque and RPM needs. A belt guard is included. Direct coupled designs are also available.

GEARCASE

The double reduction gearbox features thermal expansion capabilities for machinery efficiency upwards of 90 percent. Also features helical gearing with self contained lubrication, radial tapered roller bearings, and integral assembled thrust bearing.

BARREL

One-piece, 4140 alloy steel barrel with bimetallic cast-in liner rated for 10,000 psi. Flanges machined in place for precision alignment. Special formulation liners are optional with corrosion and abrasion resistant characteristics.

BASE

A rugged steel weldment base enables the extruder and motor to be mounted in a single factory pre-wired and tested package. The front barrel support is ideal for overhung loads and manifold expansion forces.

FEED SECTION

Large feed opening to receive polymer from stainless steel hopper equipped with slide gate, dump drain, and sight glass. Feed section made of high strength casting cored for water cooling.

BARREL HEATING AND COOLING

High watt density aluminum Thermafin™ heaters contain cast-in heating elements for uniform and efficient heating of each barrel zone. A high velocity blower for each zone is used for cooling. Zones are completely isolated to prevent air leakage and permit individual zone control. Insulated dual hoods provide thermal protection. Water-cooling is available for high heat extraction requirements.

HEAD CLAMP

A double swing bold head clamp is standard on 1 1/2-inch (40mm) sizes and optional on 2-inch (50mm) to 8-inch (200mm) sizes. Head clamps can be supplied with or without cartridge heaters. An over-pressure rupture disc is standard. These extruders have been specifically designed to easily accommodate screen changer, melt pump, or manifold connections. Threaded or bolt circle barrel flanges are also available.

SCREW

DSBM-T™ feedscrews that are chrome plated and cored for cooling are engineered for processing a range of resins including PET, PP, PBT, PE, CO-PET, all nylons, and other emerging engineered resins. Optional screw designs are available.