PUMPS

WARSON

BOMBAS

MISSION

Our mission is to be **the best option** for our customers in the market for components and assemblies of **Vertical Turbine Pumps, Mixed Flow Pumps and Axial Flow Pumps** with high profitably and stable growth.

VISION

Our vision is to be the **best business model** and skilled in Mexico and recognized abroad in the design, configuration, manufacturing and marketing of components and assemblies of vertical pumping equipment.

VALUES

Central: **Loyalty, team work, responsability, innovation and creativity**
Support: **Respect, Trust**

ABOUT US

We are a company with **25 years of experience** as manufacturers and **more than 70 years in the pump industry.** We have complete control of the production process, from design, engineering and moldling, casting, machining, assembly and testing reaching the marketing process.

The whole company is centralized. We have strict quality control, we are an **ISO 9001:2008** and all our processes are certified by the same. Our pumps meet **ANSI standards, Hydraulic Institute, American Water Works Association, PEMEX, NFPA, NOM.** 60% of export production.

We have working pumps for use in agriculture, industry, petroleum, chemical, airports, military, food, municipal, fire, desalination. We have developed successful water projects in most countries of **North, Central and South America.**

VERTICAL TURBINE

WARSON

The **WARSON** turbine pump is specifically designed for high and mid pressure and be able to transport liquids according to what is required with high efficiency.

With a versatile and trustable design, the different configurations generate a great amount of possibilities to fulfill our client's needs and make the best use of his infrastructure.

The advantages of turbine pumps are:

- Minimum floor space
- Minimum NPSH requirements since the bowls are submerged
- It does not require prime work

Some of the available configurations are the following:

- Wet sump
- Dry sump
- Canned TEE head
- Well

FEATURES

APPLICATIONS	- Deep wells or surface water such as lakes, rivers, geothermals, aquifers. - Potable water - Irrigation - Pressure booster pump - Water treatment - Desalination plant - Wastewater pumping - Pressurization of flowlines
CAPACITY	- Up to 15,000 GPM
PRESSURE	- Up to 75 PSI
SETTING	- Up to 1,500 Feet
LIQUID HANDLED	- Water - Salt Water - Mine Water - Brines - Corrosives
TEMPERATURE RANGE	• 35 °F to 180 °F
APPROX. HP RANGE	- Up to 1,000 HP
DRIVERS	- Electric Motors - Diesel Engine - Gear Drives - Variable Speed Drives
CONSTRUCTION MATERIALS	- Any Machinable Alloys Available for Column and Bowls - Cast Iron / Bronze Fitted (Standard) - Nickel Aluminum Bronze - Stainless steel - Ductil Iron

SUBMERSIBLE

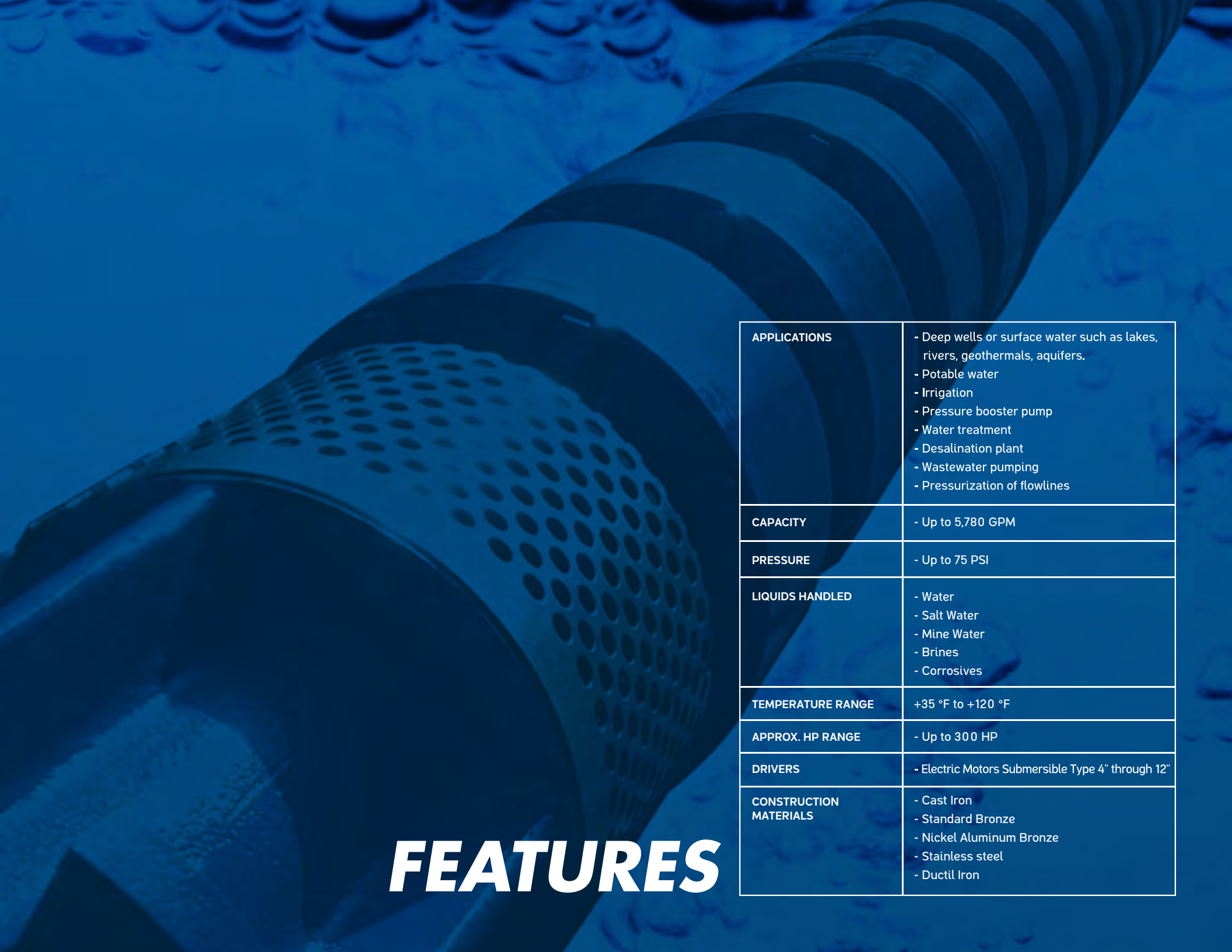
WARSON

The **WARSON** submersible pump is specifically designed to be used in well and booster pumps for industrial service, water systems, commercial, municipal and irrigation.

A submersible motor is attached directly to the pump and is designed to operate completely submerged in the fluid to be pumped. Electrical power is supplied to the motor by a water-proof cable. For deep well applications, the pump motor and cable are suspended by the column. In pressure boosting applications, the unit shall be housed in a barrel made of steel or in a tube when it is placed horizontally.

There are several applications where this type of submersible pump has its advantages:

- Extremely deep wells where there might be problems with the shaft of a transmission pump such as a deviated well
- In facilities where we could have potential flood problem that would cause problems in an electric motor on surface
- Pressure boosting applications where quiet operation is required
- Facilities which require minimum space
- Applications where the pump is placed horizontally into the pipeline and that the conditions require minimum excavation or use of surface space
- Dewatering systems



FEATURES

APPLICATIONS	- Deep wells or surface water such as lakes, rivers, geothermals, aquifers. - Potable water - Irrigation - Pressure booster pump - Water treatment - Desalination plant - Wastewater pumping - Pressurization of flowlines
CAPACITY	- Up to 5,780 GPM
PRESSURE	- Up to 75 PSI
LIQUIDS HANDLED	- Water - Salt Water - Mine Water - Brines - Corrosives
TEMPERATURE RANGE	+35 °F to +120 °F
APPROX. HP RANGE	- Up to 300 HP
DRIVERS	- Electric Motors Submersible Type 4" through 12"
CONSTRUCTION MATERIALS	- Cast Iron - Standard Bronze - Nickel Aluminum Bronze - Stainless steel - Ductil Iron

MIXED FLOW

The **WARSON** mixed flow pump design allows a medium to high capacity at a medium to low pressure with high efficiency.

A mixed flow pump allows solids to pass in an acceptable way. In our models the sphere pass goes from 1½ to 4 inches. Making it ideal for obtaining water from natural sources or dewatering work, sewage, industry, irrigation and aquaculture farms, usual needs arising from water management.

This pump has municipal agencies as their natural market. The advantages of a mixed flow pump are:

- Minimum floor space
- Minimum NPSH requirements because the body of bowls is immersed
- No priming
- The variety of construction materials makes this pump usable in a wide variety of applications

The usual configuration of a mixed flow pump is:

- Wet sump with discharge head below and over surface
- Used directly in rivers, lakes, etc.

FEATURES

APPLICATIONS	- Deep wells or surface water such as lakes, rivers, geothermals, aquifers. - Potable water - Irrigation - Pressure booster pump - Water treatment - Desalination plant - Wastewater pumping - Pressurization of flowlines - Flood control - Pollution control
CAPACITY	- Up to 23,800 GPM
PRESSURE	- Up to 75 PSI
LIQUIDS HANDLED	- Water - Salt Water - Mine Water - Brines - Corrosives
TEMPERATURE RANGE	- Up to 200°F
APPROX. HP RANGE	- Up to 1000 HP
DRIVERS	- Electric motors - Steam turbine - Diesel motors - Geared drives
CONSTRUCTION MATERIALS	- Cast Iron / Bronze Fitted (Standard) - Standard Bronze - Nickel Aluminum Bronze - Stainless steel - Ductil Iron

AXIAL FLOW

The **WARSON** axial or flow impeller pump, is a pump that it's design makes it capable of delivering a high capacity but low pressure with high efficiency.

One of the biggest benefits is that the pump allows the largest solids pass of all our models. The sphere pass is; 2¼" up to 5⅞", making it ideal for water treatment plants and waste water treatment plants and water extraction from natural sources or a large wet sump.

Several of their target markets are the municipal pumping systems, industry, irrigation and aquaculture plants. The advantages of a propeller type pump are:

- Minimum floor space
- Minimum NPSH requirements because the body of bowls is immersed
- No priming
- The variety of building materials makes this pump usable in a wide variety of applications.

The usual configuration of a propeller is:

- Wet pit with head above and below surface

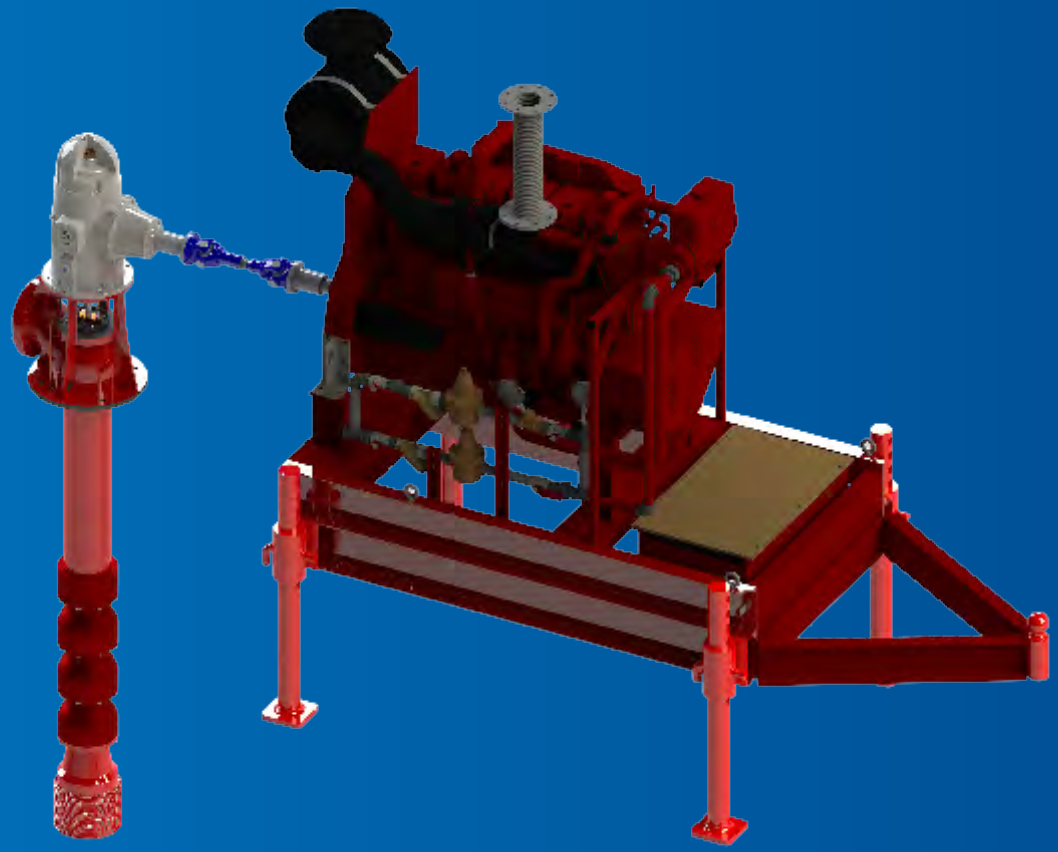
FEATURES

APPLICATIONS	- Deep wells or surface water such as lakes, rivers, geothermals, aquifers. - Potable water - Irrigation - Pressure booster pump - Water treatment - Desalination plant - Wastewater pumping - Pressurization of flowlines - Flood control - Pollution control
CAPACITY	- Up to 27,000 GPM
PRESSURE	- Up to 13 PSI
LIQUID HANDLED	- Water - Salt Water - Treated Water - Chemical Solutions - Mine Water - Brines - Corrosives
TEMPERATURE RANGE	• -20 °F to +200 °F
(HP) APPROX. RANGE	- Up to 1,000 HP
DRIVERS	- Electric Motors - Diesel Engine - Gear Drives - Variable Speed Drives
CONSTRUCTION MATERIALS	- Any Machinable Alloys Available for Impeller and Bowls. - Cast Iron / Bronze Fitted (Standard) - Nickel Aluminum Bronze - Stainless steel - Ductil Iron

FIRE PUMPS

The fire pump, a central part of a fire protection system water supply can be powered by electricity, diesel or both. The pump is connected to a supply valve underground water pipe or a water source (for example, reservoir, sump, lake). The pump provides water flow at high pressure to the sprinkler system, fire hydrants and in conjunction with a pipeline. Each pump is tested specifically for use in fire service. The main code that regulates facilities fire pumps in North America is the National Fire Protection Association NFPA, NFPA-20 is the standard we use for the Installation of stationary pumps fire protection in **WARSON**.

A jockey pump is a small pump connected to the sprinkler system or hydrant. It is intended to maintain a high pressure in the piping system, so when a single sprinkler goes on, the pressure on the systems goes down and starts the main pump. The jockey pump is an essential part of the fire pump system.



FEATURES

APPLICATIONS	- Commercial buildings - Power industry - Offshore drilling platforms - Municipal water systems - Construction - Agriculture
CAPACITY	- Up to 4500 GPM
PRESSURE	- Up to 410 PSI
LIQUIDS HANDLED	- Clean water - Sea water
TEMPERATURE RANGE	• 35 ºF to 186 ºF
(HP) APPROX. RANGE	- Hasta 1000 HP
DRIVERS	- Main pump - Water supply valve pipes - Jockey pump - Diesel Enginge - Gear head
CONSTRUCTION MATERIALS	- Nickel Aluminum Bronze - Standard bronze - Stainless steel - Ductil iron - Cast iron

SPECIAL MATERIALS

The pump industry requires different kinds of materials for different applications. The WARSON's line of special materials is designed for applications where abrasion and/or corrosion are key factors for pump performance.

At WARSON we only work with certified materials to ensure the quality of our Castings. Having our own foundry allows us to work the following materials in-house:

- **CrNi Hardened Iron:** Excellent for highly abrasive pumping conditions, like water with high solid content.
- **Ductile Iron:** Highly recommended for high head pumping conditions, when Cast Iron's resistance is not enough.
- **SS316:** Ideal for highly abrasive and corrosive pumping conditions.
- **NiAlBr:** Great performance in salt water applications. An excellent substitute for Stainless Steel.
- Other **Bronze** alloys for a wide range of different applications.

FABRICATED LINE

WARSON'S Fabrication process is focused on delivering the perfect fit for your project.

Our highly qualified engineering professionals develop products tailored-to-order, collaborating with our **AWS certified** welding team and **ISO-9001-2008** certified machining process.

At **WARSON** our tolerances are consistent with the highest standards of industry best practices. All projects requests are quoted within one business day.

Our quality assurance team is highly trained and equipped to inspect and hydro-test every piece before shipping.

In **WARSON**, we only work with certified supplier for our raw materials. The best materials deliver fabricated pieces that can handle much more resistance than a casted Discharge Head.

PRODUCTS AND MATERIALS

PRODUCTS	- Discharge Heads • WOFL (Above ground L) • WUFL (Under ground L) • WOFT(Tee) • WFŒ (Above ground E) • WOFG (Above ground G) • WUFG (Under ground G) - Motor Stands - Cans - Flanged Pipe - Manifull
MATERIALS	- Carbon Steel - Stainless Steels: • SS 316 /316L • SS304 • Duplex • Super Duplex

FABRICATED PROJECTS

Fabricated turnkey projects which may include the entire pumping station, mainfull or multiple discharge lines, tanks, ANSI flanges, control valves and maintenance bridge in order to get the turnkey pump station including the **SMART PUMPS** control system.

We can also customize special projects such as, discharge heads with special requirements to **40 ft long** machine booster cans.

The use of vertical lathes of **100 inches of swing and 71 inches of height and horizontal lathes of 30 inches of swing**, and qualified labor guarantees us an excellent job, allowing us to offer the best quality and supply the market of large pumps.

MACHINERY

Vertical Lathe's	Max. Swing 100"	Max. Height 73"
Horizontal Lathe's	Max. Swing 32"	Arm length 132"
Drills	Max. Height 54"	Arm length 50"
CNC	Diameter 18"	Height 10"
20'x10' CNC Cutting table	Max Thickness Plate 4"	

COATINGS

- Tnemec 141
- Sherwin Williams powder NSF-61
- Engard 480
- Carboline 300M
- 3M Scotchkote 134
- DuPont Nap-Gard 7-0014
- Plasite 7122

CASTING

PATTERN SHOP

TEST PIT

SUFFICIENT WAREHOUSE STOCK FOR FAST DELIVERY

CNC MACHINERY

OUR FACILITIES

PUMPS
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BOMBAS

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