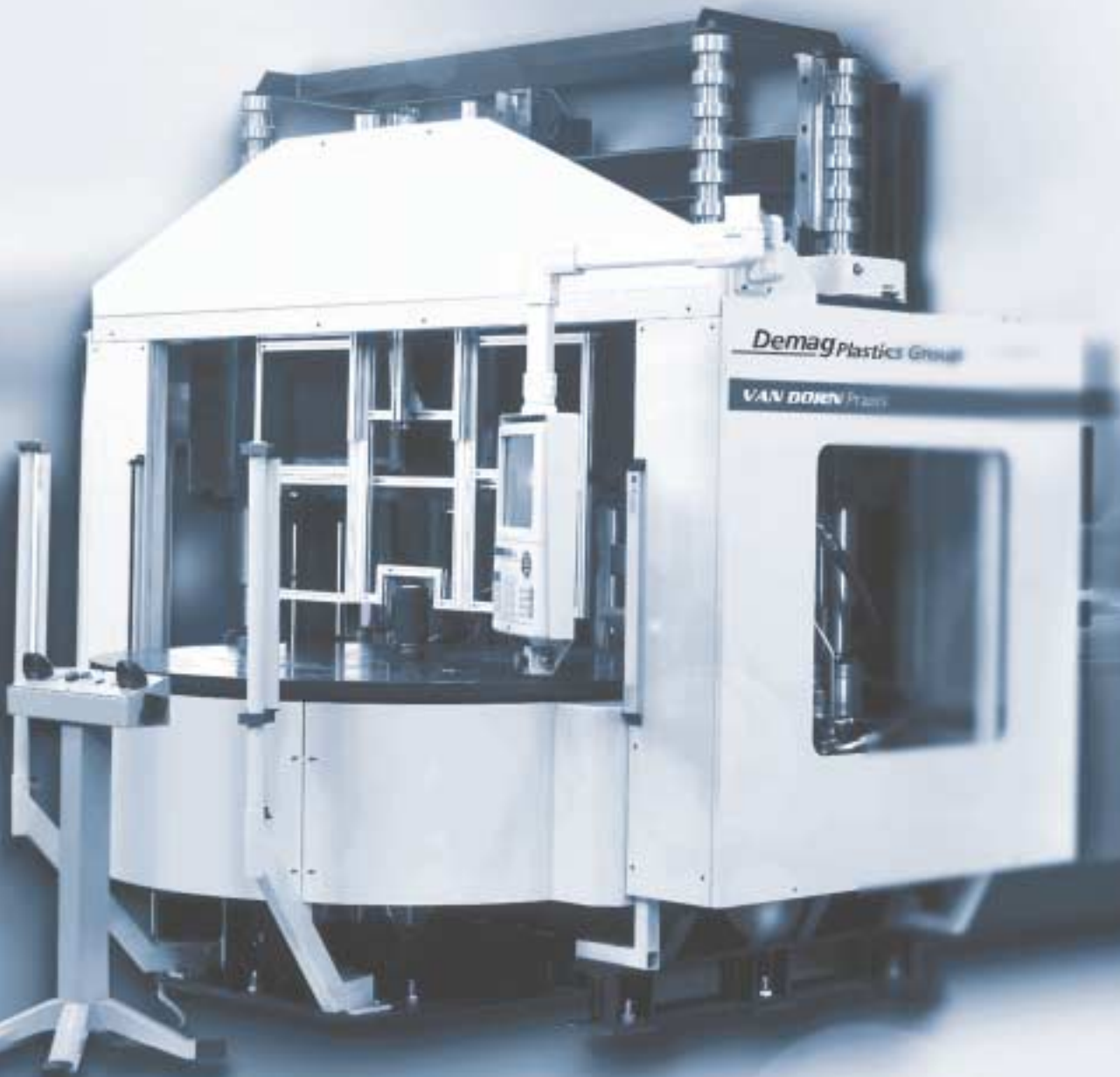


FLEXIBLE MOTIONS

Van Dorn Praxis



DemagPlastics Group
VAN DORN

VAN DORN PRAXIS

UNIQUE MOTIONS

Interaction between Man and Technology

Van Dorn Demag, the leading manufacturer of vertical injection molding machines, introduces the innovative Praxis Series. The Praxis 280, our first model, is a two-platen vertical press that addresses 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.

Engineered specifically to help our customers be more competitive by increasing productivity. The Praxis Series allows customers to reduce labor and assembly time as well as downstream processes.



Key Praxis 280 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 clean-room 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.

PRAXIS

PRAXIS

PRAXIS 280 – INJECTION UNIT

International Size	Measure	500		720		1220		1920	
		Std.	HiPr	Std.	HiPr	Std.	HiPr	Std.	HiPr
Injection Capacity (GPPS)	oz.	10.7	8.5	14.7	11.9	25.4	17.6	40.3	29.6
	g	303.3	241.0	416.7	337.4	720.1	499.0	1,142.5	839.2
Injection Capacity	cu.in.	19.7	15.6	27.0	21.8	46.6	32.4	74.0	54.4
	ccm	322.9	255.7	422.5	357.3	763.8	531.0	1,212.9	891.6
Recovery Rate-Std.	oz./sec.	1.18	1.31	1.38	1.67	1.67	1.52	2.19	1.39
	g/sec.	33.5	37.1	39.1	47.3	47.3	43.1	62.1	39.4
Injection Pressure	psi	24,088	30,486	23,757	29,329	23,264	33,501	22,916	31,191
	bar	1,660.1	2,101.0	1,637.3	2,021.3	1,603.3	2,308.8	1,579.3	2,149.6
Injection Rate @10,000psi, @700bar	cu.in./sec.	22.3	17.6	22.6	18.3	23.1	16.0	23.5	17.2
	ccm/sec.	365.5	288.5	370.4	299.9	378.6	262.2	385.2	281.9
Injection Stroke	in.	8.0	8.0	8.9	8.9	10.6	10.6	12.4	12.4
	mm	203.2	203.2	226.1	226.1	269.2	269.2	315.0	315.0
Screw Diameter	in.	1.77	1.57	1.97	1.77	2.36	1.97	2.76	2.36
	mm	45.0	39.9	50.0	45.0	60.0	50.0	70.0	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	318	450	286	450	239	317	199	199
	rpm	318	450	286	450	239	317	199	199
Back Pressure Adjust	psi	50-300	50-300	50-300	50-300	50-300	50-300	50-300	50-300
	bar	3.4-20.7	3.4-20.7	3.4-20.7	3.4-20.7	3.4-20.7	3.4-20.7	3.4-20.7	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	280
	kN	2,492
Clamp Stroke-Max.	in.	19.7
	mm	500
Open Daylight-Max	in.	39.4
	mm	1,000
Mold Thickness-Min.	in.	19.7
	mm	500
Mold Thickness-Max.	in.	39.4
	mm	1,000
Mold Area, Two Station-Max. Depth	in.	26
	mm	660
Mold Area, Two Station-Max. Width	in.	38
	mm	965
Rotary Table Diameter	in.	74.8
	mm	1,900
Station to Station Time-Two Stations	sec.	4.0
Station to Station Time-Three Stations	sec.	3.0
Ejector Force	U.S. tons	12.6
	kN	112
Ejector Stroke	in.	3.5
	mm	89

CLAMP UNIT

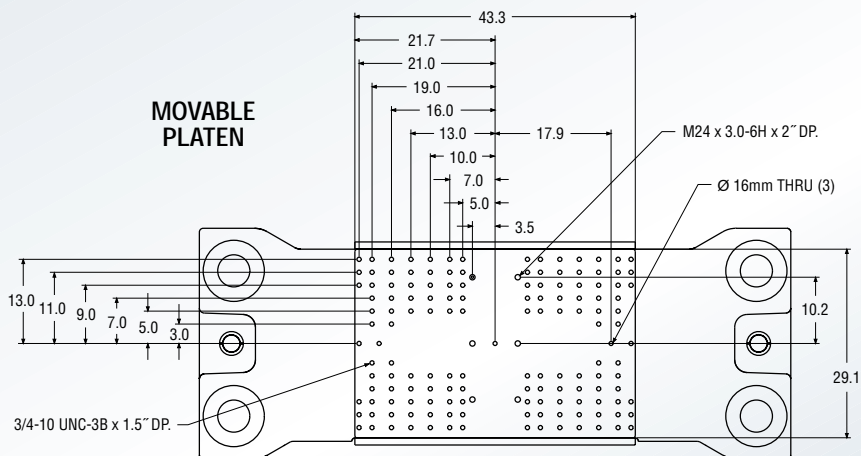
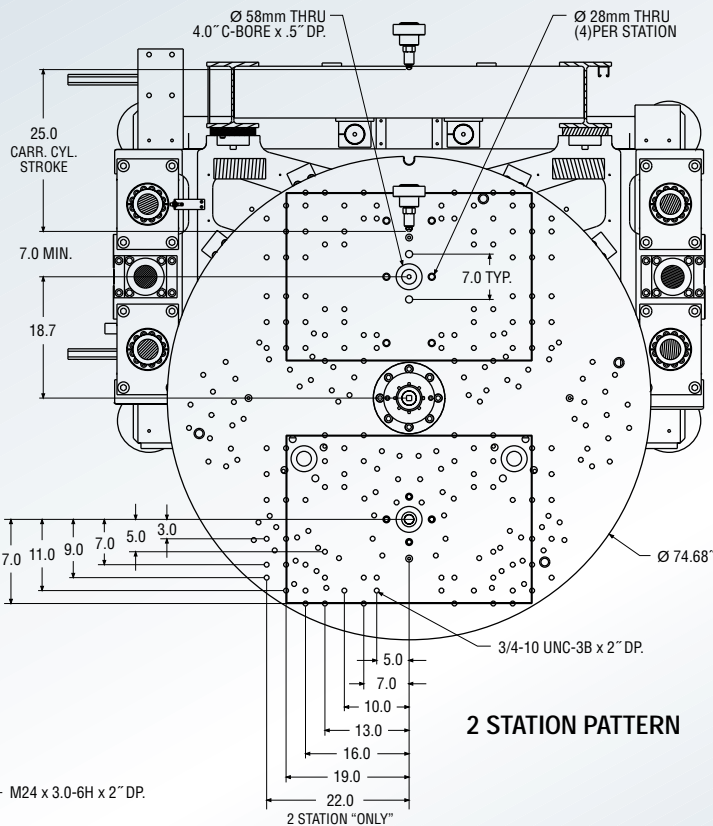
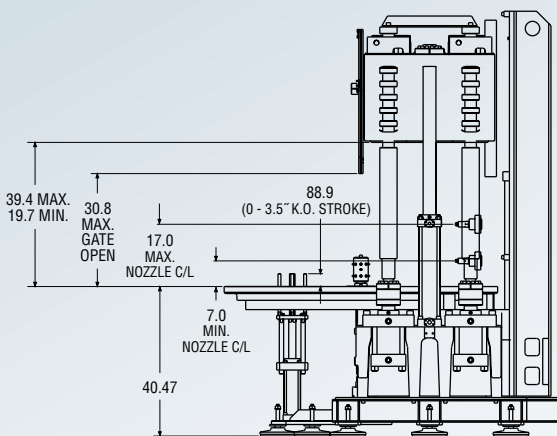
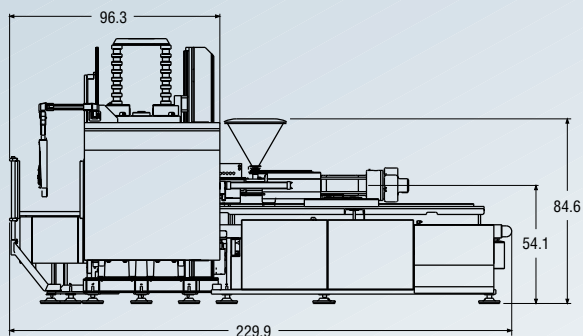
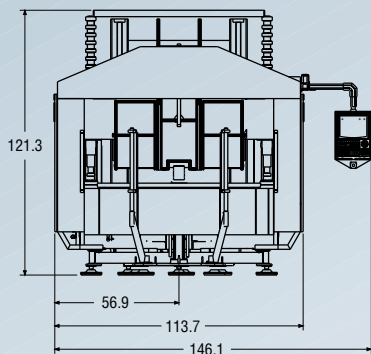
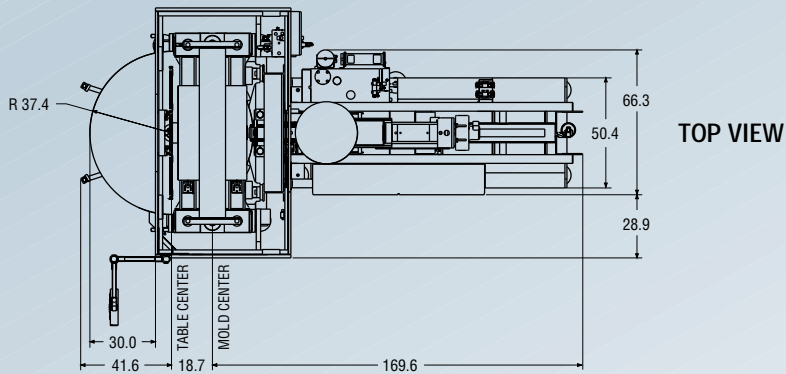
The specifications listed are standard. However, Van Dorn Demag will provide engineered options and solutions to meet virtually any performance requirements including high-pressure and high-speed configurations.

GENERAL MACHINE SPECIFICATIONS

	Measure	500/720	1220	1920
Pump Motor	hp	50.0	50.0	50.0
	kW	37.5	37.5	37.5
Pump Capacity @100psi	gpm	63.0	63.0	63.0
	Lpm	238.8	238.8	238.8
Oil Capacity	gal.	125.0	125.0	125.0
	L	473.8	473.8	473.8
Machine Weight (approx.)	lb.	44,000	44,000	44,000
	kg	19,800	19,800	19,800
Machine Dimensions:				
Length	ft.	19.2	19.2	19.2
	m	5.9	5.9	5.9
Width*	ft.	10.3	10.3	10.3
	m	3.1	3.1	3.1
Height	ft.	10.0	10.0	10.0
	m	3.0	3.0	3.3
*includes swingarm				
Clamp Speeds:				
Closing	in./sec.	11.6		
	mm/sec.	294		
Opening	in./sec.	5.9		
	mm/sec.	150		

GENERAL MACHINE SPECIFICATIONS

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.



MARKET TRENDS

Industry in Motion

Why Use a Vertical Machine?

- Shuttle and rotary tables increase productivity:
 - Eliminates idle operator time
 - Multiple bottoms loaded while molding
 - Reduce work in process
 - Reduce labor vs. assembly
- Easier and safer
- Gravity:
 - Eliminates magnets, grippers and other special mold designs
 - Parts remain in mold until removed – not dropped ensuring surface finish and no damage
- Smaller footprint
 - Efficient use of floor space
- Easier to automate
- Specifically designed for insert applications

Considerations when evaluating new vertical applications:

- How the insert will be handled – operator or robot-placing the insert into the mold
- The most efficient orientation of the insert which will result in the best part quality
- Flow analysis of the plastic around the insert
- Single station, shuttle table, or rotary table
- How parts will be removed
- Downstream assembly, inspection or testing

Insert Molding Applications:

- Automotive Applications
- Appliance Applications
- Electronics Applications
- Medical Applications
- Marine Applications
- Office Furniture Applications



MOLDER ACTION NETWORK

Our commitment to 100 percent customer satisfaction is part of the Van Dorn experience. That is why we created the Molder Action Network – total support with one call. Contact us at 866-491-1045 or visit www.molderactionnetwork.com.



REPLACEMENT PARTS

Van Dorn maintains an extensive, computerized inventory of replacement parts to assure customers of quick delivery.



TECHNICAL SERVICE

The Molder Action Network's Technical Service Department is standing by with a wide range of services – installation and start-up, troubleshooting, field service and preventive maintenance.



TRAINING

We offer classes at three different customer training centers located in Strongsville, Ohio; Greenville, South Carolina; and Roselle, Illinois. Training, tailored to meet your needs, can also be arranged at your facility.



PROCESS SOLUTIONS CENTER

This center, available to customers before and after a sale, is a state-of-the-art lab facility for mold trials, machine run-offs prior to delivery or troubleshooting processes in the field.

ENERGY SAVINGS

Sky-rocketing energy costs have changed the economics of the injection molding business. The Molder Action Network can help you cut your power bills down to size.

ONLINE STORE

Order parts from our new online store where convenience and ease are our main priority. We can accept payment via credit cards or purchase orders.

Van Dorn Demag Corporation
11792 Alameda Drive
Strongsville, Ohio 44149 USA
tel: 440/876.8960, fax: 440/876.4383
web: www.vandorndemag.com
e-mail: susan.mann@dpg.com

Since continuous improvement is Van Dorn Demag's policy, we reserve the right to change information without prior notice or obligation.