

# Patriot™ Innovator Pro Injection System

RTM INJECTION SYSTEM



**PATRIOT**  
Precision & Performance

**Highly Accurate Patriot™ Mix/Meter Technology**

**Operated Solely Through Pneumatics**

**Patented Automatic Pro Gun Mix Head**

**Resin Gel Alarm**

**Mold Pressure Guard**

**Recirculation Control**

**MAGNUM VENUS PLASTECH**  
™

# Patriot™ Innovator Pro Injection System

RTM INJECTION SYSTEM



The M.V.P. Patriot™ Innovator Pro Injection System delivers power, versatility, automation and unprecedented precision to the composites production process.

The Patriot™ Innovator Pro Injection System was designed for injecting polyester, vinylester and methacrylate resins and catalyst at controlled pressures. The mixing of the materials happens at the injection head, and the catalyst ratio can be adjusted from 0.75% to 2.5%.

The **fully pneumatic** automated controls, controlling the number of strokes during injections, recirculation, and more makes the process easier and more efficient. Included features of this system include: Resin Gel Alarm (RGA), Mold Pressure Guard (MPG), Recirculation Package, Gun/TurboAutosprue on/off, and the flush controls. It is also designed to include the optional Pneumatic PV Sensor, Pneumatic AutoCatch and Heater Control.

Both the Fluid Section and Catalyst Pump on Patriot™ feature the new “self-healing” seal that has the lowest coefficients of friction available today. This seal does not require packing adjustments, and greatly reduces the problems associated with heat buildup and wear.



The extremely low variance rate offered by the Patriot™ Innovator Pro Injection System makes this system ideal for closed mold processes. The closed molding process requires a higher level of precision with every cycle, and the testing has shown that Patriot™ delivers the most efficient and consistent level of precision for this process. If the injection system is inconsistent, the quality of the product will be inconsistent.

## SPECIFICATIONS:

**Output Capabilities:** .....Up to 7.5 lbs./min.  
(3.4 kg/min.)  
*depending on materials & application*

**Catalyst** .....0.75% to 2.5% by volume

**Displacement:** .....2.45 in.<sup>3</sup> (40.15 cc)/stroke  
or 4.90 in.<sup>3</sup> (80.3 cc)/cycle

**Pump Ratio:** ..... 7:1

**Maximum Fluid Outlet Pressure:** ..... 1500 psi  
(76 bar, 7.6 MPa)

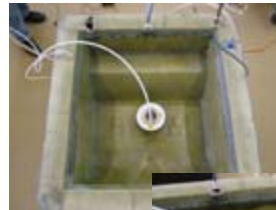
**Maximum Air Input Pressure:**..... 100 psi  
(7 bar, 0.7 MPa)



*Pneumatic Controls*



*Automatic RTM ProGun*



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