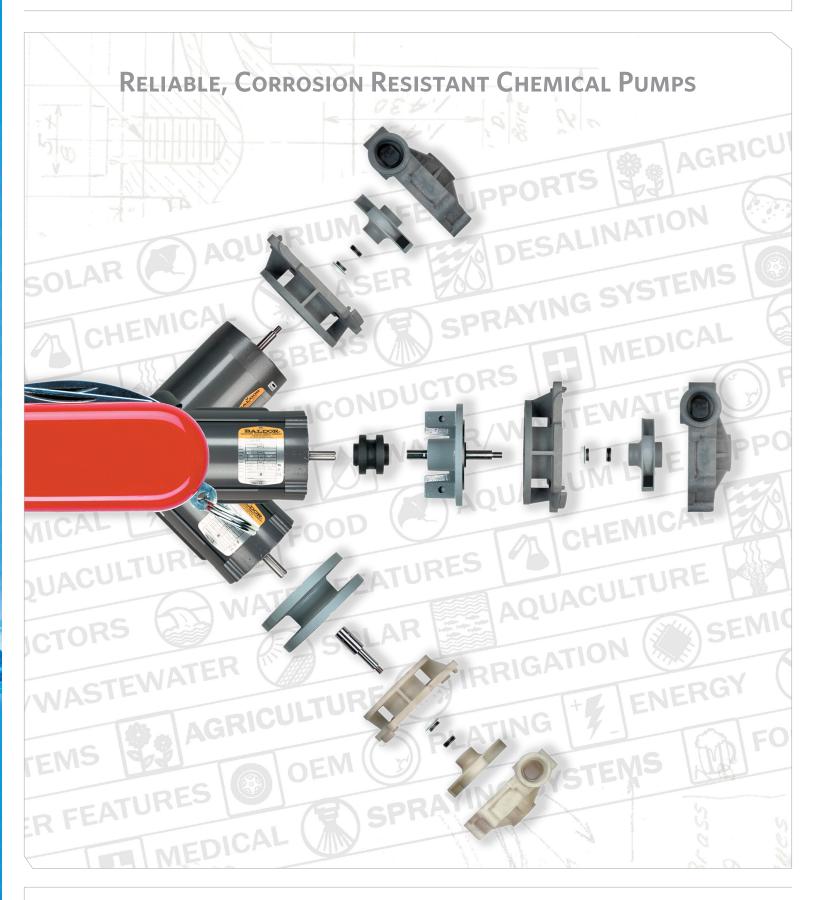
# ADVANCE 4000 PUMP

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TECHNICAL SPECIFICATIONS PERFORMANCE CURVES PRODUCT PHOTOS

# 4000 Product brochure



ADVANCE PUMPS

800.447.8342 dvancepumps.com



#### **CLOSE-COUPLED AND EXTENSION BRACKET**

The Advance® 4000 is designed to mount directly to NEMA 56J motors (C-face, threaded shaft), which are readily available in 1ø and 3ø, ODP, TEFC & TENV configurations. An extension bracket and 316 S.S. extension shaft are available to enable the use of a NEMA 56C motor (C-face, keyed shaft), which are also available in explosion-proof & chemical duty configurations.



# **BEARING PEDESTAL**

A heavy-duty, bearing pedestal mount power frame is available for long coupling to a variety of motors, PTO, and engine drives.

# DESIGN

The Advance<sup>®</sup> 4000 is a close coupled, end suction centrifugal pump line which is molded in glass-filled polypropylene. Its high efficiency design makes it suitable for medium flows [to 200 GPM] and higher heads [up to 80' TDH]. When fitted with the patented Impenatra<sup>®</sup> Seal, the Advance<sup>®</sup> 4000 provides total non-metallic contact, while maintaining the benefits of a direct drive unit.

The design of the pump, coupled with the chosen resins, produces a strong, durable, versatile unit. When used with the patented Impenatra® seal, the fluid pumped does not contact any metal parts. This allows it to properly handle many applications at a fraction of the cost of exotic alloys.

# **APPLICATIONS**

Typical applications serviced by the Advance® 4000 include filtration systems, deionized water transfer, waste water reclamation, pressure spray systems, fountains, plating chemical transfer and recirculation, fume scrubbers, pollution control equipment, and transfer of chemical process fluids.

#### **CORROSION RESISTANCE:**

Here is a small sampling of the chemicals handled:

- Sodium Hydroxide (10%)
- Ammonium Hydroxide (10%)
- Sodium Bicarbonate (SAT.)
- Potassium Bicarbonate (SAT.) Demineralized Water • Ferric Chloride (SAT.)
- Acetic Acid (10%) Nickel Plating Solutions
- Ethylene Glycol
- Ammonium Phosphate (SAT.)

# PERFORMANCE

Engineered for high efficiency, Advance® impellers are enclosed to accommodate a wide variety of pressures and fluids. The standard impeller trims deliver the performances listed at 60 HZ. [3450 RPM]. Contact factory for 50Hz performances.

# VERSATILITY

The pump can be close coupled to a 56J motor or mounted to a bearing pedestal. Both single and three phase motors in ODP and TEFC enclosures are readily available. An adapter kit is available to convert to a 56C flange. A variety of elastomers, seals, impellers, and motors, can be combined to meet your exact requirements. All units are bench tested prior to shipping.

# MARKETING

We are structured to sell unassembled pump ends, as well as completely assembled pump and motor units. We specialize in serving OEM's and distributors throughout the world.





#### NEW VARIABLE SPEED DRIVE PUMP SYSTEM

The amazing versatility of MDM's Advance<sup>®</sup> Pumps has been improved once again with the addition of the Yaskawa V1000 Variable Speed Drive, which is now available as a newly designed fluid control system. The combination of these two respected industry brands has produced a system that saves energy, increases efficiency and allows for the pumps to run at different speeds for different demands. This increased flexibility also adds to the life of the motor since the V1000 VFD ensures that it only runs at the necessary speed. This added efficiency also reduces cost of ownership over the lifetime of the product. In fact, some utilities even offer rebates for installing variable speed drives in new or retrofit work. Another added benefit of the V1000 Energy Saving Control feature is that it ensures optimum performance by supplying the proper voltage for the load on the motor, thus maintaining the right amount of motor slip. Since system conditions frequently require reducing the flow rate, the design experts at MDM will size the pump to meet the maximum flow rate required by the system. Throttling valves, which are commonly installed to adjust the pump output are effective, but not energy efficient. A better and more energy-efficient design feature utilized by our engineers involves adjusting the pump impeller speeds, so the pump delivers only the required flow.

# PUMP PERFORMANCE FEATURES (@ 60 HZ)

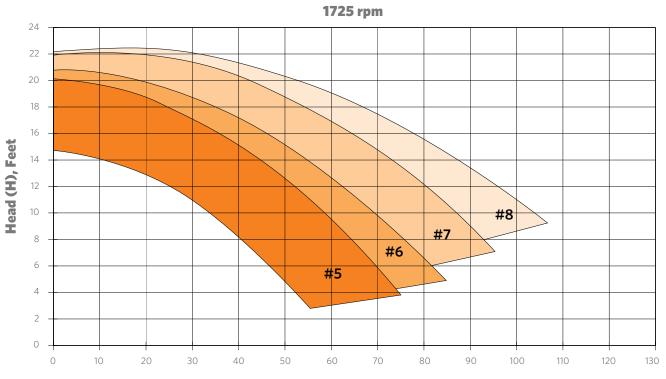
- Up to 200 GPM
- Up to 80 feet TDH
- Up to 5 HP (3.7 KW)

#### **BENEFITS:**

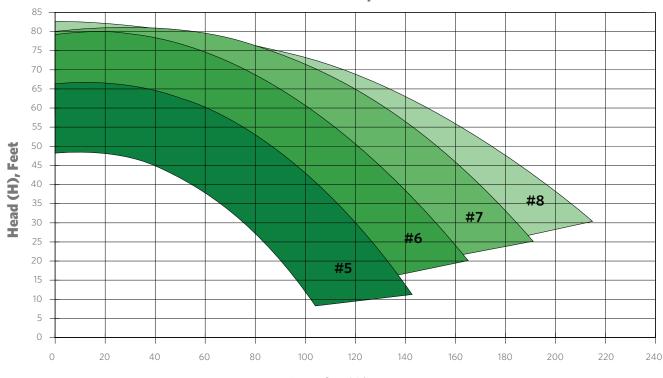
- Energy Savings
- Increased Equipment Life
- · Easily adjustable flow rates optimum pump output to meet demand
- Inherent soft-starting reduces wear and tear on motors and other system components such as piping and valves.
- Some utilities offer rebates for installing variable speed drives in new or retrofit work.
- · Ability for integration with your system automation and monitoring

For cost savings, efficiency, reliability and hands-on personalized service, turn to the professionals at MDM Incorporated.





Capacity (Q), USgpm



3450 rpm

Capacity (Q), USgpm

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