

# Tech Table: COMPRESSION MOLDING MACHINES

By Grace Nehls / Assistant Editor

► The use of composite materials in compression molding has provided an increasingly attractive opportunity for the fabrication of lightweight, affordable components for a variety of end markets, including automotive, aerospace and others. Compression molding is particularly attractive because of its repeatability and high-volume capability. As a result, compression molding machine manufacturers have accelerated and expanded press offerings over the last few years, from standard presses to tailor-made machines.

This table of vertical-only hydraulic compression molding machines was built with data provided either directly by each supplier, or from published data. It should be noted that CW limited each company in this table to a maximum of eight products, thus it is not a comprehensive list of all presses available from all suppliers. Further, whether each company solely offers standard presses, custom presses or both, has been delineated; to

better indicate what is offered to customers, companies that specialize in custom-only capabilities have provided press examples. For more information on these and other composites industry products, please visit the CW SourceBook database to find and identify suppliers.

While CW was unable to receive data from all compression molding press suppliers, prominent companies unlisted — but which should be distinguished in this area — include Magnum Press, Globe Machine, Pacific Press Technologies, Italpresse USA and Siempelkamp.

This is the third in a series of Tech Tables CW has published in 2020, each designed to provide as comprehensive a list as possible of suppliers, their products and selected product data. CW's first Tech Table, published in January 2020, covers aerospace structural adhesives, and its second Tech Table, published in August 2020, details mold release agents. **cw**

TECH TABLE: COMPRESSION MOLDING MACHINES										
*E=electric; O=oil; S=steam										
Company	Trade name/ brand name	Press footprint (mm)	Max clamping force (metric tons)	Heated platens offered? (Y/N)	Heat source*	Platen dimensions (mm)	Ram/piston stroke length (mm)	Multiple daylight openings? (Y/N)	Daylight opening length (mm)	Standard presses, custom or both?
CARVER INC.	4386 Model CH	483 x 406	11	Y	E	152 x 152	125	N	0-381	Both
	4122 Model 12-12H	737 x 686	11	Y	E	305 x 305	125	N	0-254	
	693 Model 25-15H	813 x 711	23	Y	E	381 x 381	165	N	127	
	4129 Model 30-12-2H	813 x 686	27	Y	E	305 x 305	152	Y	51-76	
	3889 Auto C-NE,H	940 x 559 x 1,118	14	Y	E	152 x 152	152	N	0-356	
	3893 Auto Four 1512-NE,H AutoFour 1512-NE,H	1,143 x 711 x 1,168	14	Y	E	305 x 305	152	N	0-305	
	4533 Auto Four 3015-NE,H	1,143 x 711 x 1,168	27	Y	E	381 x 381	152	N	0-305	
	5403 Auto Four 4818-NE,H	1,549 x 1,194 x 1,803	44	Y	E	457 x 457	102	N	0-381	
	WABASH MPI	G30H-15 Genesis Compression	1,067 x 1,016 x 1,829	27	Y	E	381 x 381	152	Y	152-305
G100H-24 Genesis Compression		1,524 x 1,346 x 2,108	91	Y	E	610 x 610	305	Y	305-559	
GT30H-15 Genesis Transfer		1,067 x 1,295 x 2,413	27	Y	E	381 x 381	152	N	152-305	
VT100H-24 Vantage Transfer		1,072 x 991 x 2,667	91	Y	E	610 x 610	305	N	305-508	

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WABASH MPI (continued)	200H-30 Vantage Compression	2,083 x 1,067 x 2,159	181	Y	E	762 x 762	406	Y	406-711	
	400H-42 Vantage Compression	2,438 x 1,219 x 2,159	363	Y	E	1,067 x 1,067	406	Y	406-762	
	700H-48 Vantage Compression	2,819 x 1,448 x 3,048	635	Y	E	1,219 x 1,219	457	Y	457	
	400H-72x48 Custom Compression	3,327 x 1,702 x 4,013	363	Y	E	1,829 x 1,219	610	Y	610	
BECKWOOD PRESS CO.	Beckwood	Custom	Up to 4,536	Y	E, O, S	Custom	Custom	Y	Custom	Custom
	Triform Fluid Cell Sheet Hydroforming	Varies	Varies	N	N/A	Round, up to 1,727 mm diameter	N/A	N	N/A	
	EVOx C3-100	1,626 x 1,143 x 3,454	45	Y	E, O, S	508 x 762	up to 610	N	up to 610	
	EVOx P3-100 4-Post	1,321 x 1,270 x 3,531	45	Y	E	610 x 914	up to 610	N	up to 762	
WICKERT PRESS	WLP 1600S		160	Y	E, O	483 x 381	279	N	279	Custom
	WKP 4400S		440	Y	E, O	1,803 x 1,194	1,448	Y	1,499	
	WKP 10000S		1,000	Y	E, O	1,397 x 1,245	1,067	Y	1,600	
	WKP 100000		10,000	Y	E, O	3,302 x 3,734	508	Y	508	
DIEFFENBACHER GMBH	DCE 1000		1,020	Y	E, O, S	2,800 x 2,000	1,400	N	2,000	Both
	DCE 1500		1,530	Y	E, O, S	3,200 x 2,200	1,800	N	2,400	
	DCE 2000		2,039	Y	E, O, S	3,200 x 2,200	1,800	N	2,400	
	DCE 2500		2,549	Y	E, O, S	3,600 x 2,500	1,800	N	2,400	
	DCE 3000		3,059	Y	E, O, S	3,600 x 2,500	1,800	N	2,400	
	Fiberpress 2500		2,549	Y	E, O, S	3,600 x 2,500	2,000	N	2,800	
	Fiberpress 3600		3,671	Y	E, O, S	3,600 x 2,500	2,000	N	2,800	
	Fiberpress 5000		5,099	Y	E, O, S	4,000 x 2,800	2,000	N	2,800	
	FRENCH OIL MILL MACHINERY	30 Ton Vison	1,016 x 762	27	Y	E	381 x 381	152	N	279
100 Ton Vacuum Vision Press		1,372 x 1,143	91	Y	E	457 x 457	152	Y	76	
200 Ton Multi Daylight Press		1,067 x 1,168	181	Y	E	559 x 559	203	Y	305	
400 Ton Vacuum Press		1,422 x 1,118	363	Y	E	610 x 610	508	N	406	
600 Ton Press		2,108 x 1,626	544	Y	E	1,067 x 1,067	838	N	914	
850 Ton Press		1,549 x 1,067	771	Y	E	1,016 x 1,016	762	Y	432	

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FRENCH OIL MILL MACHINERY (continued)	1300 Ton Multi Daylight	2,032 x 2,159	1,179	Y	E	1,422 x 1,422		Y	76	
	2200 Ton Press	2,159 x 1,829	1,196	Y	S	1,626 x 1,626	1,016	N	1,219	
GREENERD PRESS	Four Post	Custom	Unlimited	Y	E, O, S	Custom	Custom	Y	Custom	Custom
	Straight Side	Custom	Unlimited	Y	E, O, S	Custom	Custom	Y	Custom	
	Open Gap - C-Frame	Custom	2,000	Y	E, O, S	Custom	Custom	Y	Custom	
PINETTE EMIDECAU INDUSTRIES	Laboratory		30-100	Y	E, O	300 x 300 to 600 x 600	300-500	N	300-500	Custom
	TP Stamping		50-120	Y	E, O	300 x 600 to 3,000 x 2,500	500-1,500	N	500-2,000	
	TP Consolidation		50-2,500	Y	E, O	500 x 500 to 5,000 x 3,500	300-800	Y	300-800	
	SMC		300-5,000	N		1,000 x 600 to 4,000 x 3,000	800-2,000	N	800-3,000	
	RTM		100-1,500	Y	E, O	600 x 600 to 10,000 x 3,000	300-600	N	400-1,110	
	Ballistic		300-7,000	Y	E, O	600 x 600 to 1,700 x 2,600	500-1,500	Y	600-2,000	
	Honeycomb forming		100-500	Y	E, O	1,200 x 1,200 to 3,000 x 4,000	400-1,000	Y	400-1,500	
	R&D		30-1,500	Y	E, O, S	300 x 300 to 4,000 x 3,000	300-2,200	Y	300-2,500	
SCHULER GROUP		Custom (10,000 kN)	867	Y	E, O, S	2,000 x 1,600	1,700	Y		Both
		Custom (18,000 kN)	1,632	Y	E, O, S	2,800 x 1,800	1,800	Y		
		Custom (25,000 kN)	2,243	Y	E, O, S	2,800 x 2,000	1,800	Y		
		Custom (36,000 kN)	3,263	Y	E, O, S	3,600 x 2,400	1,900	Y		
MACRODYNE TECHNOLOGIES	Model No. PPM-50	Custom	50-500	Y	E,O,S	To spec.	To spec.	Y	To spec.	Custom
	Model No. PPM-500	Custom	500-1,000	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM- 1000	Custom	1,000-1,500	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM-1500	Custom	1,500-2,000	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM-2000	Custom	2,000-2,500	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM-2500	Custom	2,500-3,000	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM- 3000	Custom	3,000-3,500	Y	E,O,S	To spec.	To spec.	Y	To spec.	
	Model No. PPM- 3500+	Custom	3,500+	Y	E,O,S	To spec.	To spec.	Y	To spec.	