



# PUMP SPECIFICATIONS

## RMC Rear Mount Pump

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### DETAILED SPECIFICATIONS

#### SPECIAL NOTE:

When preparing the specifications for your new pumper, assure the use of a Hale pump by incorporating these pump specifications as written. No competitive pump can match Hale's construction or performance.

#### Pump Assembly

1. The pump shall be of a size and design to mount on commercial and custom truck chassis, and have the capacity of \_\_\_\_\_ gallons per minute (U.S. GPM), NFPA 1901 rated performance.
2. The entire pump shall be manufactured and tested at the pump manufacturer's factory.
3. The pump shall be driven by a transmission mounted or split drive line power take-off (PTO). The engine shall provide sufficient horsepower and RPM to enable pump to meet and exceed its rated performance.
4. The entire pump, both suction and discharge passages, shall be hydrostatically tested to a pressure of 500 PSI. The pump shall be fully tested at the pump manufacturer's factory to the performance spots as outlined by the latest NFPA Standard 1901. Pump shall be free from objectionable pulsation and vibration.
5. The pump body and related parts shall be of fine grain alloy cast iron, with a minimum tensile strength of 30,000 PSI. All moving parts in contact with water shall be of high quality bronze or stainless steel. Pump utilizing castings made of lower tensile strength cast iron not acceptable.
6. Pump body shall be vertically split, on a single plane, for easy removal of impeller assembly, including clearance rings.
7. Pump/drive shaft to be rigidly supported by four bearings for minimum deflection. The bearings shall be heavy-duty, deep groove ball bearings and they shall be splash lubricated.
8. The pump/drive shaft shall have only one mechanical seal. The mechanical seal shall be spring loaded, maintenance free and self-adjusting. (No exceptions.)
9. Pump impeller shall be hard, fine grain bronze of the mixed flow design; accurately machined, hand-ground and individually balanced. The vanes of the impeller intake eye shall be hand-ground and polished to a sharp edge, and be of sufficient size and design to provide ample reserve capacity utilizing minimum horsepower.
10. Impeller clearance rings shall be bronze, easily renewable without replacing impeller or pump volute body. (No exceptions.)
11. The pump/drive shaft shall be heat-treated, electric furnace, corrosion resistant, stainless steel. Pump shaft must be sealed with double lip oil seal to keep road dirt and water out of bearings.



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## **Pump Bearing Housing**

1. The pump bearing housing shall be manufactured and tested at the pump manufacturer's factory.
2. The pump bearing housing shall be of sufficient size to withstand the torque of the engine in pump operating conditions. The pump bearing housing shall be designed of ample capacity for lubrication reserve and to maintain the proper operating temperature.
3. Pumps requiring a direct mounted gearbox are not acceptable.

## **Priming Pump**

1. The priming pump shall be a positive displacement, oil-less rotary vane electric motor driven pump conforming to the requirements of NFPA 1901. The pump body shall be manufactured of heat treated anodized aluminum for wear and corrosion resistance.
2. The pump shall be capable of producing a minimum 24 Hg vacuum at 2000 feet above sea level.
3. The electric motor shall be a 12 VDC (or 24 VDC) totally enclosed unit.
4. The priming pump shall not require lubrication.
5. The priming pump shall be operated by a single push-pull control valve mounted on the pump operator panel. The control valve shall be of all bronze construction.

NOTE: The RMC pump body is also available as an option in bronze