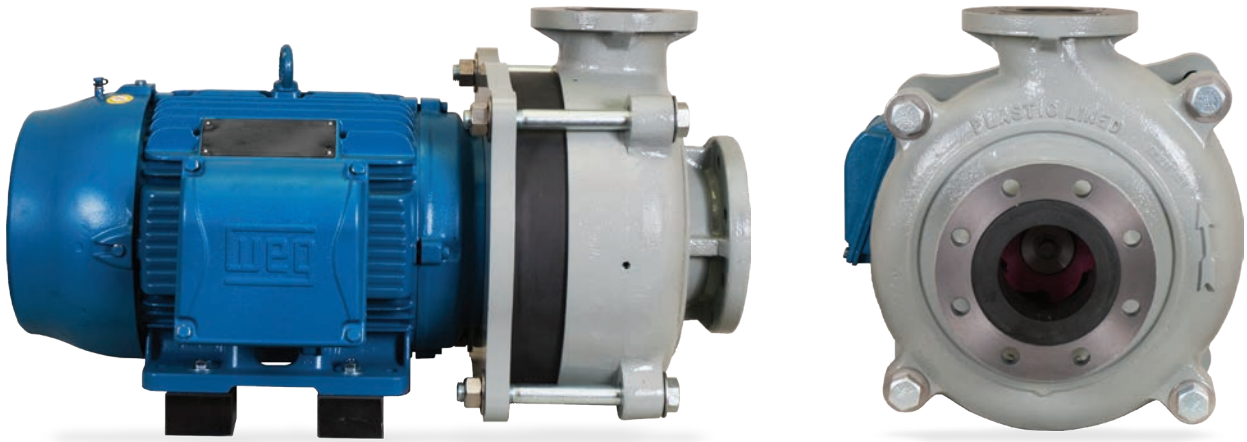


**GENERATED FROM EFFICIENCY.  
ADAPTED FOR FLOW. BUILT FOR LONGEVITY.**



AN MDM PUMPS PRODUCT

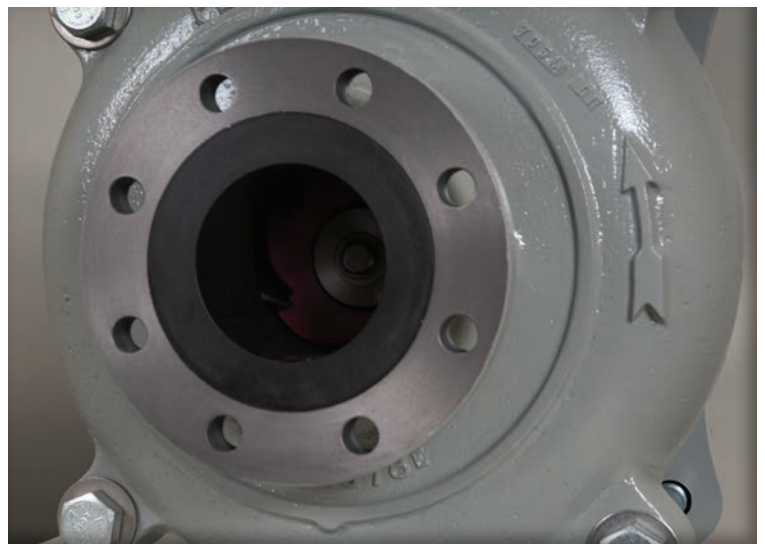
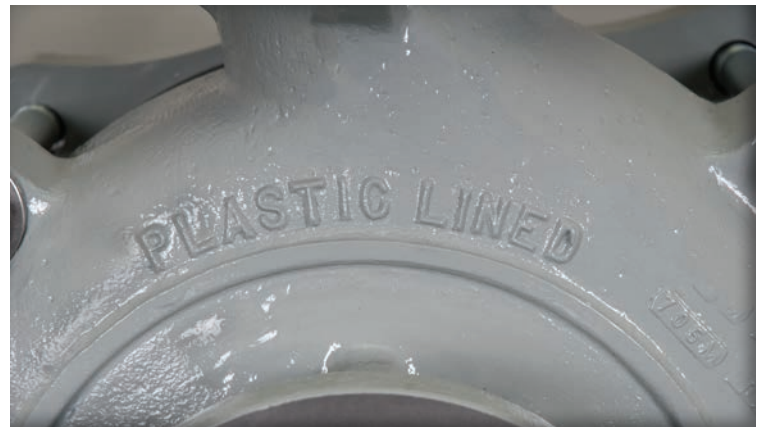


### Generated From Efficiency

Since 1978, MDM's vision has been to manufacture non-metallic, end-suction pumps. In 1981, MDM acquired Advance Pump Co. primarily for the high efficiency hydraulic IP designs of their pumps. That included a fairly complete line of cast iron end-suction centrifugal pumps as well as deep-well submersibles. MDM's goal was to re-engineer the centrifugal lines for use in the Chemical Process Industry (CPI) and other corrosive-handling markets. That was a market that MDM was currently serving with their own non-metallic (thermoplastic) pumps. Advance's end-suction centrifugal line was then re-engineered to be cast in 316 stainless. Initial production parts were put in the field and performed well. The end came when Goulds Pumps imported stamped stainless pumps at half the price.

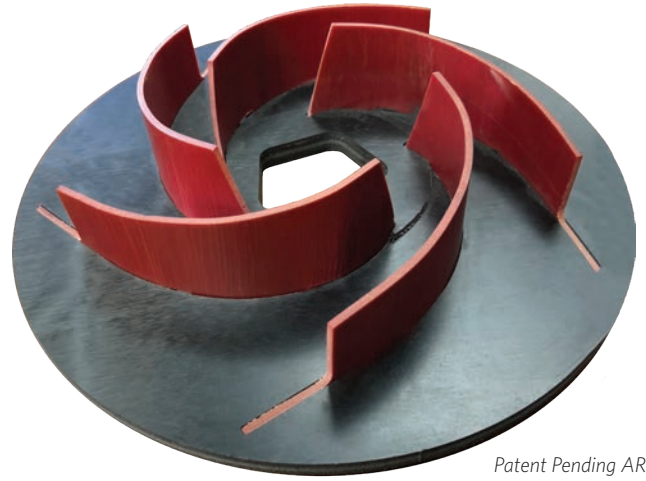
MDM then had no choice but to try to lead the way in developing a larger line of non-metallic, end-suction centrifugal pumps. Goulds and Ingersoll-Rand had already developed a complete and larger line of Resin-Transfer Molded (RTM) pumps, but efficiencies were low due to a variety of production limitations. Another type of product in the market were armored pumps consisting of metallic cast pump shells with a non-metallic lining. Due to MDM's commitment to providing the highest efficiencies and the lowest possible operating costs, MDM decided NOT to pursue making an RTM line of pumps but began developing the very risky and bleeding edge technology of applying bulk-molded compounds (BMC) to making thermoset pumps with smooth surfaces and unmachined surfaces (to net). It took a long time of experimentation but the final result was the BMC product line GENESYS® made to B73lean® specifications.

Pursuit of larger GENESYS® cases continue, but MDM has taken the leap of stepping into the market with their own version of an armored composite shell pump now called "C-Shell."



**Adapted For Flow**

Along with the release of our new Composite Shell pump series, MDM has implemented the innovative *Edge impeller technology* providing flow-biased pump performance that significantly exceeds current centrifugal performances. The ultra-strong yet thin vane design of *Edge impellers* provides for reduced vane solidity and frictional losses, allowing for extended mass flows and increased efficiencies. The oversized volutes, shaped by thermoset polymer within a nearly indestructible iron shell, offer high flows at low rotational speeds for nearly silent operation. The close-coupled design, using standard NEMA JM motors allow for a 50-75% space reduction compared to the common ASME/ANSI style frame mounted pumps while maintaining the benefits of a centerline discharge.



Patent Pending ARI

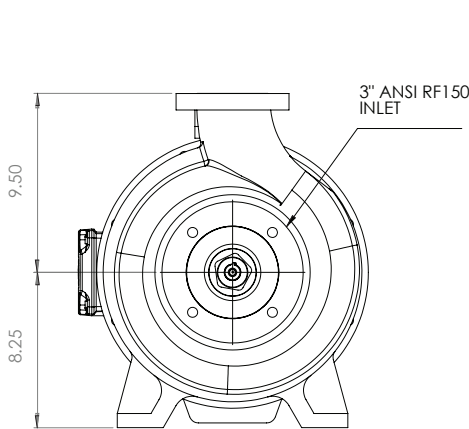
**Built For Longevity**

Over the past 5 years, MDM has also developed a custom pump selection software designed to make accurate selections from extensive test data. Our pump selection standards and principles exceed industry specifications. Focusing on each customer need as a tailored solution, the C-Shell pump configurations will always be selected for optimum efficiency, longevity and value for our customers. This partner-based philosophy provides customers with the highest Return-On-Investment and the lowest total cost of ownership.

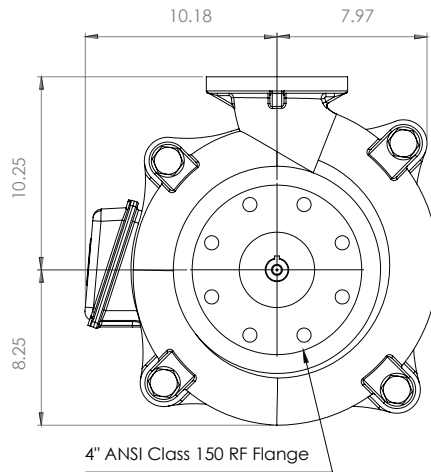


**Type 21 Cartridge Mechanical Seal**

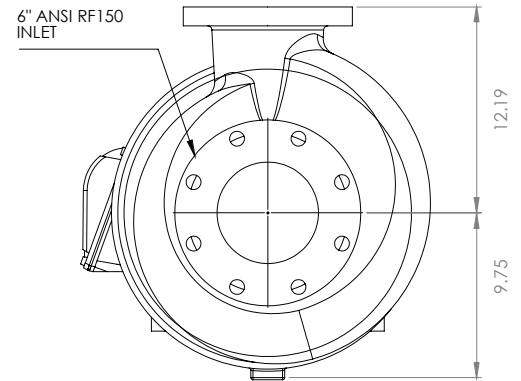
The conventional and simple seal design allow for a wide range of different seal face materials to be configured for the appropriate pumped fluid. The seal chamber design provides for easy and fast installation.



3x2-10 CS



4x3-10 CS



6x5-11 CS

