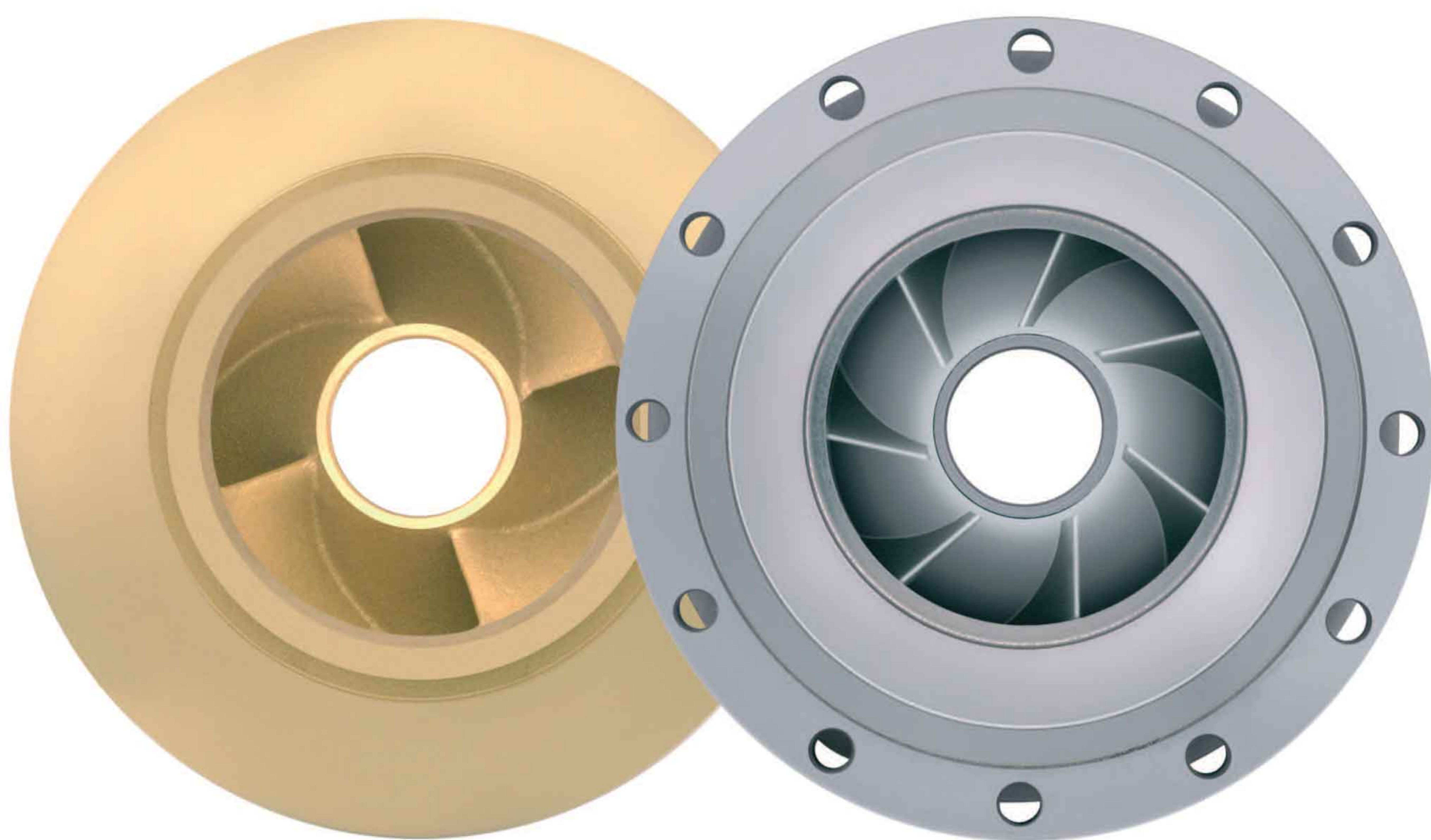


Vertical Turbine Pumps



VISION

To be a leading local manufacturer and reliable partner providing engineered products and solutions to our customers.

MISSION

Supporting the socio-economic development of the Kingdom.

- Enhance local content through technology transfer and human capital development.
- Contribute to the development of Oil & Gas, Water and upcoming industrial initiatives.

Manufacturer of engineered metal products and provider of solutions to our customers.

- Exceed customer expectations through partnerships, high quality and timely delivery.
- Focus on operational excellence in the manufacturing of engineered products.

Involved proactively with our key stakeholders.

- Care for our employees, community and the environment.
- Maximize shareholder value through innovation and effective resource utilization.

VALUES

Commitment

Be reliable and add value to our customers.

Empowerment

Trust our employees to make the right decisions.

Integrity

Show transparency in everything we do.

Excellence

Operate professionally, safely and effectively.

Collaboration

Deliver through cooperation and team work.



Saudi Mechanical Industries Company

SMI is a world-class precision manufacturing company, offering a comprehensive service with emphasis on total customer satisfaction. With a dedicated and experienced team of skilled personnel, we provide an efficient service to achieve the required specifications and quality set by our customers.

Under License from National Pump Company (U.S.A.), Saudi Mechanical Industries (SMI) manufactures vertical turbine pumps with the brand name of "Saudi National Pump" (SNP), providing a complete range of oil and water lubricated pumps for Agricultural, Industrial, Municipal and Commercial applications.

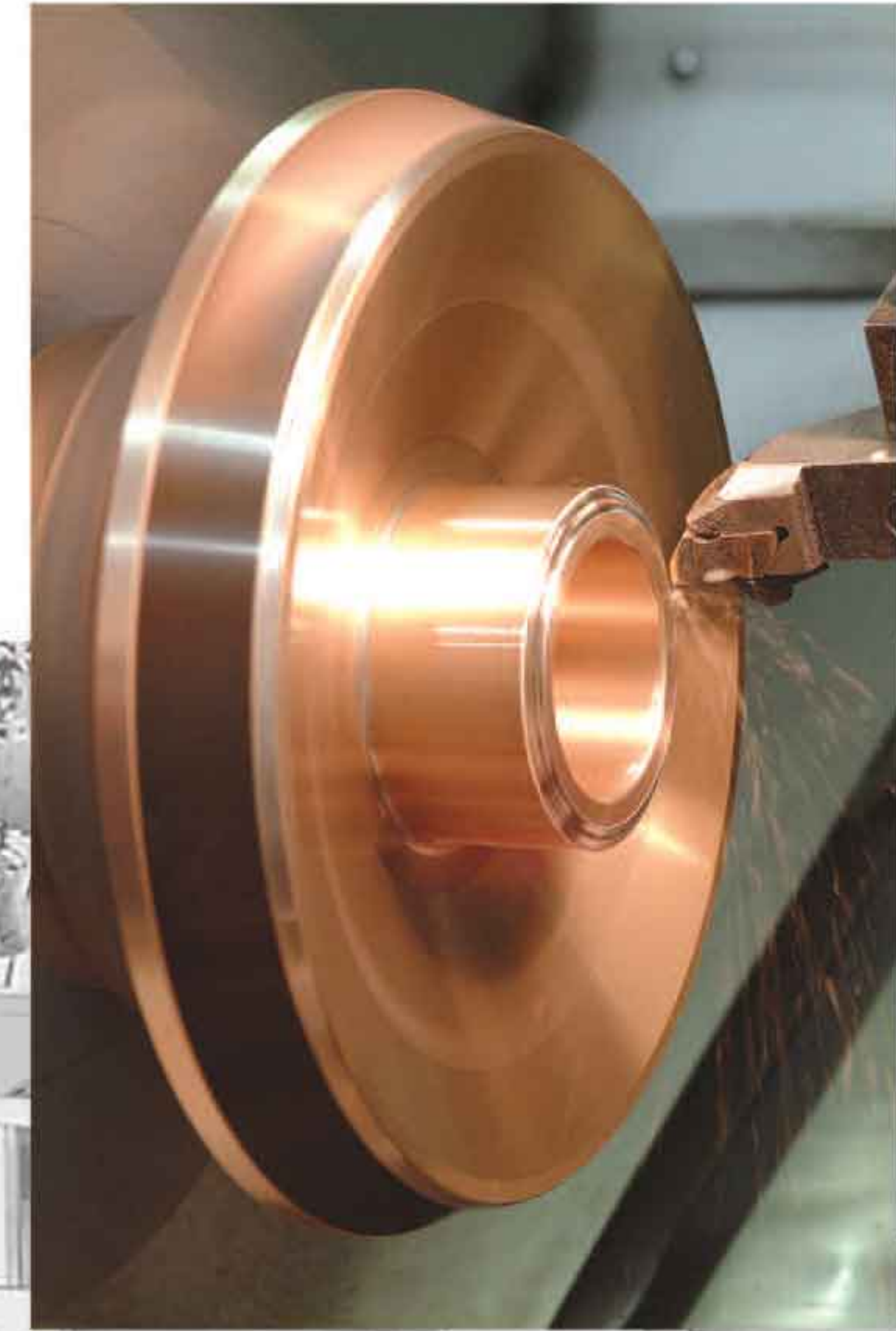
Manufacturing

PRECISION



Saudi National Pumps are manufactured at SMI by conforming to SASO and international specifications of AWWA-E101 (American Water Works Association) approved by ANSI (American National Standards Institute) along with materials to the requirements of ASTM (American Society for Testing and Materials).

ENGINEERING



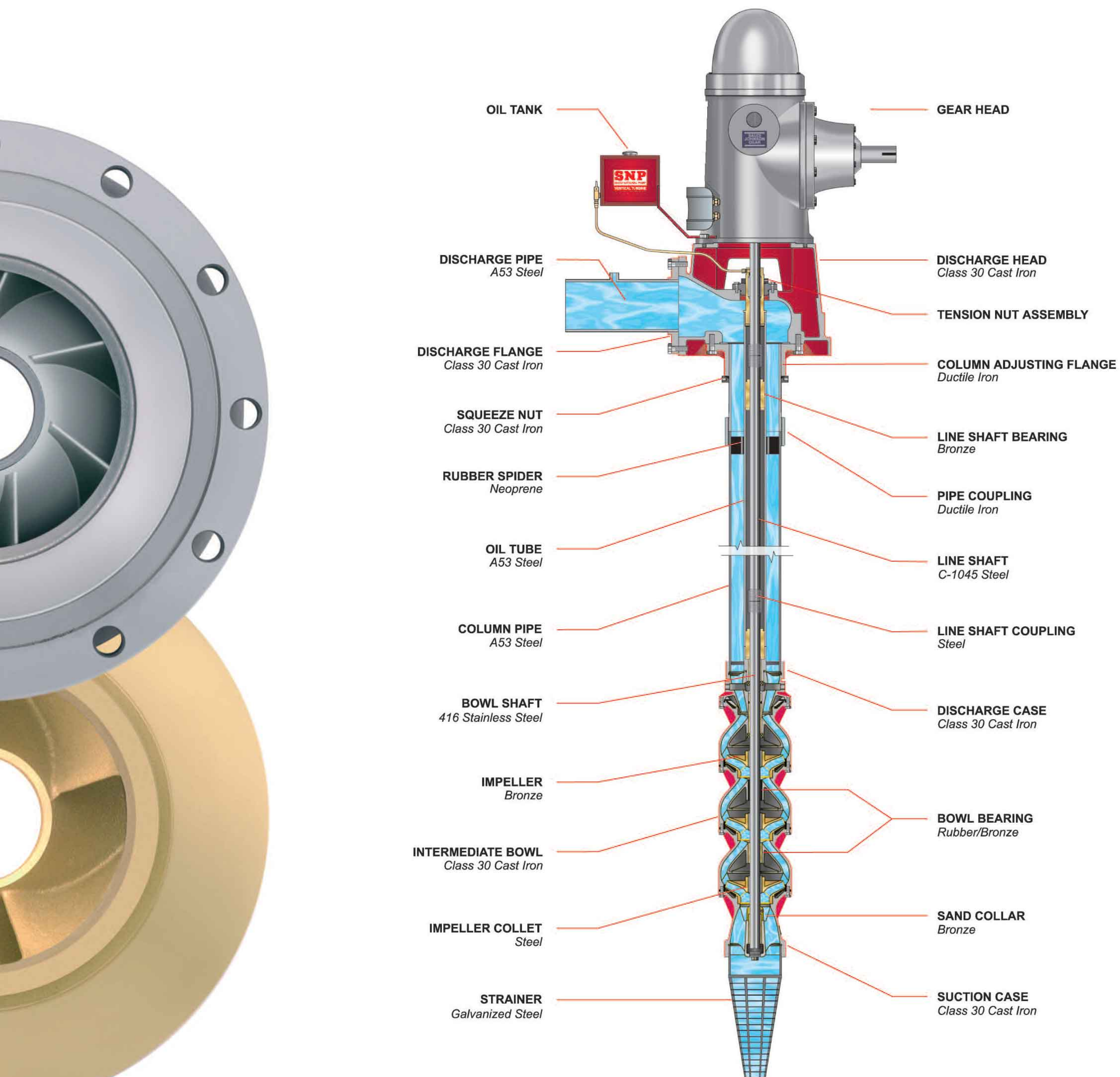
Strict Quality Control is enforced at each stage of manufacturing to ensure a final product to the required specifications.

Computer numerically controlled (CNC) equipment provides the basics for the manufacturing of the pump parts at the highest degree of precision.

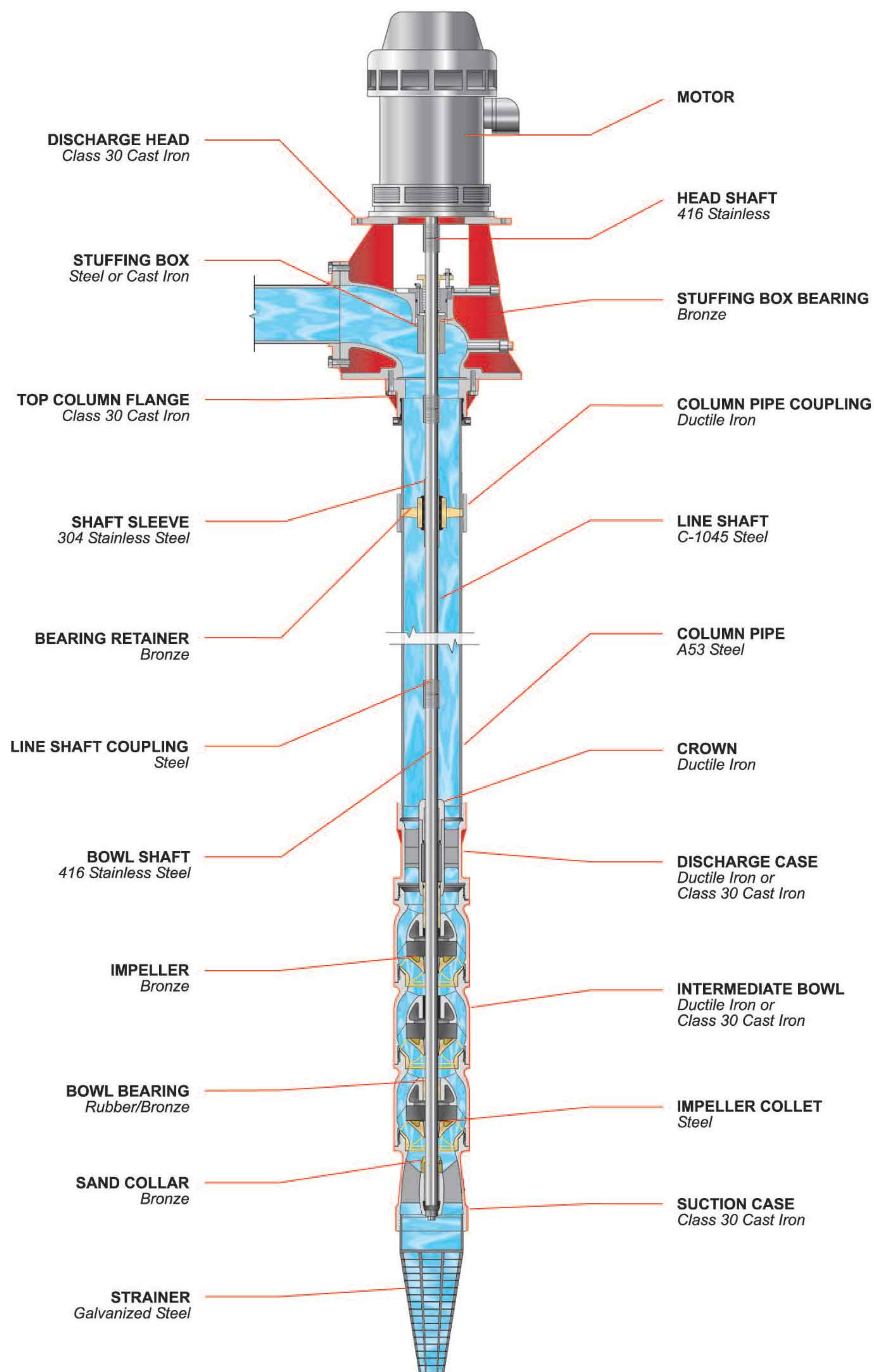


Quality Management System

Oil Lubricated



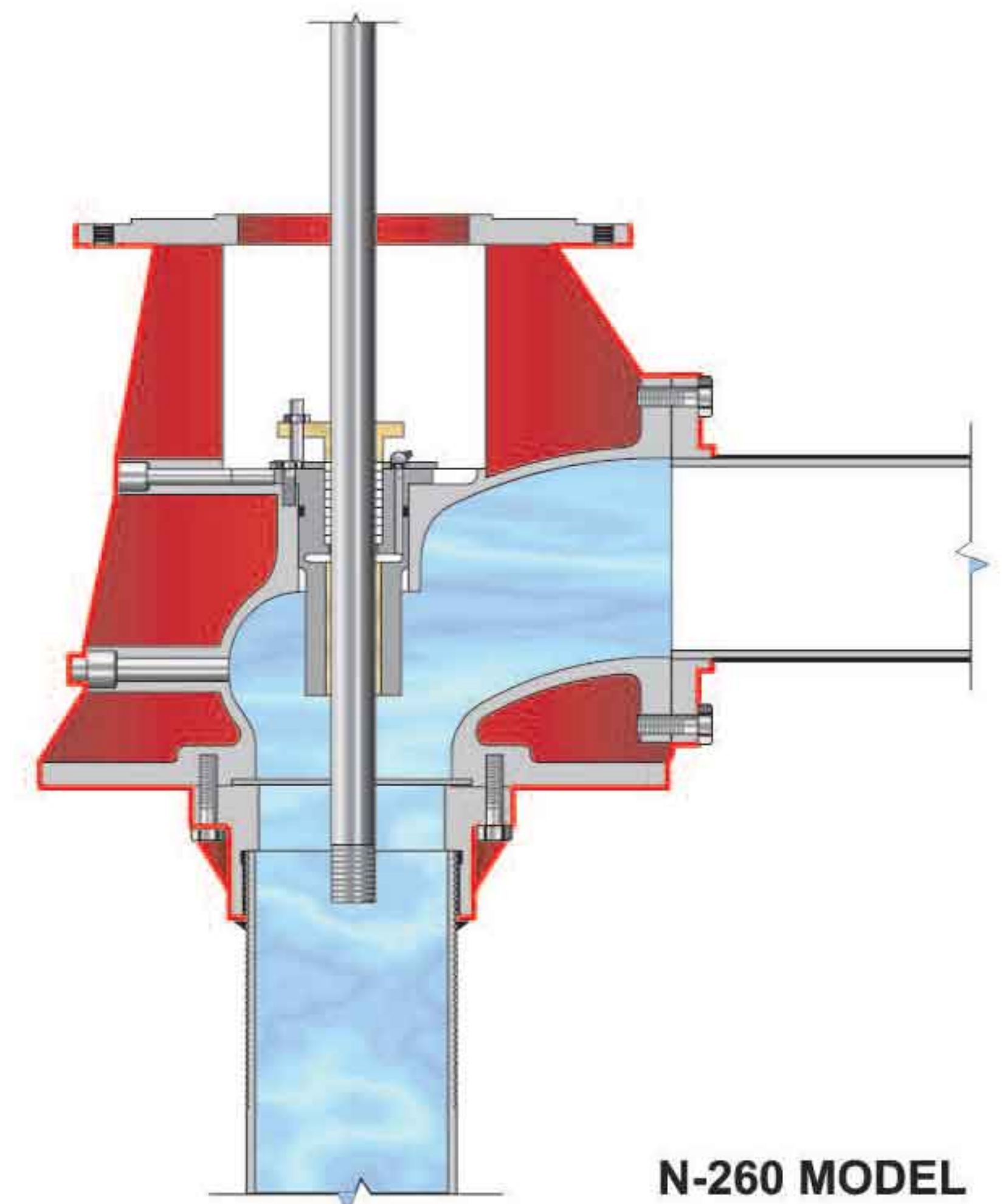
Water Lubricated



Discharge Heads

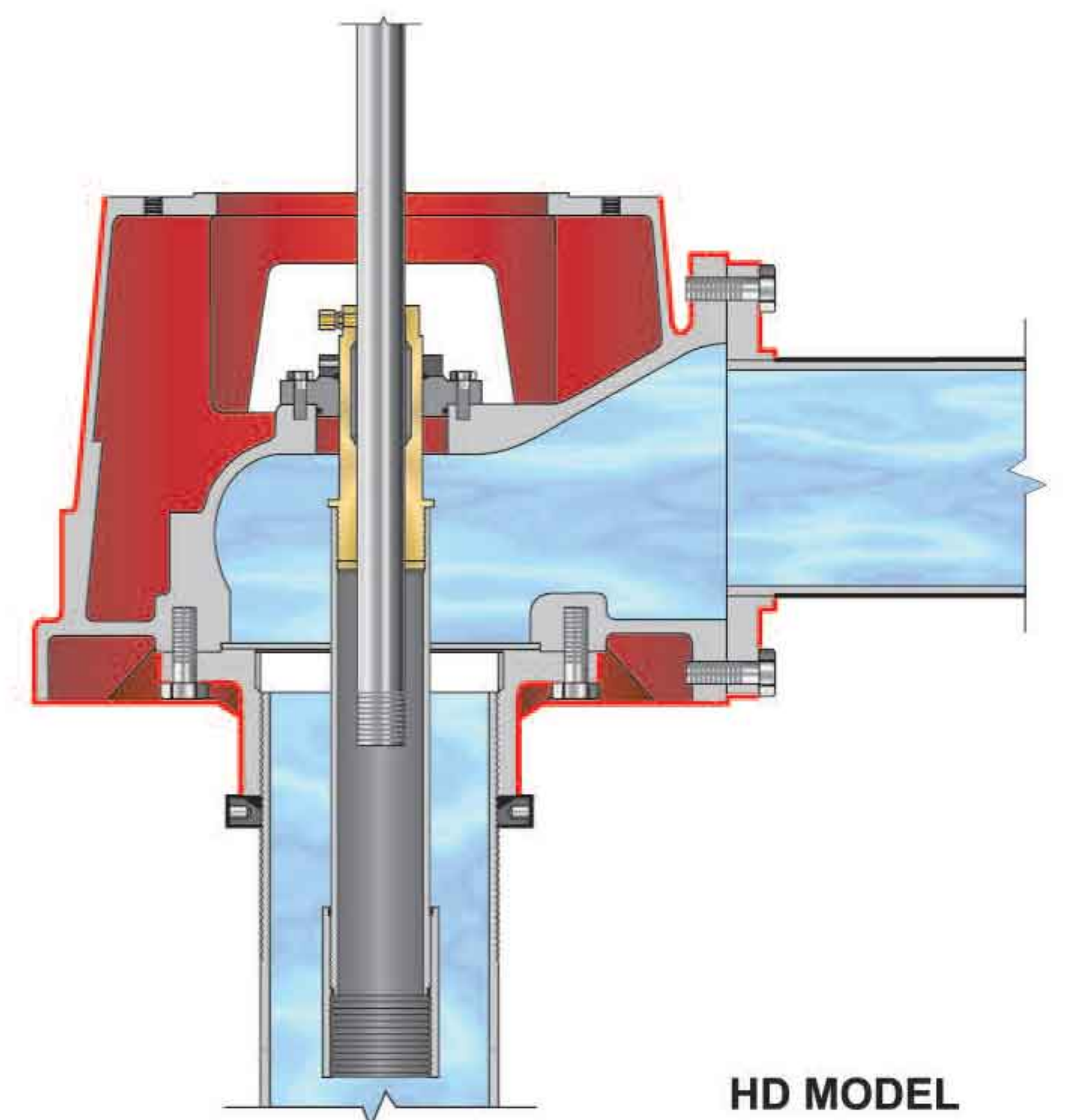
N-260 Models

The N-260 Discharge Head is the ideal specification for water lubricated pumps and is specially designed for normal setting conditions. The heads are made from ASTM A48, Class 30 cast iron and have large windows providing easy access to service the stuffing box assembly. N-260 heads are available in several sizes to fit all pipe diameters from 3" to 12".



HD Models

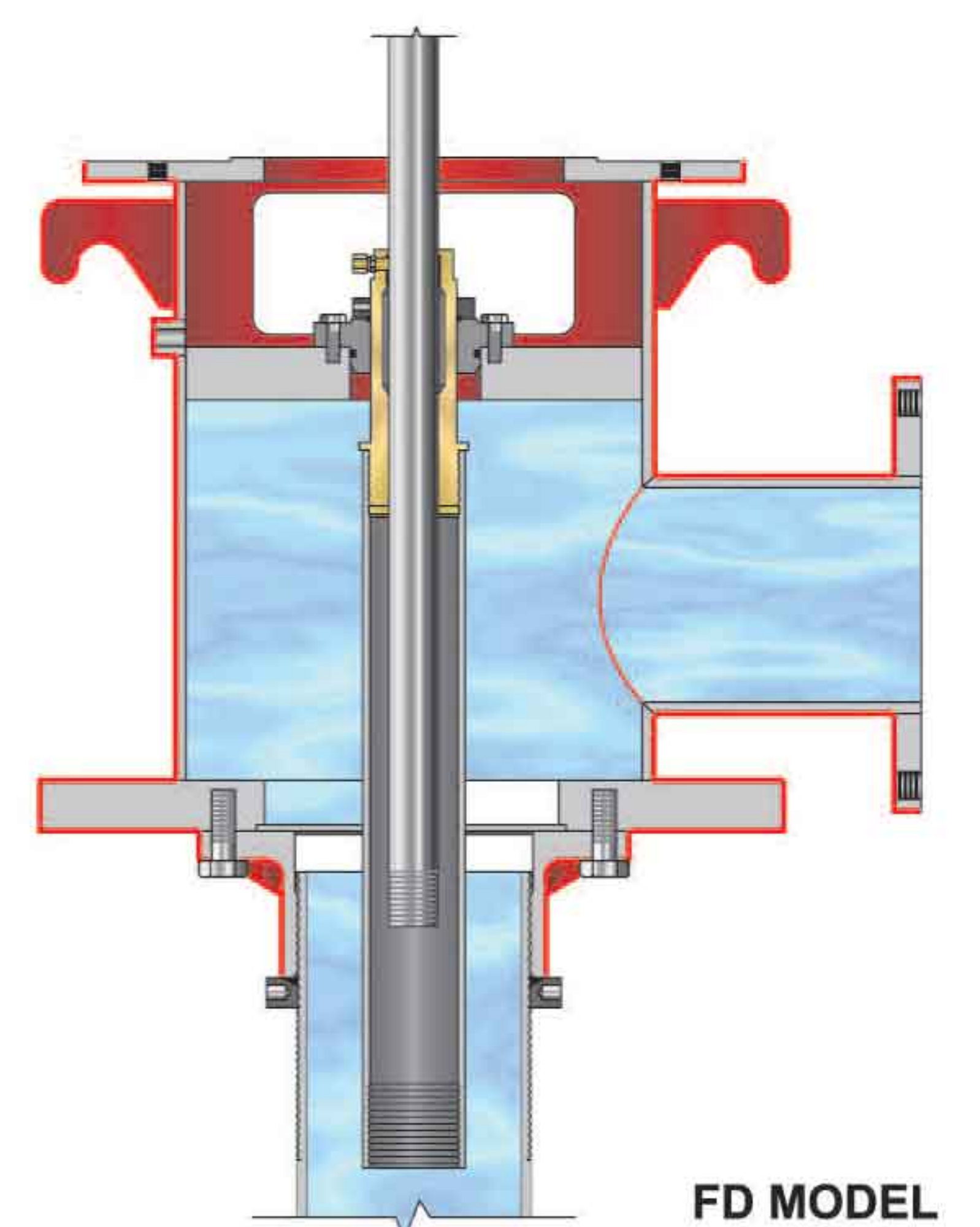
The HD Heads are available in several sizes, made from ASTM A48 Class 30 cast iron. The HD model is ideal specification for both redwood and bronze oil lubricated purposes, and is specifically designed for standard deep setting conditions. The SNP discharge head material has a minimum tensile strength of 30,000 PSI as per ANSI Standards, including additional safety factor to provide for maximum strength. Large opening holes are designed for easy access to all adjustable components.



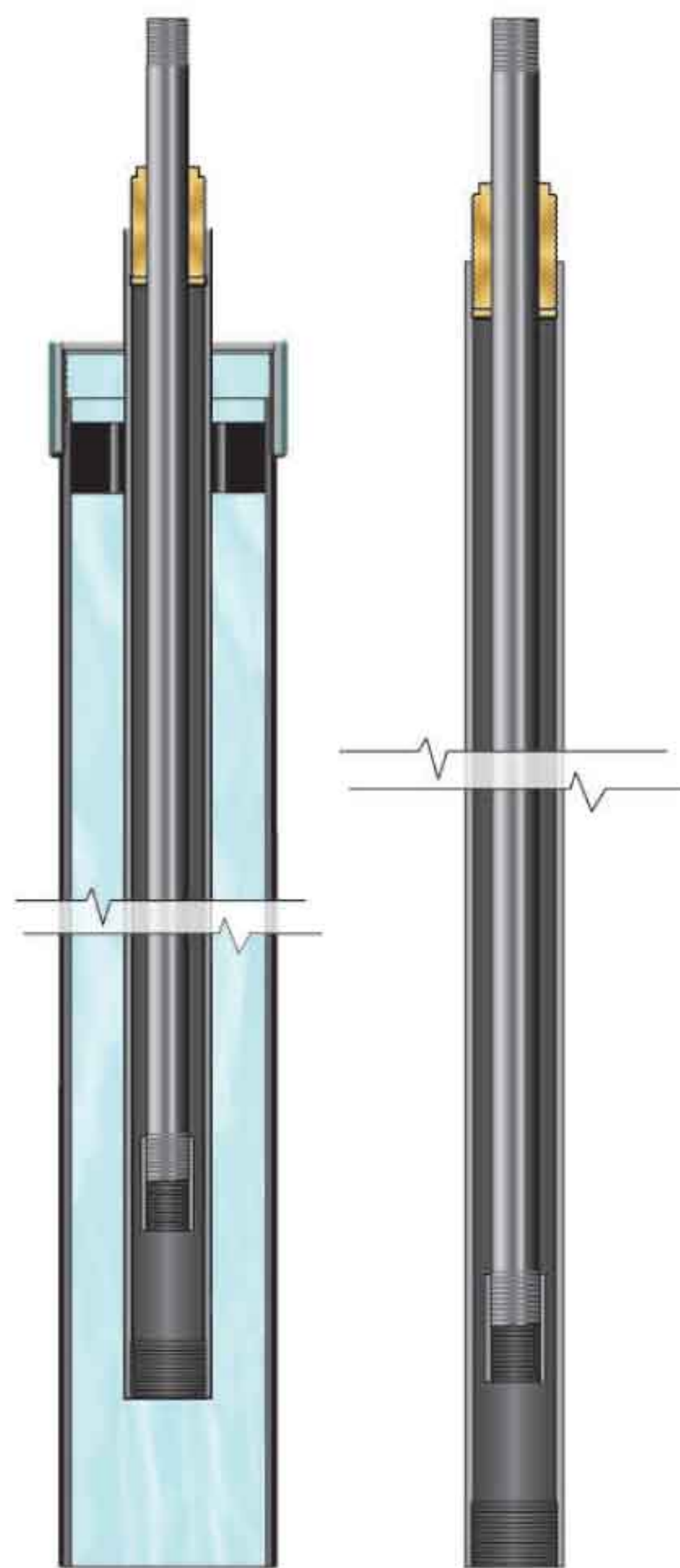
FD Models

SNP FD fabricated discharge heads are formed from high quality steel, and designed to accept the large sizes of column, shaft and bowl weight as well as the pump thrust.

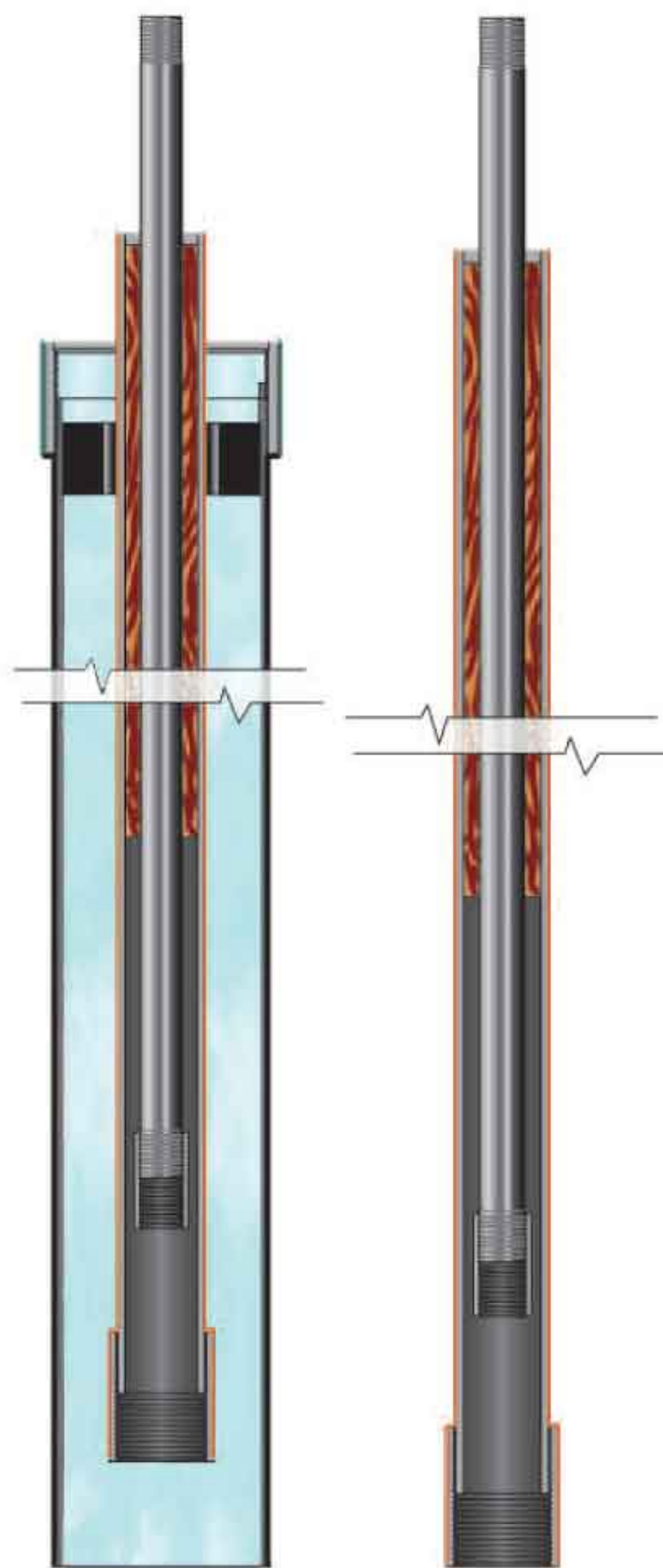
FD Heads are specially used with deep setting National Pumps for 8 & 10 inches column pipes applications to reach up to 1200 Feet. The special design provides for efficiency and durability.



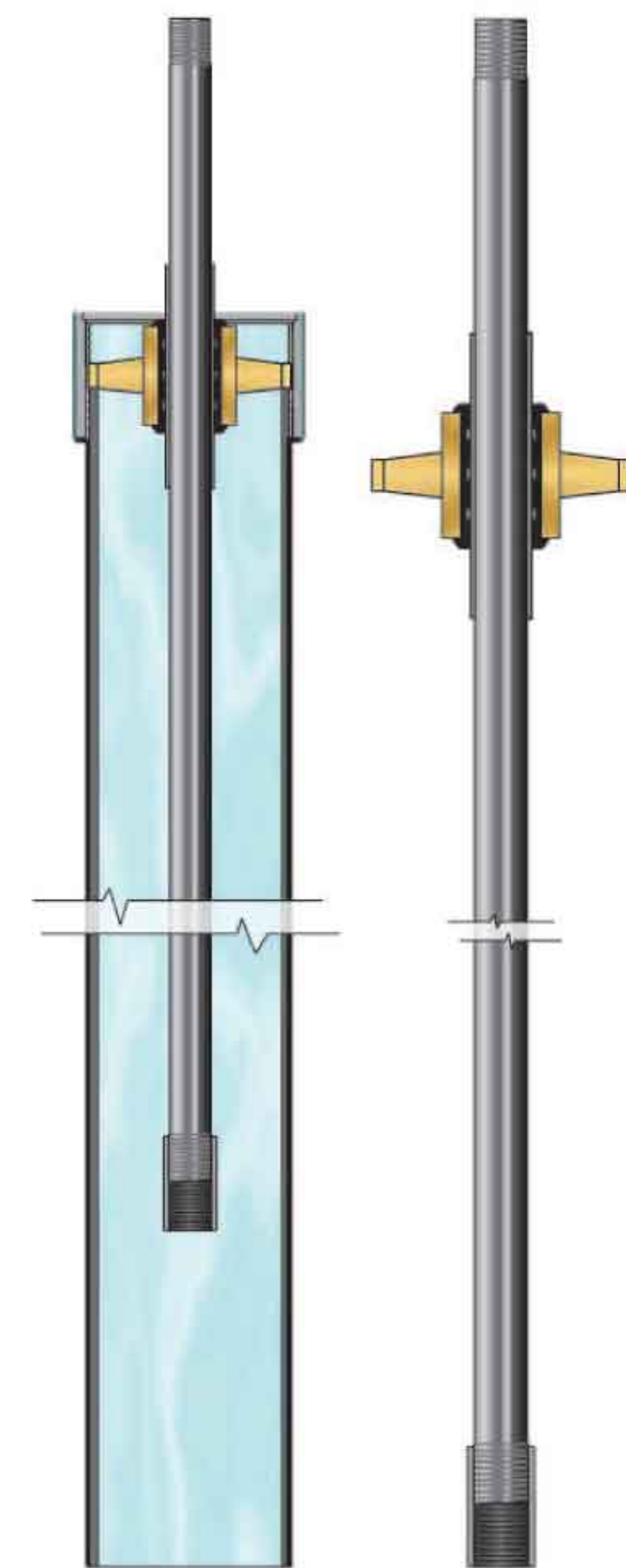
Column Assembly



Bronzeline, Oil Lube



Redwood, Oil Lube



Threaded, Water Lube

- Pipes are made in different schedules of high quality black steel (ERW - ASTM A53 Grade B) threaded both ends and provided with pipe couplings designed for deep well water pumping requirements. The machined couplings are made of ductile iron or seamless steel (sizes ranging from 4 to 12 inches, and in lengths of 5, 10 and 20 feet.)

The oil tubes are made of the black steel pipe material with different schedules conforming to AWWA standards.

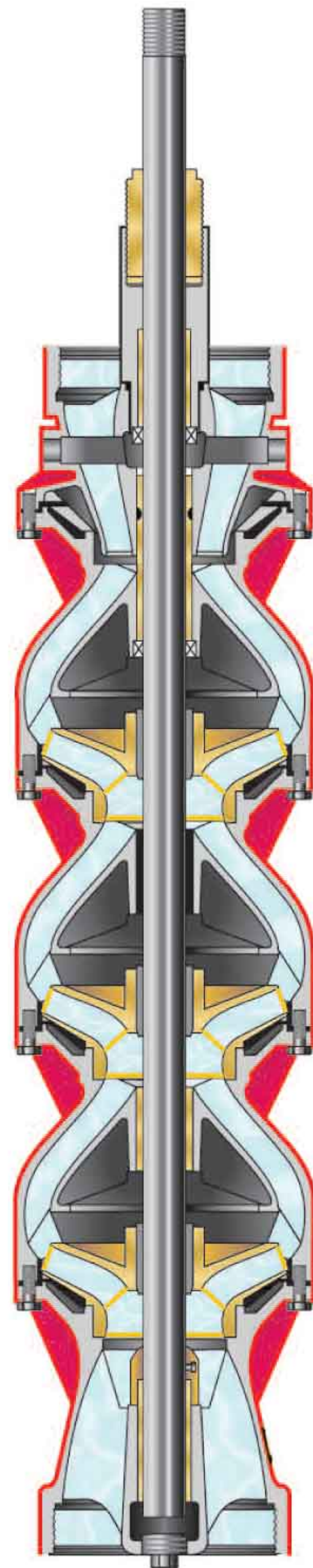
For water lubricated inner column assembly, proper alignment is maintained by butting the pipe ends on the line shaft bearing retainer. The horsepower is transmitted to the bowl assembly through a precision-ground, high tensile strength line shaft, made of ASTM C1045 carbon steel.

Special material for Column pipe assembly are available also such like SS 316L on request.

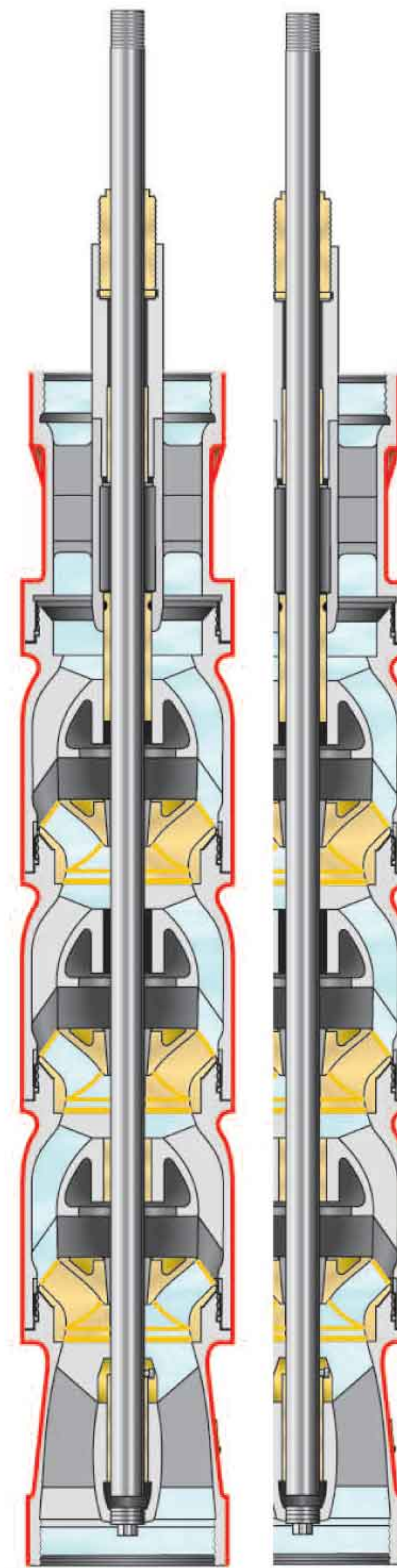


Bowl Assembly

MEETING RE



FLANGED CONSTRUCTION



THREADED CONSTRUCTION

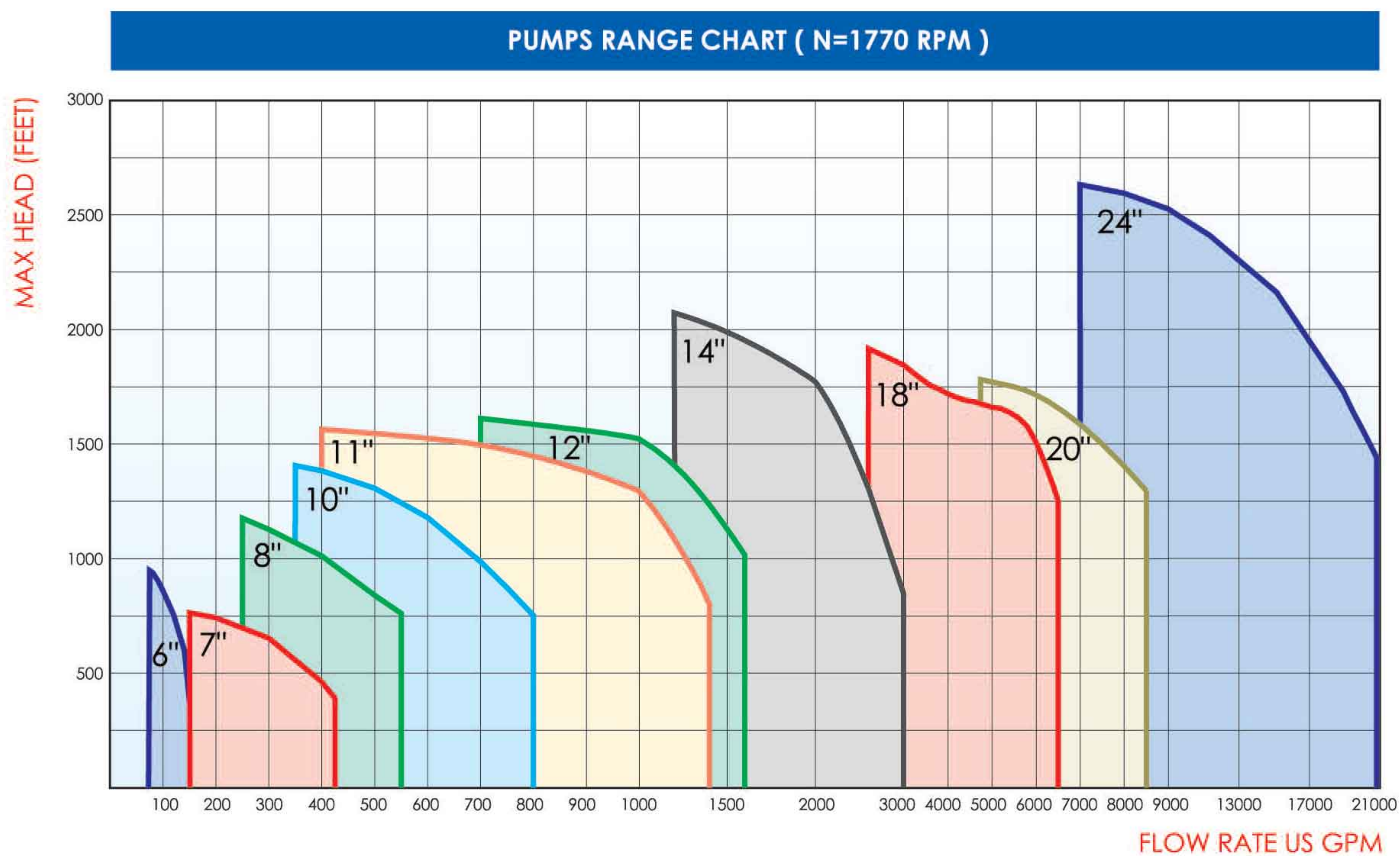
- The bowl castings are manufactured of robust cast iron in close grained structure iron according to ASTM A48 CL 30 with a minimum 30,000 PSI tensile strength, and veined to guide water flow from one impeller to the next with maximum efficiency.
- The enclosed impellers are cast from high-grade bronze according to SAE 40 with flow passages hand finished to a smooth surface for minimum efficiency losses. All impellers are balanced statically and dynamically to avoid vibration and secured to the pump shaft with tapered lock collet.
- The pump shaft is made from high-grade tensile strength stainless steel according to ASTM A276-T416 of diameter sufficient to prevent distortion.

- Bowl assemblies have varied specified components such as heavy-duty sand collars, sand lugs, bowl bearings in bronze and rubber, double-oil seals in top bowl bearing to help protect the oil tube from water. All bowls have a maximum lateral to allow for deep setting conditions. To insure long life under severe conditions, both rubber and bronze bearings (dual bowl bearings system) are used.

Optional enamel coated bowls are available to enhance pump performance and efficiency.

Product Range

REQUIREMENTS



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