

High Pressure RIM Metering System

The Omega RIM™



Built to last.

THE OMEGARIM is a state-of-the-art high pressure polyurethane metering and dispensing machine designed and manufactured by Gusmer-Admiral, Inc., with special attention to accuracy and performance reliability. It allows the production of both large and small parts within an acceptable cream time.

The OmegaRim brings you all the advantages of high pressure RIM processing eliminating the price gap between low and high pressure equipment.

ELIMINATE EXTRA COSTS:

- The cost of wasted material that must be flushed out of the mixer.
- The cost associated with disposal of flushed materials.
- The cost of water additives or flush solvents required.
- The cost of extra time to flush the mixhead.

ENJOY THE ADVANTAGES:

- Use faster reacting chemistry processed by high pressure machinery.
- Get splash-free open pouring with a Gusmer-Admiral L-style mixing head.
- Get better fill in closed mold applications with the high forward velocity generated by a Gusmer-Admiral Straight-style mixing head.

AVAILABLE OPTIONS:

- TEMPERATURE CONTROL SYSTEMS
Conditioning units are available in a wide range of capacities, in order to maintain temperature critical to your specific processing needs.

The Omega RIM™

HYDRAULIC SYSTEM

The Hydraulic Poser System provides the hydraulics to operate the mix head. The open design format facilitates operation, servicing, and maintenance.

TWO STEEL RAW MATERIAL DAY TANKS.

Constructed for operation up to 110 psi. Removable tops for easy maintenance. Tank levels visible from the outside via sight tube. Tank stand allows access for maintenance. Standard pressure relief safety system. 20 gallon tank capacity.

DAY TANK PRESSURIZATION SYSTEM

All-inclusive system maintains a dry air blanket (uses minus 40 degree dewpoint air or nitrogen) on the day tanks. Separate check valves are provided to isolate the isocyanate and polyol air streams to prevent chemical contamination.

TUBE & SHELL HEAT EXCHANGERS

allow maximum heat recovery with minimum pressure loss. Tubes are stainless steel preventing chemical attack.

FLOW METERS

The gusmer-Admiral flow measuring system provides accurate digital readout of flow, eliminating the mess and inconvenience of wet calibration.

PUMP METERING SYSTEM

Each metering pump is a precision Positive Displacement Axial Piston Pump driven by a variable speed motor for adjustment of throughput and ratio control. The metering pumps feature critical modifications designed and manufactured by Gusmer-Admiral.

A spring loaded, mechanical face seal housed in an environmentally sealed reservoir provides an industry leading service life and ease of maintenance not available with the conventional lip seal used by competitors.



The OmegaRim metering system has been field proven and accepted to perform with accuracy and repeatability well within the tolerances generally required by systems specifications.



- **AUTOFILL SYSTEM**
Automatically controls day tank liquid levels, and can operate from a variety of different feed pumps, including bulk storage.
- **AIR OPERATED TANK AGITATORS**
Maintain uniform temperature and chemical composition within the day tanks, preventing separation of the chemical components.
- **MOVABLE BOOM**
Supports mix head for easy access to molds and pouring targets. 8 ft. boom swings 90° with adjustable height settings.
- **VOLTAGE OPTIONS**
The OmegaRim can be factory wired to operate at 230, 380, 460, or 575 volts. It can comply with Canadian standards.

The OmegaRim is designed to manufacture a wide variety of urethane products at up to 100lbs./min. @ 1:1 ratio.

- Decorative molding
- Leisure products
- Coolers
- Toys
- Snowmobile, bicycle seats
- Aircraft interiors
- Furniture
- Office panels, dividers
- Safety products, flotation devices
- Mannequins
- Medical devices
- Prosthetics
- Taxidermy
- Skis, boats
- Insoles, footwear
- Entry doors
- Columns & rails
- Construction panels
- Cooler panels
- Refrigerated display cases
- Spas, hot tubs
- Automotive armrests



PROGRAMMABLE LOGIC CONTROL

The Touchscreen is a multi-functional, easy to use interface, allowing you to adjust and fine tune processing parameters. Features digital readout for output and ratio, fault monitoring messages, and various sequencing options.



REMOTE OPERATION STATION provides the operator with convenient access to controls such as dispense, on/off, emergency shut off, and 99 selectable shot times.

EMERGENCY SHUT OFF SWITCH On main panel and remote operation station.

HIGH/LOW PRESSURE SWITCHES for each chemical to prevent cross-over.

WELDED STEEL FRAME with an integral aluminum hydraulic tank. The compact Gusmer-Admiral open design facilitates easy access for operation, service, and maintenance, providing a service-friendly environment.

HIGH PERFORMANCE MIX HEAD.

RIM mixhead with an integral hydraulic power pack is mechanically self cleaning. Choose from L-style for open pour or Straight-style at no change in price. L-style mixhead provides high pressure impingement mixing and reduced outlet velocity to minimize splash.



The Omega Rim incorporates the same high quality features found in all our high pressure RIM equipment.



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TECHNICAL SPECIFICATIONS



BULK STORAGE SYSTEMS

INCREASE YOUR PRODUCTION CAPACITY



TURNKEY PRODUCTION LINES



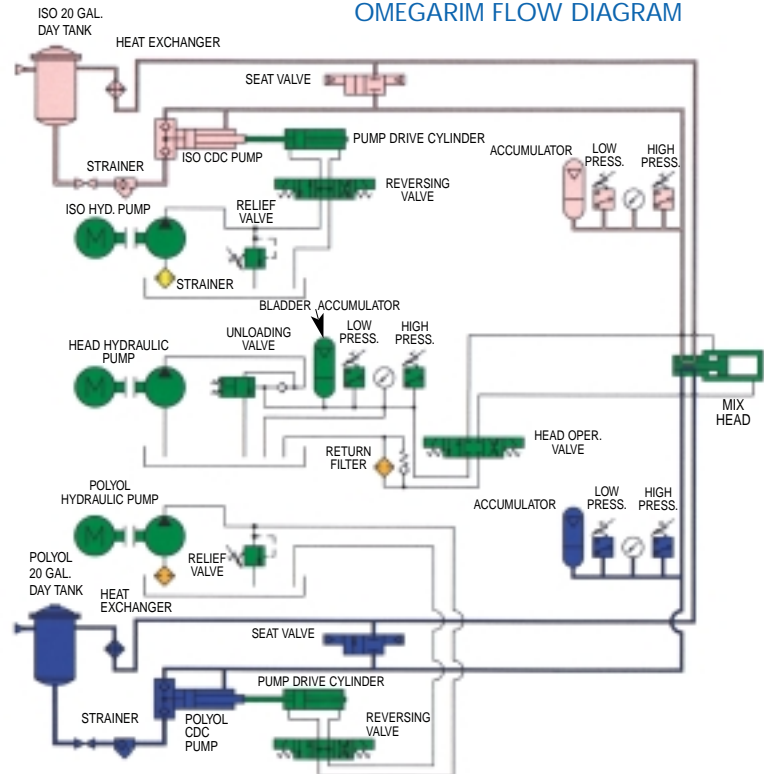
ASK ABOUT THE FULL LINE OF GUSMER-ADMIRAL RIM METERING UNITS TO SUIT YOUR PARTICULAR APPLICATION.

The OmegaRim is rated for 50/60Hz operation

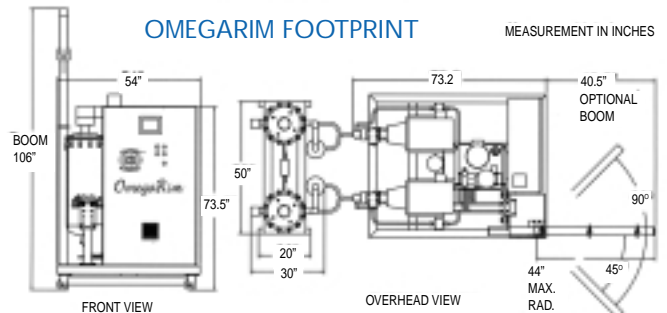
	OmegaRim 50	OmegaRim 100
Max. Throughput - lbs. per min (Kg/min) @ a ratio of 1:1	50 (23)	100 (45)
Min. Throughput - lbs. per min (Kg/min) @ a ratio of 1:1	10 (4.5)	20 (9.1)
Ratio Range, Variable	1:5 to 5:1	1:5 to 5:1
Power Required at 230V, 3PH50	50	104
Power Required at 380V, 3PH	29	61
Power required at 460 V, 3PH	25	52
Power required at 575 V, 3PH	20	41
Maximum Working Pressure - psi (bar)	3000(207)	3000(207)
Floor Space-Sq. Ft. (Meters Sq.)	40(4)	40(4)
Approximate Dry Weight-lbs. (Kg.)	1250(560)	1500(680)
Plant Air Required*	2-5 CFM @ 100psig*	2-5 CFM @ 100psig*

* when using a 20 gallon tank reservoir and optional agitator .

OMEGARIM FLOW DIAGRAM



OMEGARIM FOOTPRINT



WARNING: The equipment described herein must only be operated or serviced by properly trained individuals, thoroughly familiar with the operating instructions and limitations of the equipment.
 NOTICE: All statements, information and data given herein are believed to be accurate and reliable but are presented without guarantee, warranty or responsibility of any kind expressed or implied. Statements or suggestions concerning possible use of GUSMER-ADMIRAL Equipment are made without representation or warranty that any such use is free of patent infringement, and are not recommendations to infringe any patent. The user should not assume that all safety measures are indicated or that other measures may not be required.
 NOTE: All standard and service specifications identified on the GUSMER-ADMIRAL technical sales flyer are based on U.S. standards.

Part #: OMEGARIM 06/2000

CALL TODAY TO ARRANGE A DEMONSTRATION OR CHEMICAL SYSTEM TRIAL AT OUR CONVENIENT OHIO LOCATION



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