VANDORN DEMAG

Praxis SERIES

Van Dorn Demag, the leading manufacturer of vertical injection molding machines, introduces the innovative Praxis Series. The Praxis 280 System and Praxis 380 System, our first models, are two-platen vertical presses that address the growing need for insert molding, over-molding and multi-component molding in many market segments. They especially fill the need for large tonnage vertical machines equipped with rotary tables. Our machines are designed specifically for the North American market, and will range from 60 to 380 tons.

Key Praxis 280 System and Praxis 380 System features:

- Two-platen design
- Spread frame design for the largest available mold space in the tonnage range
- Increased platen area for mold utility connections
- Rotary table with largest diameter in tonnage range; two or three station with oscillating capabilities; low profile and work height eliminates platforms and simplifies automation
- Clamp's multi-point guidance system ensures platen parallelism and maintains durability
- Precise clamp positioning and superior mold protection
- Pivoting capabilities on rotating ram injection unit
- Single point, adjustable centerline of injection
- Little or no lubrication required
- All the features needed for cleanroom applications, such as cleanliness, precision, repeatability, energy consumption savings, less maintenance, and quiet operation
- Modular design for easy installation
- Designed, manufactured and supported in the U.S.

Injection Unit – Praxis 280

International Size		500		720		1220		1920	
	Measure	Std.	HiPr	Std.	HiPr	Std.	HiPr	Std.	HiPr
Injection Capacity (GPPS)	oz. g	10.7 303.3	8.5 241.0	14.7 416.7	11.9 337.4	25.4 720.1	17.6 499.0	40.3 1,142.5	29.6 839.2
Injection Capacity	cu. in ccm	19.7 322.9	15.6 255.7	27.0 422.5	21.8 357.3	46.6 763.8	32.4 531.0	74.0 1,212.9	54.4 891.6
Recovery Rate-Std.	oz./sec. g/sec.	1.18 33.5	1.31 37.1	1.38 39.1	1.67 47.3	1.67 47.3	1.52 43.1	2.19 62.1	1.39 39.4
Injection Pressure	psi bar	24,088 1,660.1	30,486 2,101.0	23,757 1,637.3	29,329 2,021.3	23,264 1,603.3	33,501 2,308.8	22,916 1,579.3	31,191 2,149.6
Injection Rate (@ 10,000psi) (@ 700 bar)	cu.in./sec. ccm/sec.	22.3 365.5	17.6 288.5	22.6 370.4	18.3 299.9	23.1 378.6	16.0 262.2	23.5 385.2	17.2 281.9
Injection Stroke	in. mm	8.0 203.2	8.0 203.2	8.9 226.1	8.9 226.1	10.6 269.2	10.6 269.2	12.4 315.0	12.4 315.0
Screw Diameter	in. mm	1.77 45.0	1.57 39.9	1.97 50.0	1.77 45.0	2.36 60.0	1.97 50.0	2.76 70.0	2.36 60.0
Screw L/D Ratio		20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1
Maximum Screw Speed-Std.	rpm rpm	318 318	450 450	286 286	450 450	239 239	317 317	199 199	199 199
Back Pressure Adjust	psi bar	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7
Barrel Heating Capacity	kW	10.3	9.5	13.7	11.7	21.7	17.9	33.4	25.6

Clamp Unit

Clamp Force	U.S. tons kN	280 2,492
Clamp Stroke-Max.	in. mm	19.7 500.4
Open Daylight-Max.	in. mm	39.4 1,000.8
Mold Thickness-Min.	in. mm	19.7 500.4
Effective Mold Size-Max. Depth Effective Mold Size-Max. Width	in. mm in. mm	25.9 657.9 37.9 962.7
Tie Bar Diameter		
Diameter Vertical	in. mm in. mm	4.70 119.4 65.4 1,661.0
Clamp Speeds		
Closing Opening	in./sec mm/sec in./sec mm/sec	12.0 304.8 6.0 152.4
Ejector Force	U.S. tons kN	12.6 112.1
Ejector Stroke	in. mm	3.5 88.9

The specifications listed are standard. However, Van Dorn Demag will provide engineered options and solutions to meet virtually any performance requirements including high-pressure and high-speed configurations.

General Machine Specifications

	Measure	720	1220	1920
Pump Motor	hp kW	50 37.5	50 37.5	50 37.5
Pump Capacity @100psi	gpm Lpm	63 238.8	63 238.8	63 238.8
Oil Capacity	gal. L	125 473.8	125 473.8	125 473.8
Machine Weight (approx.)	lb. kg	44,000 19,800	44,000 19,800	44,000 19,800
Machine Dimensions				
Length	ft. m	19.2 5.9	19.2 5.9	19.2 5.9
Width*	ft. m	12.6 3.8	12.6 3.8	12.6 3.8
Height	ft. m	10.0 3.0	10.0 3.0	10.5 3.2

*Includes swing arm.

Performance specifications are based on theoretical data and mold, material and conditions. Since continuous improvement is Van Dorn Demag's policy, we reserve the right to change specifications, designs and performance data without prior notice or obligation.

Injection Unit – Praxis 380

International Size		500		720		1220		1920	
	Measure	Std.	HiPr	Std.	HiPr	Std.	HiPr	Std.	HiPr
Injection Capacity (GPPS)	oz. g	10.7 303.3	8.5 241.0	14.7 416.7	11.9 337.4	25.4 720.1	17.6 499.0	40.3 1,142.5	29.6 839.2
Injection Capacity	cu. in ccm	19.7 322.9	15.6 255.7	27.0 422.5	21.8 357.3	46.6 763.8	32.4 531.0	74.0 1,212.9	54.4 891.6
Recovery Rate-Std.	oz./sec. g/sec.	1.18 33.5	1.31 37.1	1.38 39.1	1.67 47.3	1.67 47.3	1.52 43.1	2.19 62.1	1.39 39.4
Injection Pressure	psi bar	24,088 1,660.1	30,486 2,101.0	23,757 1,637.3	29,329 2,021.3	23,264 1,603.3	33,501 2,308.8	22,916 1,579.3	31,191 2,149.6
Injection Rate (@ 10,000psi) (@ 700 bar)	cu.in./sec. ccm/sec.	22.3 365.5	17.6 288.5	22.6 370.4	18.3 299.9	23.1 378.6	16.0 262.2	23.5 385.2	17.2 281.9
Injection Stroke	in. mm	8.0 203.2	8.0 203.2	8.9 226.1	8.9 226.1	10.6 269.2	10.6 269.2	12.4 315.0	12.4 315.0
Screw Diameter	in. mm	1.77 45.0	1.57 39.9	1.97 50.0	1.77 45.0	2.36 60.0	1.97 50.0	2.76 70.0	2.36 60.0
Screw L/D Ratio		20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1	20/1 20/1
Maximum Screw Speed-Std.	rpm rpm	318 318	450 450	286 286	450 450	239 239	317 317	199 199	199 199
Back Pressure Adjust	psi bar	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7	50-300 3.4-20.7
Barrel Heating Capacity	kW	10.3	9.5	13.7	11.7	21.7	17.9	33.4	25.6

Clamp Unit

Clamp Force	U.S. tons kN	380.0 3,382
Clamp Stroke-Max.	in. mm	19.7 500.4
Open Daylight-Max.	in. mm	39.4 1,000.8
Mold Thickness-Min.	in. mm	19.7 500.4
Mold Thickness-Max.	in. mm	39.4 1,000.8
Mold Area, Two Station-Max. Depth Mold Area, Two Station-Max. Width**	in. mm in. mm	30.0 762.0 42.0 1,066.8
Rotary Table Diameter	in. mm	86.2 2,189.5
Station to Station Time-Two Stations	sec.	4.0
Station to Station Time-Three Stations	sec.	3.0
Tie Bar Diameter		
Diameter Vertical	in. mm in. mm	4.70 119.4 65.4 1,661.0
Clamp Speeds		
Closing Opening	in./sec mm/sec in./sec mm/sec	6.0 152.4 4.0 101.6
Ejector Force	U.S. tons kN	12.6 112.1
Ejector Stroke	in. mm	3.5 88.9

General Machine Specifications

	Measure	720	1220	1920
Pump Motor	hp kW	50.0 37.5	50.0 37.5	50.0 37.5
Pump Capacity @100psi	gpm Lpm	63.0 238.8	63.0 238.8	63.0 238.8
Oil Capacity	gal. L	125.0 473.8	125.0 473.8	125.0 473.8
Machine Weight (approx.)	lb. kg	*	*	*
Machine Dimensions				
Length	ft. m	*	*	*
Width	ft. m	*	*	*
Height	ft. m	*	*	*

*Consult your sales representative.

Performance specifications are based on theoretical data and mold, material and conditions. Since continuous improvement is Van Dorn Demag's policy, we reserve the right to change specifications, designs and performance data without prior notice or obligation.

The specifications listed are standard. However, Van Dorn Demag will provide engineered options and solutions to meet virtually any performance requirements including high-pressure and high-speed configurations.

**For Mold Area, Three Station-Max. Depth and Width, consult your sales representative.

MOLDER ACTION NETWORK

Supportive. Responsive. Dependable. Our commitment to realizing 100% customer satisfaction relies on these directives, giving you the highest level of after-sale service. That is why we invested in the strongest molder resource in the industry – the **Molder ction Network**.

The Molder ction Network links our customer support services to coordinate support, enhance delivery and improve uptime over the life of your machine.

Field Service

Choose either our telephone or e-mail troubleshooting service – whichever is more convenient for you. When necessary, our friendly, factory-trained Service Engineers provide fast response to requests for machine service or advice on machine maintenance and operation.

Customer Training

Complementing our World Headquarters in Strongsville, Ohio, satellite locations are conveniently located across the United States to provide molders comprehensive training on all machinery and control systems, including hands-on experience in a demonstration lab. Training programs can also be arranged as can training in Spanish as well as English.

Replacement Parts

Van Dorn Demag maintains an extensive, computerized inventory of replacement parts to assure customers of quick delivery. Check parts pricing, availability, or order status with our industry leading Quick Track[SM] or explore the online store at our Web site. ll orders from stock are shipped within 24 hours.

Modernization

Our expert staff of technicians is proficient in modernizing existing machinery with many of the latest technologies. Upgrades to your installed base will add efficiency and profitability.

Process Solutions

The Process Solutions Center is available to customers both before and after a sale. Whether running trials on a mold, machine run-off prior to delivery, or troubleshooting processes in the field, our Process Solutions Center staff is ready and waiting to Deliver More for you.

A1577 ISO 9001
QS9000 TE-Supplement

Van Dorn Demag
Injection Molding Machine Series
Van Dorn 28–125 Cadence Series
Van Dorn 30–400 Newbury Vertical Series
Van Dorn 60-380 Praxis Vertical Series
Van Dorn 50-625 IntElect Series
Van Dorn 85–650 HT Series
Van Dorn 500–880 Spectra Series
Van Dorn 500–4400 Caliber Series

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