



**CARVER PUMP™**

Built for purpose



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## **API MAXUM OH2**

API 610 Compliant  
End-Suction Pumps





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## API MAXUM OH2

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Our horizontal end-suction pump, specifically designed to meet the needs of the hydrocarbon processing industry.

The API Maxum OH2 is designed for optimum reliability, featuring rugged construction and state-of-the-art mechanical design. Units are well suited for applications that include petroleum refining/production/distribution, petrochemical/chemical processing, boiler circulation/high-temperature applications, and general industrial use. A workhorse in the industry, these pumps are designed for years of service, in some of the toughest environments imaginable.

This model is fully compliant with latest edition API 610 specifications. Standard features include renewable casing wear rings, API 610 seal chamber sized to accommodate 682 mechanical seals, back pull-out construction, dynamically-balanced impellers, heavy-duty carbon steel/finned bearing housing equipped with labyrinth-type oil seals, and fan cooling. Locations are also included for temperature probes, as standard. Common options include single, double or tandem mechanical seals, and various seal flush systems. Heavy-duty baseplates, casing jackets, and various levels of performance testing are also available.

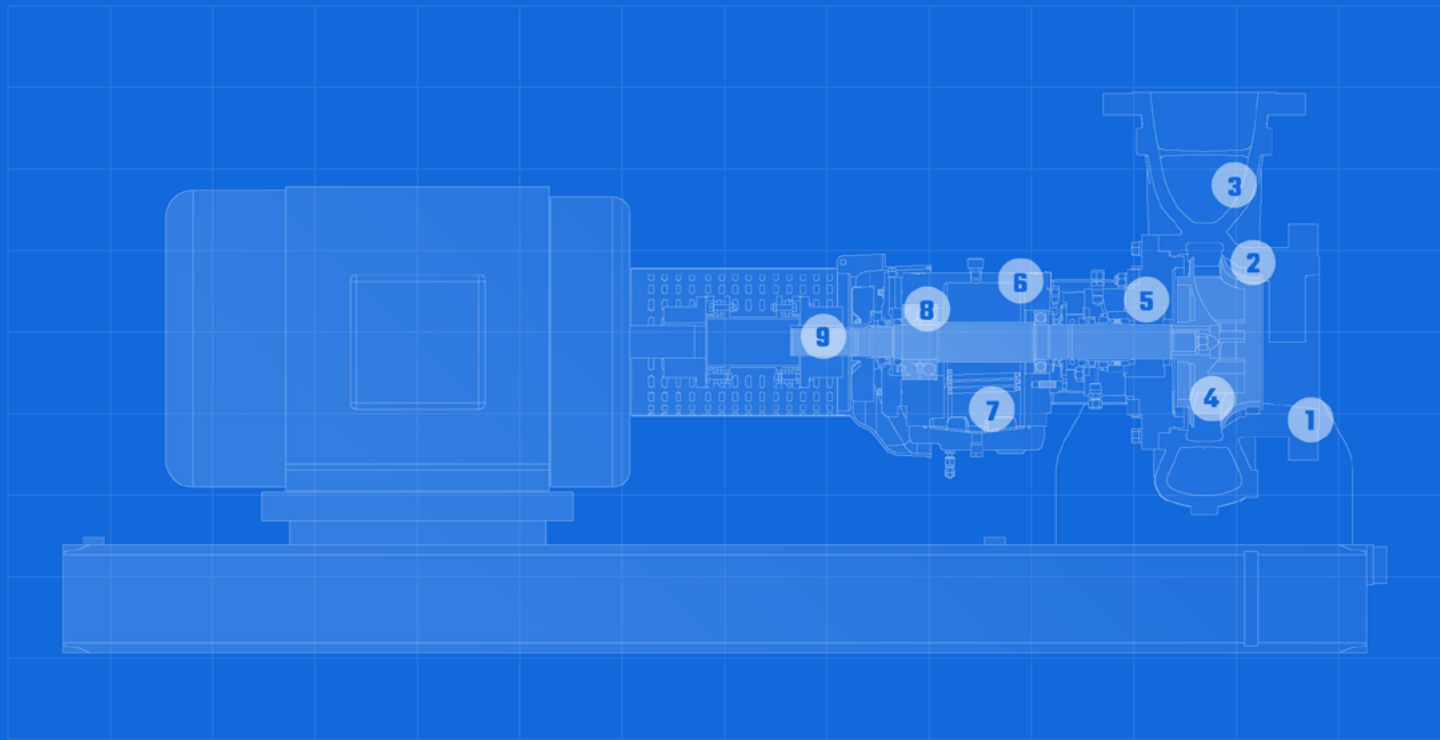
Together, these features combine to produce some of the most efficient hydraulics in the industry and shaft deflection values meeting or exceeding those of API 610 requirements. The API Maxum OH2 is also available as an OH1 design for lower temperature applications.



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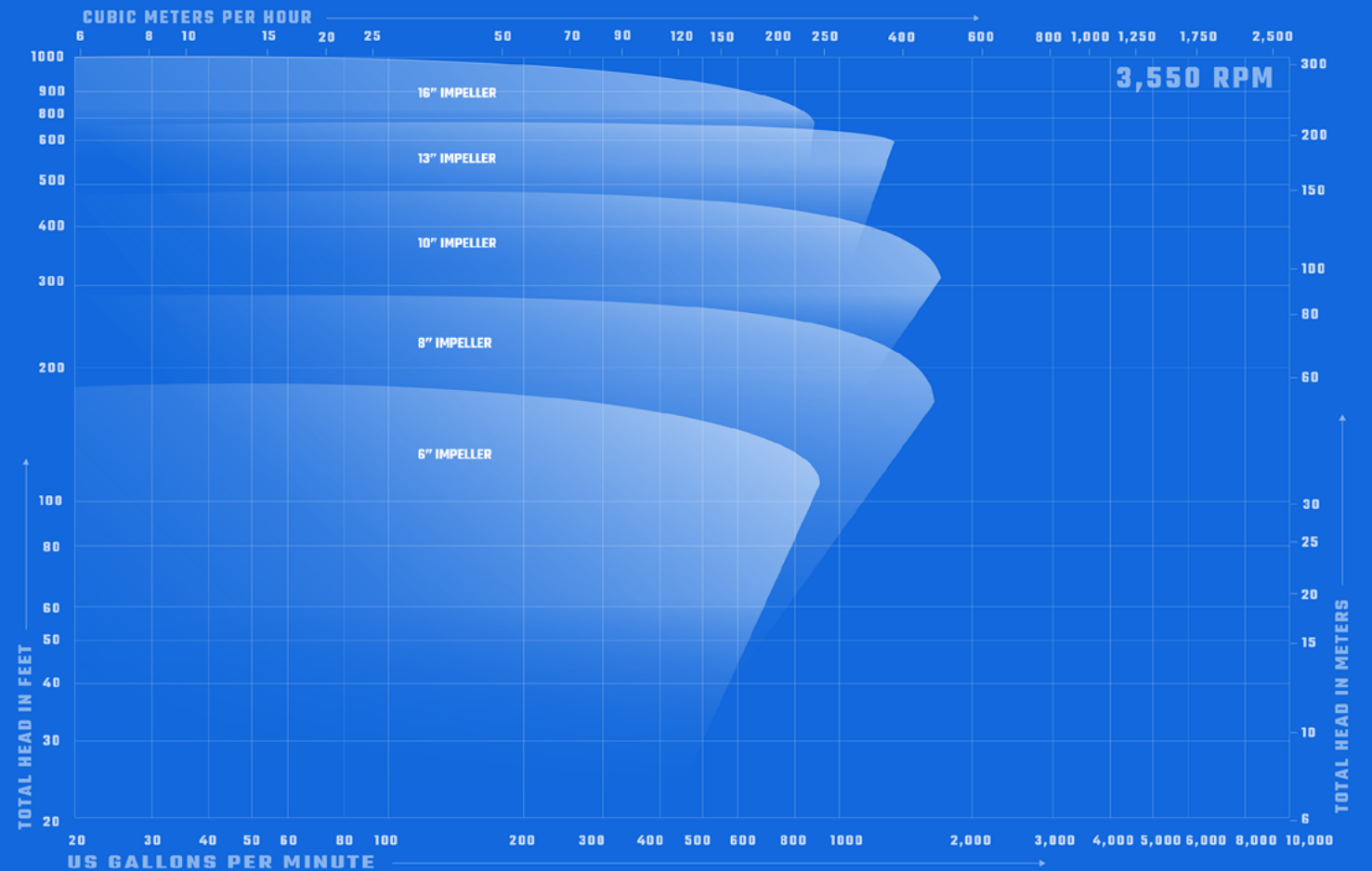
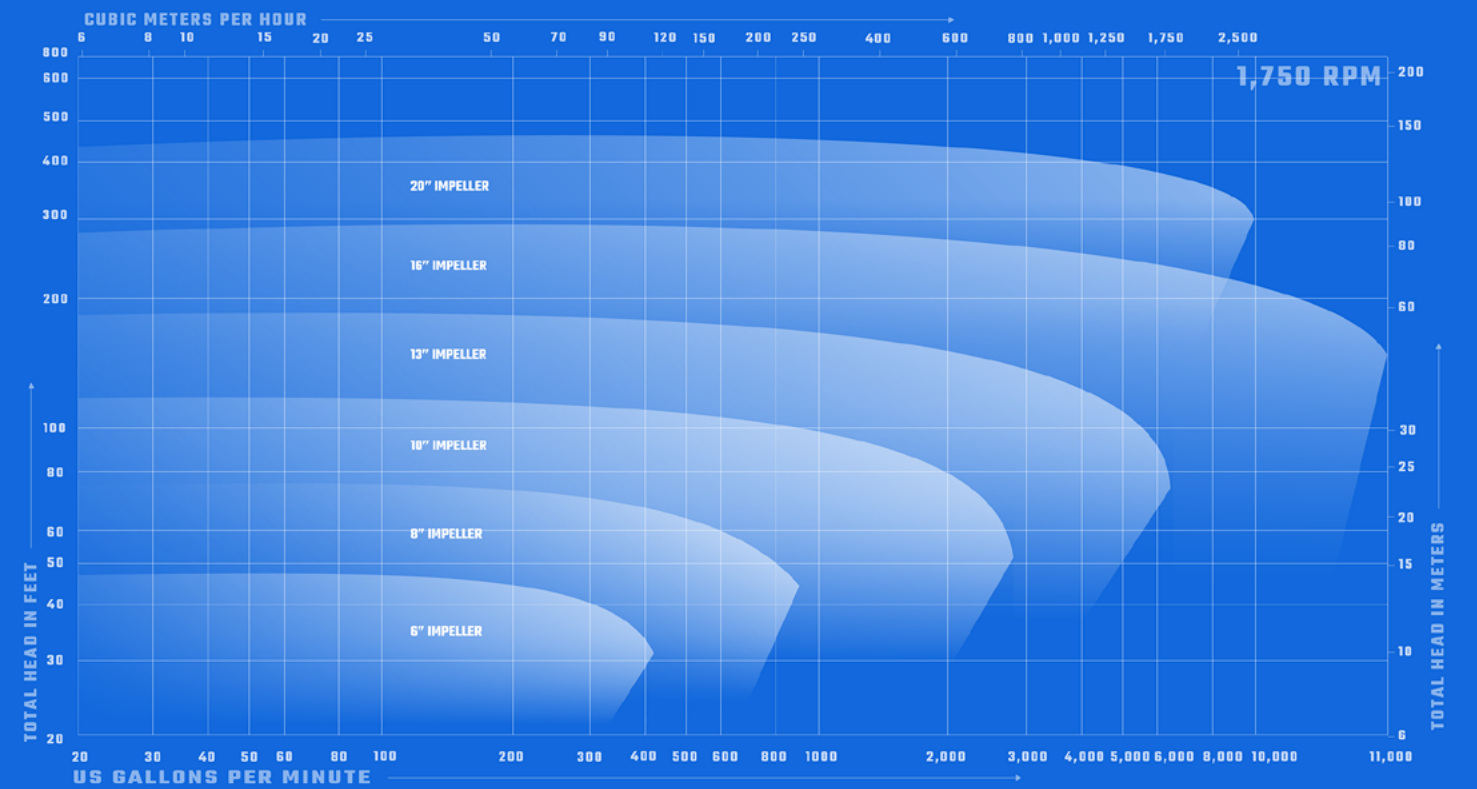
**API MAXUM OH2**





- 1 CONNECTIONS**  
Class 300 ANSI flanges with centerline discharge assist in self-venting
- 2 WEAR RINGS**  
Replaceable casing and backhead wear rings maintain efficiency and balanced axial loads
- 3 CASING**  
Back pull-out design with registered fits and fully-confined gaskets assure sealing and alignment of critical fits. Casing drains included as standard
- 4 IMPELLERS**  
Enclosed, high-efficiency impellers balanced to ISO 1940, Grade G2.5 for vibration-free operation. All impellers are keyed to shaft
- 5 API 610 SEAL CHAMBER**  
Provides an ideal seal environment for both single/dual, pressurized/unpressurized cartridge mechanical seals. A full range of API 682 piping plans is also available to maximize seal life

- 6 BEARING FRAME**  
Heavy-duty bearing housing with cooling fins, fan and labyrinth seals keeps oil clean and cool, for greater bearing life
- 7 BEARING LUBRICATION**  
Oil-lubricated bearings with standard flooded or optional flinger lubrication. Conversion to purge oil mist or pure oil mist is possible without additional machining
- 8 COOLING FAN**  
Cooling fan allows ambient temperatures to 110° F and fluid temperatures to 600° F in centerline mount configuration. The cooling fan also extends bearing life
- 9 SHAFTS**  
Minimal shaft deflection extends mechanical seal and wear ring life



Intertek





### HYDRAULICS

- Flows to 11,500 US GPM (3,136 m³/hr)
- Heads to 720 feet (220 m)
- Efficiencies to 88%
- Power to 900 HP (670 KW)
- Temperatures to 600° F (315° C)
- Speeds to 3,550 RPM

### APPLICATIONS

- Desalination/Municipal
- Oil & Gas
- Power Generation
- Acid Leaching Processes
- Black, Green and White Liquor Transfer
- Ethane and Polyethane
- Hot Oil Applications
- Light Hydrocarbon Transfer
- Molten Liquid Sulfur Transfer
- NOx Water Transfer
- Phosphoric and Sulfuric Acids
- Refinery Offsite Loading and Transfer
- Steel Mill Cooling Water Circulation

### WHY AN API MAXUM OH2?

- Combined bearing life exceeds 25,000 hours.
- Shaft design dramatically reduces deflection, thereby increasing seal life and reducing vibration when operating away from best efficiency point.
- Oil mist lubrication available as a pre-engineered option.
- Heavy-duty baseplate designed for operation without deflection, excessive vibration or resonance. Fully complies with or exceeds API 610 requirements for shaft deflection at coupling.
- Operates at fluid temperatures up to 600° F (315° C) without cooling water.

### MATERIALS OF CONSTRUCTION

Commonly Used Materials	WCB Carbon Steel, 12% Chrome and CD4MCuN Duplex
API Material Codes	S1, S3, S4, S5, S6, S8, S9, A8, C6, D1 and D2
Severe Duty Materials	Hastelloy B, Hastelloy C, 254 SMO, 654 SMO and Titanium

Other materials available, including coatings and composites, to meet specific application requirements.

### MECHANICAL DATA

Rotation	Clockwise from Fan End of Motor
Input Power	Up to 1,500 HP
Connections	Class 300 ANSI Flanges
Bearings	Oil Lubricated



### FUELING EL DORADO

To get planes on their way as quickly and safely as possible, Latin America's largest international cargo airport needed a 100% reliable aircraft hydrant fueling system. El Dorado Airport in Bogota, Colombia installed ten of our 6x4x13 carbon steel API Maxum pumps to transport its fuel. These heavy-duty pumps are fully compliant with API 610 and have provided a reliable solution for pumping fuel from a safe location.





## 80 years of experience

Since we built our first pumps, Carver Pump has become recognized as one of the leading centrifugal pump companies, building to the most demanding engineering specifications and military standards in the world.

We were one of the first American pump companies to attain ISO 9001 certification – the most recognized standard for quality in the world. This certification is your assurance that our commitment

to quality includes not only our hardware, but also superior customer service, leading-edge R&D, and continuous improvement in everything we do.

So whether the job is refueling fighter jets on the deck of an aircraft carrier, supplying paint to an auto assembly line, or bringing water to the fountain in a city park, we put our reputation on the line everyday with every pump we build.

## Contact us

2415 Park Avenue  
Muscatine, Iowa 52761-5691  
USA

(563) 263-3410  
[sales@carverpump.com](mailto:sales@carverpump.com)  
[www.carverpump.com](http://www.carverpump.com)