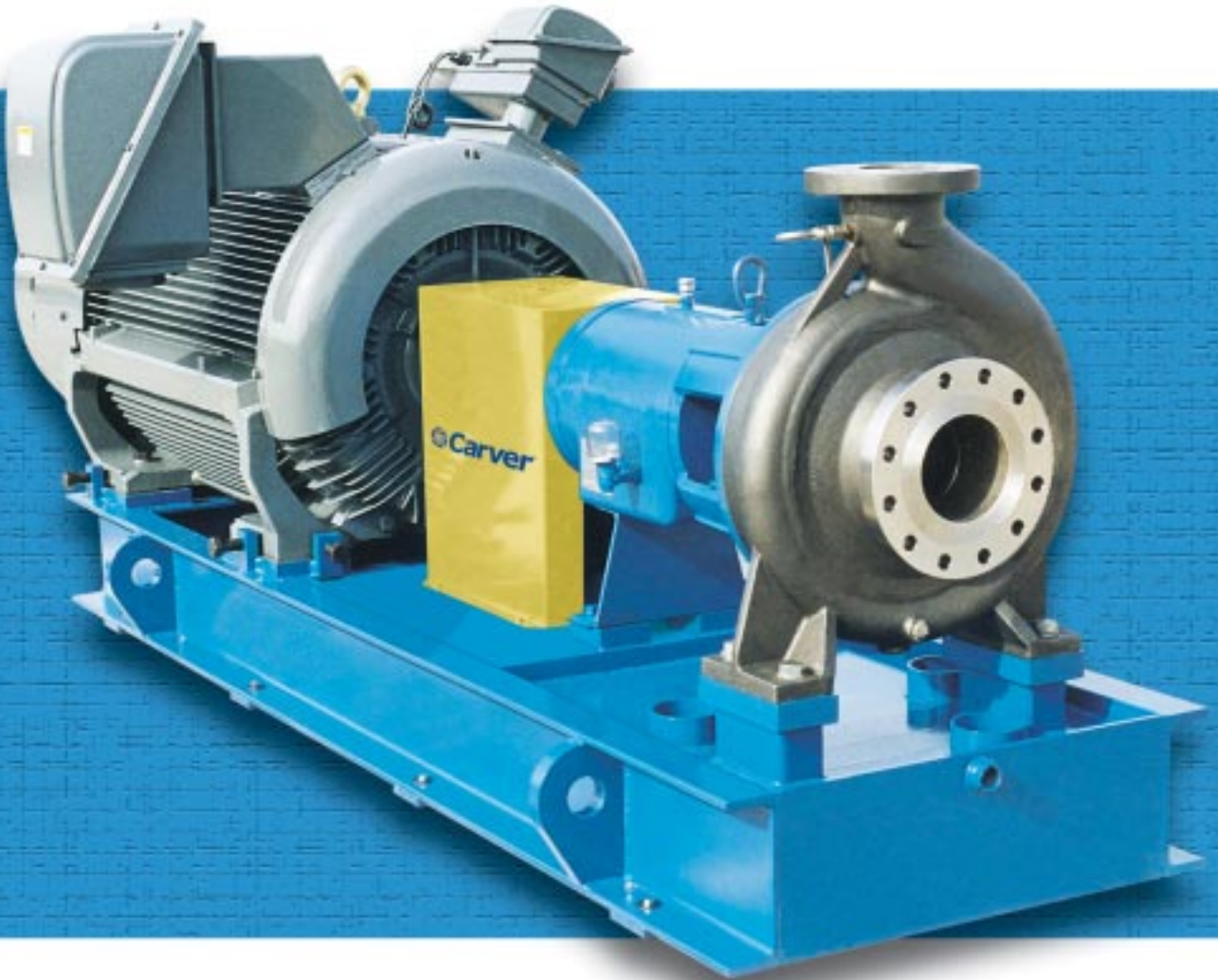


Maxum Series

*Medium Duty Process Pumps
For Flows to 9,000 GPM*



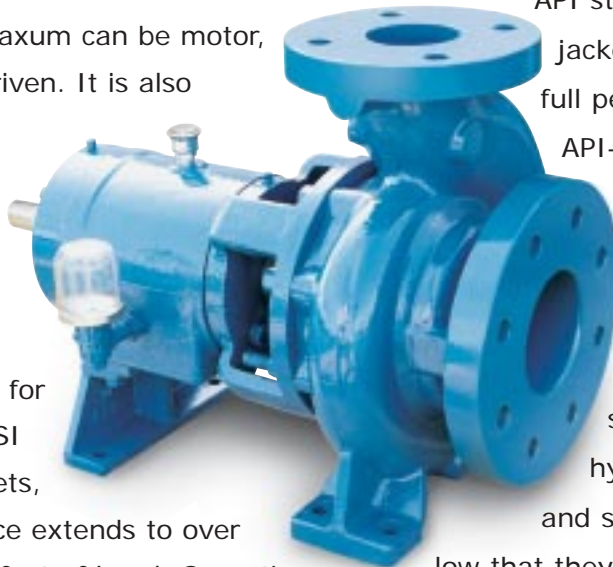
 **Carver[®]**

Creating Value.

The Maxum Series

The Maxum is Carver's medium duty API-610 pump for handling water, acids, and hydrocarbons in refining and process industry applications. Offered as either a horizontal or vertical in-line mounted unit, the Maxum can be motor, engine, or turbine driven. It is also available in high temperature, centerline mounted, and magnetic drive versions as well.

Designed specifically for the needs of the ANSI and API pump markets, hydraulic performance extends to over 9,000 GPM and 720 feet of head. Operating at speeds up to 3,500 RPM, this range is covered by thirty-three sizes in steel and 316 stainless steel as the standard, off-the-shelf materials. In addition to these, higher alloys such as CD4MCu, Alloy 20, Hastelloy B or C, Monel and Titanium are also available.



Common options include double, tandem, and cartridge seals, seal flush systems, and several bearing lubrication schemes. Auxiliaries such as vibration detection, API style baseplates, cooling jackets, spacer couplings, and full performance testing to API-610 or U.S. military specifications are also available.

Together, these features combine to produce some of the most efficient hydraulics in the industry and shaft deflection values so low that they actually exceed API-610, 8th Edition requirements.

Most importantly, as with all our other pumps, the Maxum offers the reliability, low total life cost, and lasting value that has made Carver one of the most trusted names in pumps.

Hydraulics

- Flows to 9,000 GPM (2,000 m³/hr)
- Heads to 720 Ft (220 M)
- Efficiencies to 88%
- Power to 900 HP (670 KW)
- Speeds to 3,500 RPM
- Temperatures to 500°F (260°C)

Applications

- Acid leaching processes
- Black, green and white liquor
- Caustic solution transfer
- Ethane and polyethane
- Hot oil applications
- Light hydrocarbon transfer
- Molten sulfur transfer
- NOx water transfer
- Off site loading and transfer
- Phosphoric and sulfuric acids
- Steel mill cooling water circulation



Features & Benefits

Casing

Back pull out design with registered fits and fully confined gaskets assure sealing and alignment of critical fits. Casing drains offered at no additional cost. Centerline mounting also available.

Impellers

Enclosed, high efficiency impellers balanced to stringent ISO 1940, Grade G2.5 standards for vibration-free operation. All impellers keyed and locked for added safety.

Wear Rings

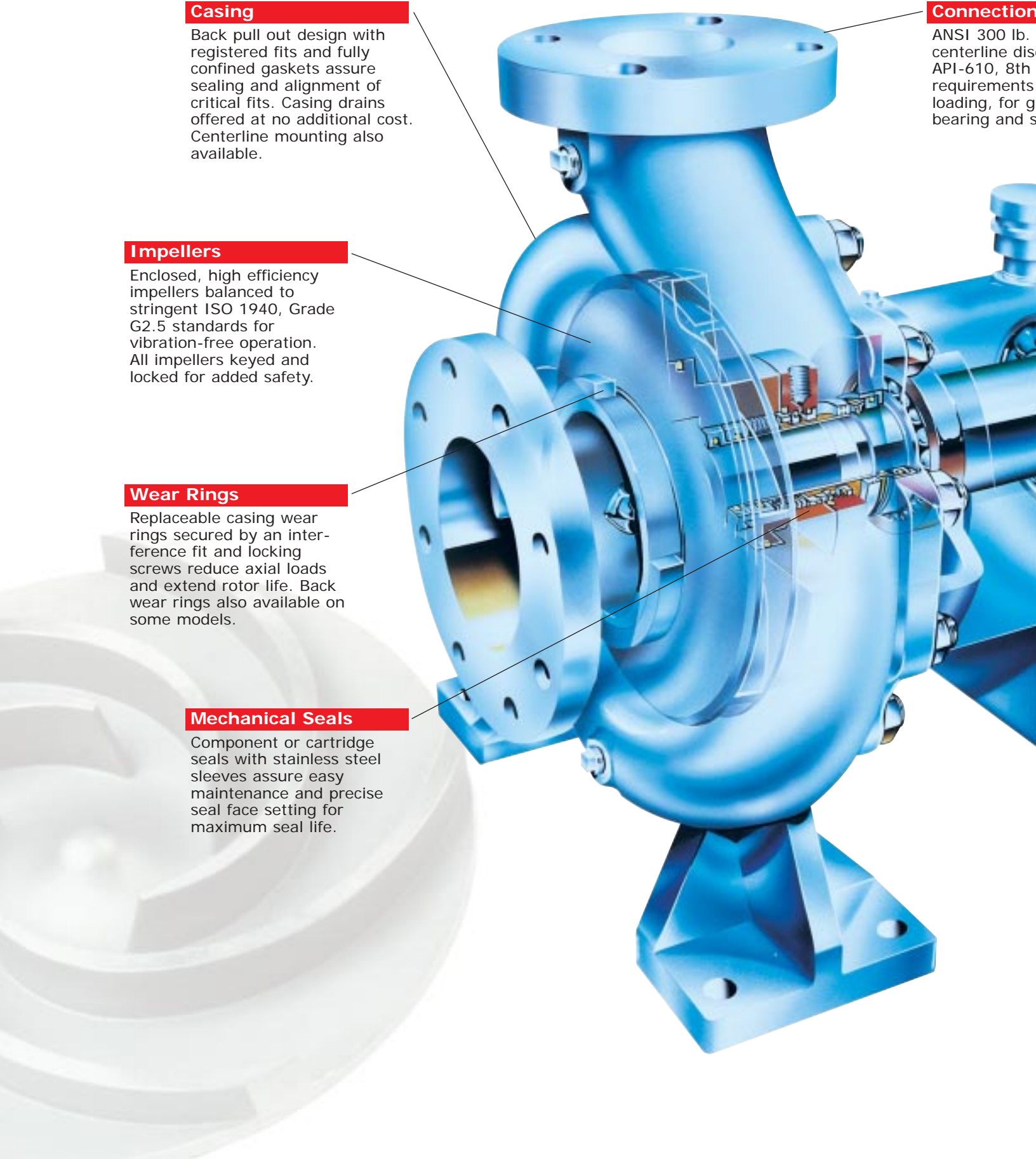
Replaceable casing wear rings secured by an interference fit and locking screws reduce axial loads and extend rotor life. Back wear rings also available on some models.

Mechanical Seals

Component or cartridge seals with stainless steel sleeves assure easy maintenance and precise seal face setting for maximum seal life.

Connection

ANSI 300 lb. centerline design, API-610, 8th requirements loading, for g bearing and s



Connections

ANSI 300 lb. flanges with centerline discharge exceed API-610, 8th Edition requirements for nozzle loading, for greater rotor, bearing and seal life.

Bearing Frame

Thick-walled bearing housings with labyrinth or magnetic seals keep oil clean for greater bearing life. Finned cooling coils also available for higher temperature applications.

Shafts

Large diameter shafts with large fillet radii reduce stress concentrations at cross section changes and keep shaft deflections below 0.001".

Bearings

Single row, deep groove radial bearings and duplex single row, 40° angular contact thrust bearings mounted back to back for longer component life.

Bearing Lubrication

Oil lubricated bearings with shaft mounted oil rings assure efficient oil feed to all bearings. Purge oil mist and pure oil mist options also available.

Maxum Mag-Drive

The Maxum-Mag is our sealless, magnetic-drive pump for eliminating seal leakage, aiding in compliance with OSHA and EPA air quality regulations and generally superior performance with corrosive and/or high temperature applications.



The Maxum-Mag is based on the same product platform as our conventional drive unit, with back pull out capability and 100% fluid containment.

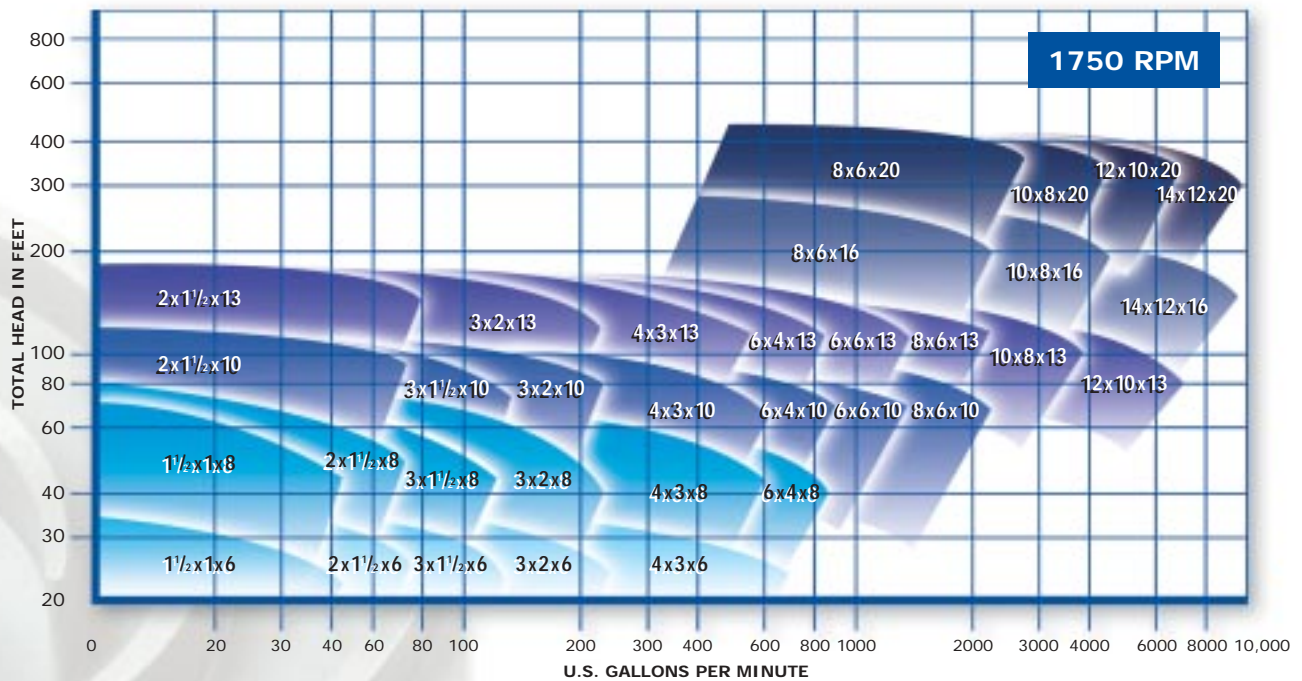
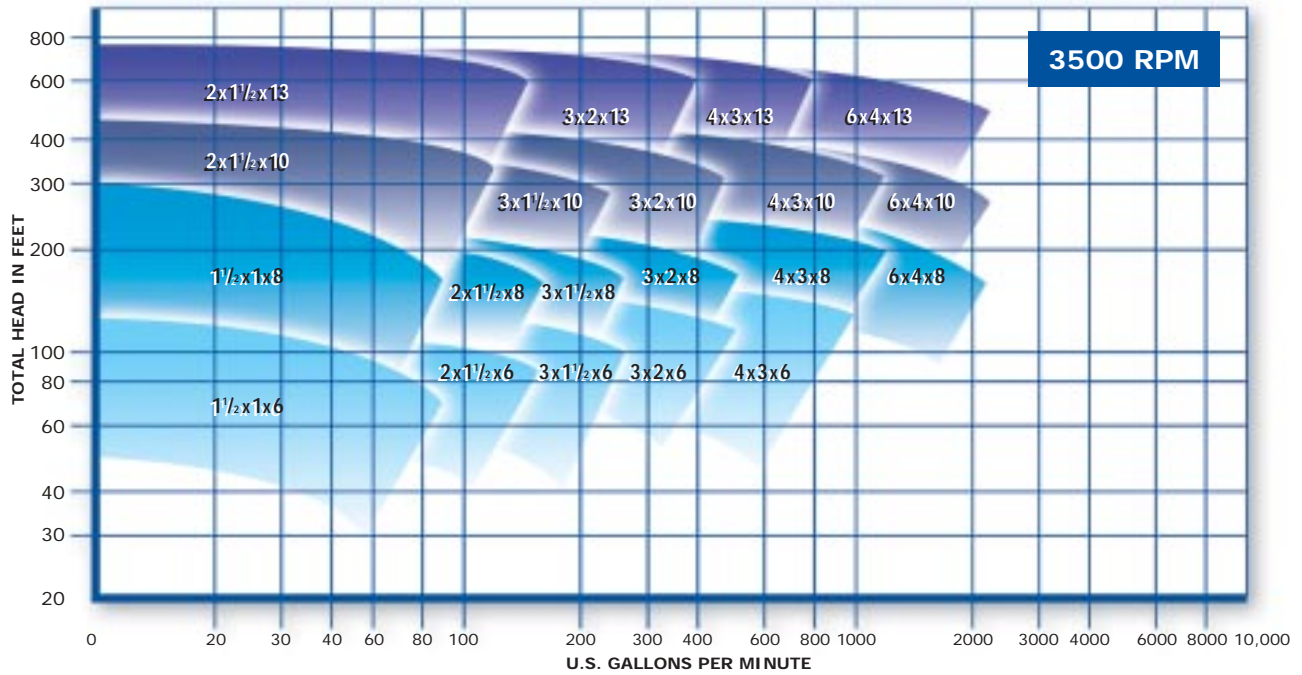
Standard features include:

- Minimum gap between outer magnet and containment shell of 0.030".
- Carbon on silicon carbide sleeve bearings.
- Neodymium iron magnets to 300° F, samarium cobalt to 500° F.
- Magnets sized for full voltage starting.
- Hastelloy C or PEEK containment shell with secondary containment.
- 316 SS, CD4MCu, Hastelloy, Monel and Titanium casings.



Approval Certification Number 95-370

Hydraulic Coverage



Standard Materials of Construction

| API Material Code | Casing | Impeller | Shaft | Wear Rings | Bearing Frame |
|-------------------|--------------|--------------|-----------|-------------|---------------|
| S-1 | Carbon steel | Ductile iron | AISI 4140 | Cast iron | Carbon steel |
| S-8 | Carbon steel | 316 SS | 316 SS | Nitronic 60 | Carbon steel |
| A-8 | 316 SS | 316 SS | 316 SS | Nitronic 60 | Carbon steel |
| D-1 | CD4MCu | CD4MCu | Duplex SS | Nitronic 60 | Carbon steel |



Since we built our first pumps in 1938, the Carver name has become synonymous with value. Today we are recognized as one of the world's leading centrifugal pump companies, building pumps to the most demanding engineering specifications and military standards in the world.

Our company is located in Muscatine, Iowa, 25 miles southwest of the Quad Cities area. Our operations there include some of the most modern manufacturing equipment and pump development software available, and we are committed to the highest quality possible-in our products and our people. Along these lines, Carver was also one of the first American pump companies to attain ISO 9001 certification-the most recognized standard for quality in the world.

From an applications standpoint Carver has traditionally built pumps for water, oil, and chemicals for both the public and private sectors. Our product line includes both horizontal and vertical end suction, multi-stage, axial split case, self-priming, API, and solids-handling pumps that all carry the same Carver trademark: lasting value from solid, straightforward designs engineered to provide many years of service.

These pumps are also backed by unparalleled aftermarket support. Our network of stocking distributors, manufacturer's representatives and certified service centers throughout the world means that no matter where your pump may be installed, there are local sales and service people ready to support your aftermarket needs.



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