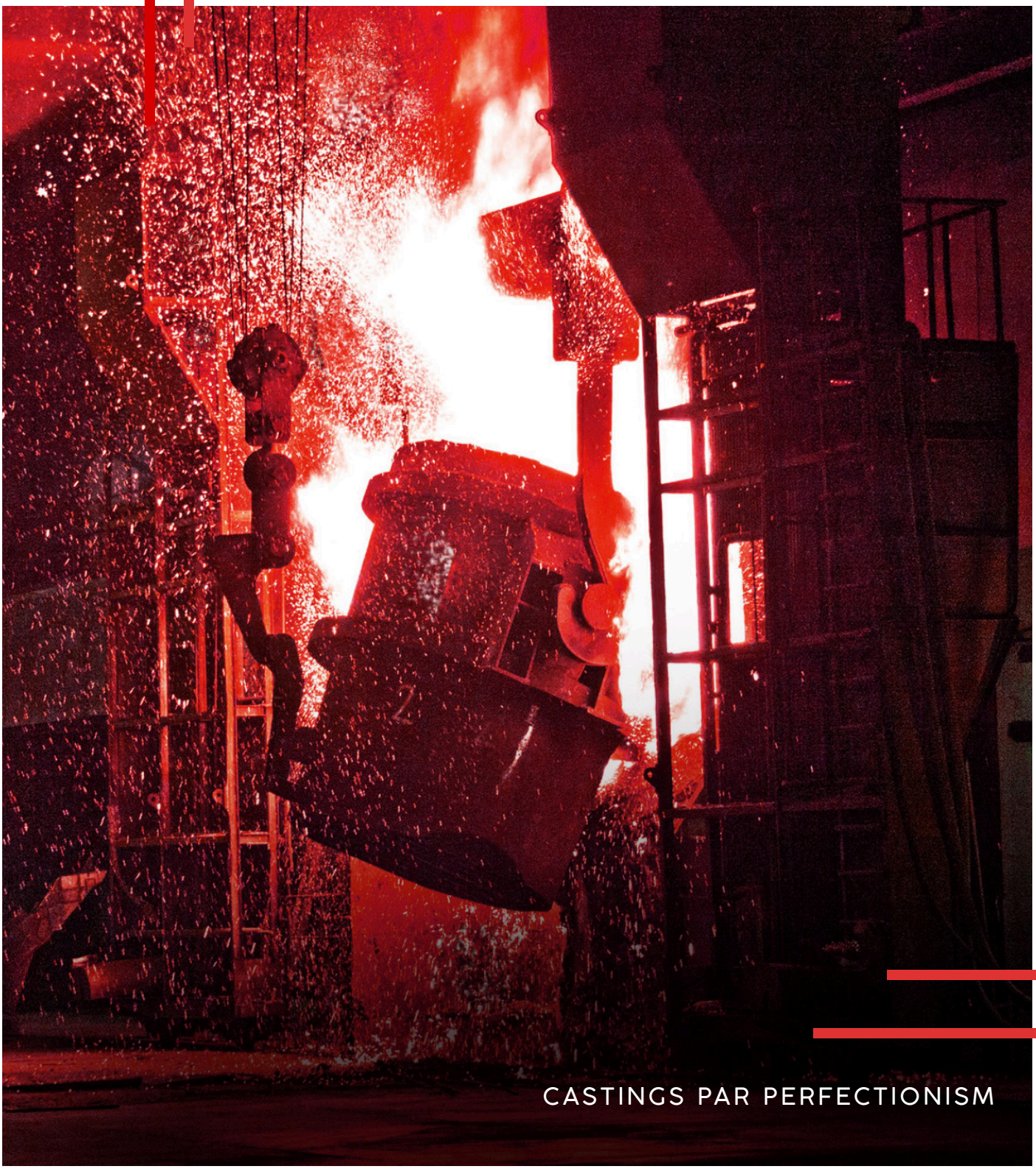
ATUL
precision cast



CASTINGS PAR PERFECTIONISM

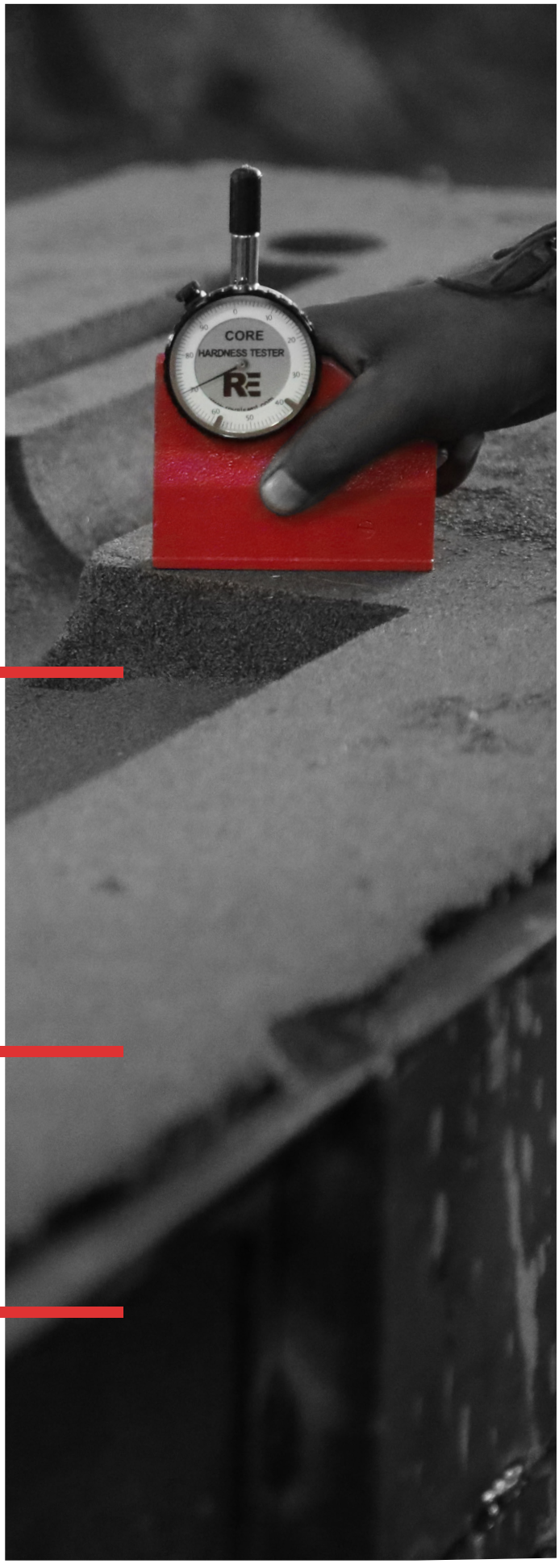
Index 00.

About Us 01.

Atul Group consists of high end machine shops and ISO 9001:2015 certified foundries producing Quality Casting by various process such as Sand casting,Lost Wax casting, Lost foam casting and centrifugal casting in different alloy steels, Duplex and super Duplex steel, High chrome and Nickel based alloys, graded cast iron and Ductile iron.

Atul Precision Cast is strategically positioned at Rajkot, Gujarat with ware-houses in Texas and Netherlands. We cater to various demanding requirements of many challenging Industries such as Hydro Turbines, Special Chemical Pump, Defense Industries, Earth moving equipments, Automobile Industry and Pharmaceutical Industry in India and abroad. We have earned reputation for fast deliveries, superior quality, competitive pricing and outstanding customer service.

Facilities 02.



Backed by state-of-the-art manufacturing facilities and managerial know-how we confidently meet the technical requirements in terms of intricacy of the casting and specifications.

Tool Room:

We have a well- equipped In-house tool room for manufacturing Pattern, die, Jigs and fixtures for any critical component.

Melting Shop:

Induction melting furnace with crucibles of 250, 500, 1500 and 5000 kgs. Weight range for a single piece of casting is from 5 grams to 3500 kg.

Upgradation Department:

Our in-house fettling shop is equipped with pencil grinders, hand grinders, Heavy Swing frame grinders, air arc Gouging, Shot Blasting, Sand Blasting, Acid pickling & Passivation for increasing corrosion ressitance for castings. Welders are qualified as per IBR / ASME/ EN Standards, under supervision of TUV TPT.

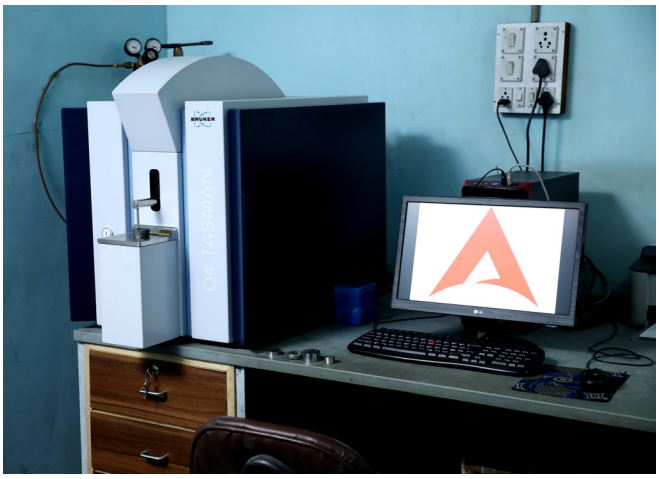
Heat Treatment:

We have Electric furnace of capacity upto 3 ton per charge, Maximum operating temperature 1200°C, with arrangements for automatic multipoint temperature recording of various zones of furnace and with facilities for water quenching. Furnace is calibrated to API-6AAnnex under TUV.

03. Quality

At Atul Precision Cast, We lay emphasis on total quality. Our Quality program encompasses all the processes right from the inception of the customer's casting design to the delivery of quality and flawless products to the complete satisfaction of our customers.

Effective management for quality is achieved by clearly defining objectives and responsibilities and making resources available to implement and maintain APC Alloys Quality Policy. We at APC do several quality checks with our quality experts. Below are some of the Testing processes which we follow to deliver flawless products to the fullest satisfaction of the client.



Chemical Testing:

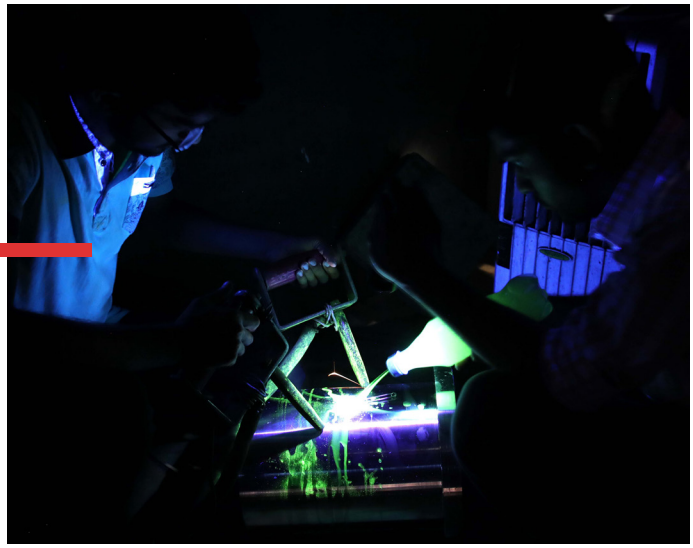
Optical emission direct reading with Bruker make spectrometer with 26 channels.

Physical Testing:

Equipped with 20 Tons Universal Testing Machine, Brinell Hardness Tester and with Portable Dynamic Hardness Testing Machine we determine hardness, Impact strength and Tensile strength.

Sand Testing:

With complete range of sand testing equipments for testing AFS Number, moisture content, clay content etc.



Non- Destructive Testing:

In-house facilities for Ultrasonic Testing, Magnetic Particle Testing, Dye Penetrant Testing evaluated by Level-III inspectors certified as per SNT.TC.IA

Fact File:

APC at present exports 70% of castings to European market under EN 10204 3.1 certification for castings under Third Party witness on requirement of the customer.

Certification:

ISO-9001: 2015 for Quality Management Systems by TUV, PED approved by TUV.

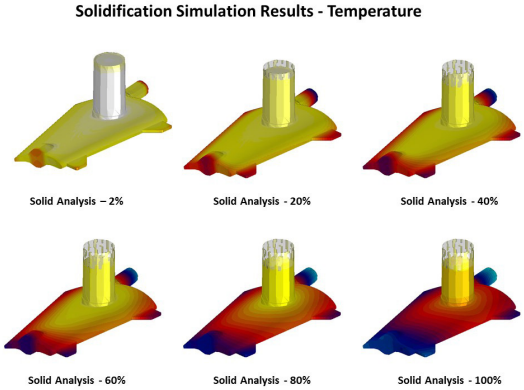
Core Competency 04.

We feel privileged to have not merely survived in today's competitive business world, but, progressed with leaps and bounds. With the continued support of our customers and the dedication of our team, we have been able to develop the following core competencies:

ERP implementation: We ensure seamless management using ERP software which makes our business systems integrated and automated hence minimizes the chances of error, increases productivity, streamlines all business processes leading to increased efficiency and nurtures our company's growth.

CAD/CAM: at ATUL, our designing facility has been completely modernized. We ensure that our designing excellence using CAD helps us to produce effective and accurate designs and it's seamless integration with CAM technology makes complex machining simple with help of highly advanced tools like SolidWorks and Power Mill.

Casting Simulation: We have a powerful tool to visualize mould filling, solidification and cooling, and to predict the location of internal defects such as shrinkage porosity, sand inclusions, and cold shuts. It can be used for troubleshooting existing castings, and for developing new castings without shop-floor trials.

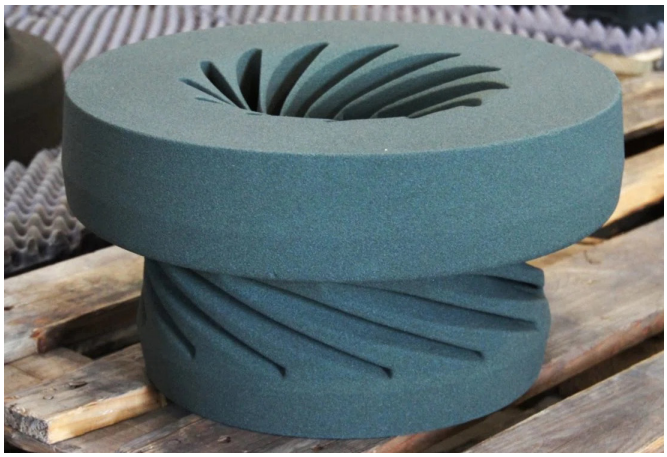


Alloy Selection and Product Redesign:

We have in-depth knowledge of various alloys & well experienced design department which enables us to offer castings with enhanced metallurgy and design, which improvises application of redesigned component.

Reverse Engineering: We have the engineering & manufacturing expertise to reverse engineer your worn out mechanical parts using laser scanners and portable FARO Arms and make new ones with similar or better efficiency.

Rapid Prototyping: Atul Precision cast can actualise your ideas and invention in just a few days which could give you opportunity to physically review the design and functionality of the product before it is sent for mass production.



With advanced machines and 3d printer of different kinds such as 3d printer for plastic parts, metal parts, sand moulds and core you get lot of advantages which includes-

Geometrical Freedom:

- Freedom to create complex geometry, which might not be possible with conventional method.

Low production & High efficiency:

- 3dPrinting is an economic way to manufacture one off parts or even small batches, with 100% repeatability without investing large sum of money behind toolings.

Adaptability

-3dPrinting parts require no tooling therefor less risk is involved while developing a new part, incase of ammendments; they can be made digitally and be reprinted.

Machines 05.

Equipped with high-end CNC, VMC, VTL, Wirecut and HMC machines, enables us to make most intricate parts with maximum precision.

VMC Machine

Make :HAAS, USA

Model: VF - 5/50

Weight Carrying Capacity: 1814 kg

X axis : 1279 mm

Y axis: 660 mm

Z axis: 635 mm

HMC Machine

Make :HAAS, USA

Model: EC 1600 (4 axis)

Weight Carrying Capacity: 4536 kg

X axis : 1626 mm

Y axis: 1270 mm

Z axis: 813 mm

CNC VTL Machine

Make :Honor Seiki

Model: VL 160 C

Weight Carrying Capacity : 8000 kg

Maximum Swing : 2000 mm

Chuck Diameter : 1270 mm

Maximum Turning Height : 813 mm

CNC WIRE CUT ELECTRICAL DISCHARGE MACHINE

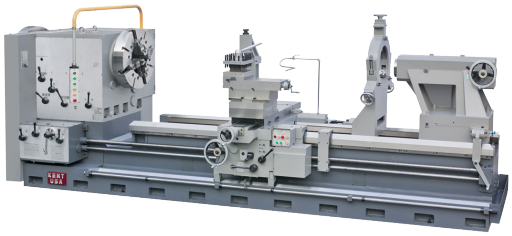
Make: Ratnaparkhi Electronics Industries Pvt Ltd

Model: EZEECUT-NXG

Avg. Cutting speed 80 mm^2/min on steel

Multipass and Multicavity facility

Best surface finish 1.5 Ra



HORIZONTAL CONVENTIONAL LATHE MACHINES

Make: Multiple

Weight Carrying Capacity: 3000 kg

Face Diameter: 1828 MM

Chuck Diameter: 1371 MM

Turning Height: 914 MM

Bed Length: 4267 MM

CNC Lathe Machine

Make :HAAS, USA

Model: SL 30

Max. Swing : 450 mm

Max Length: 900 mm

CNC Lathe Machine

Make :DENVER, TAIWAN

Model: RHL 960

Max. Swing : 1200 mm

Max Length: 3000 mm

VMC Machine

Make :Sinho, Taiwan

Model: Customized

Weight Carrying Capacity: 5814 kg

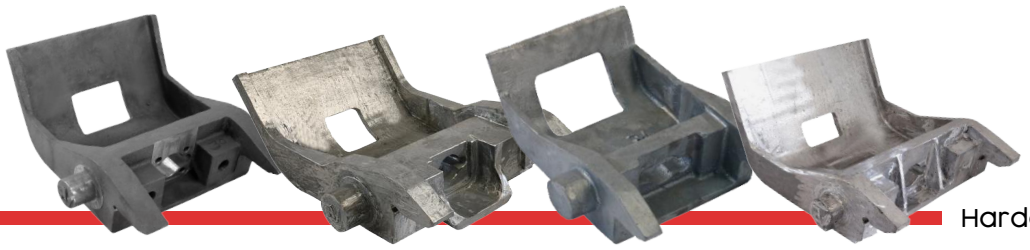
X axis : 3000 mm

Y axis: 1500 mm

Z axis: 800WW mm

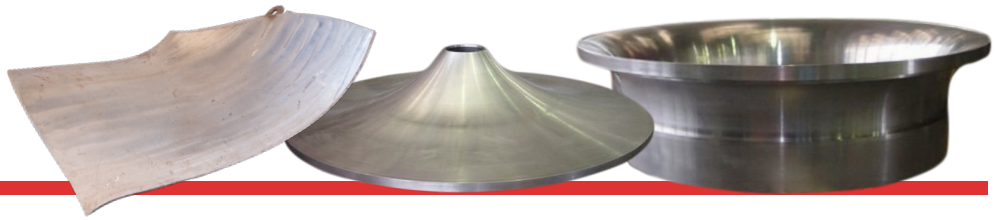
Products 06.

Alloy steel valves for chemical treatment plant

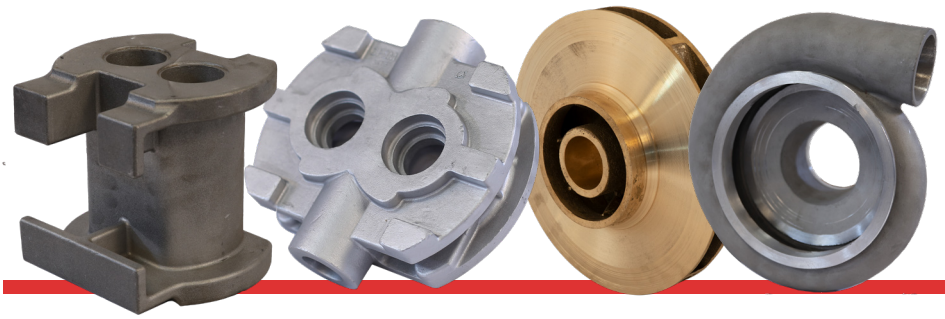


Hardened steel Quick couplers for excavators.

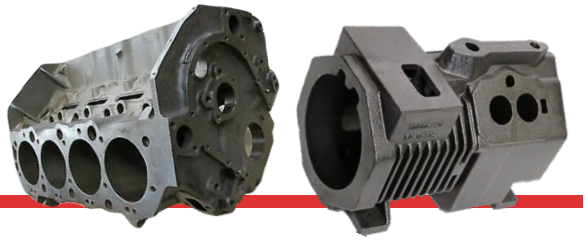
Heat resistant and corrsion resistant spares for cement industry.



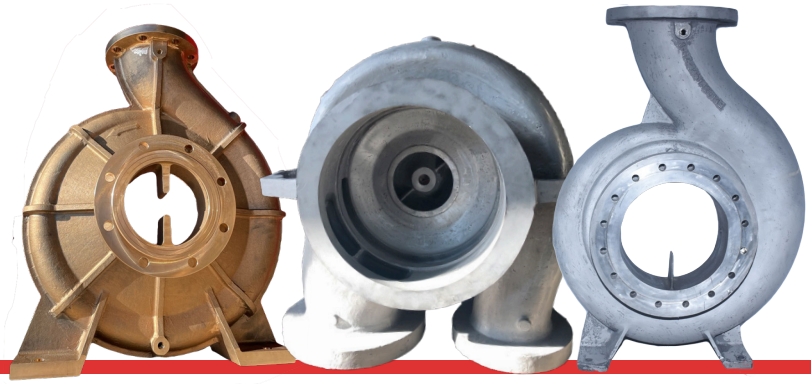
Alloy steel componens for cast fabricated francis runner.



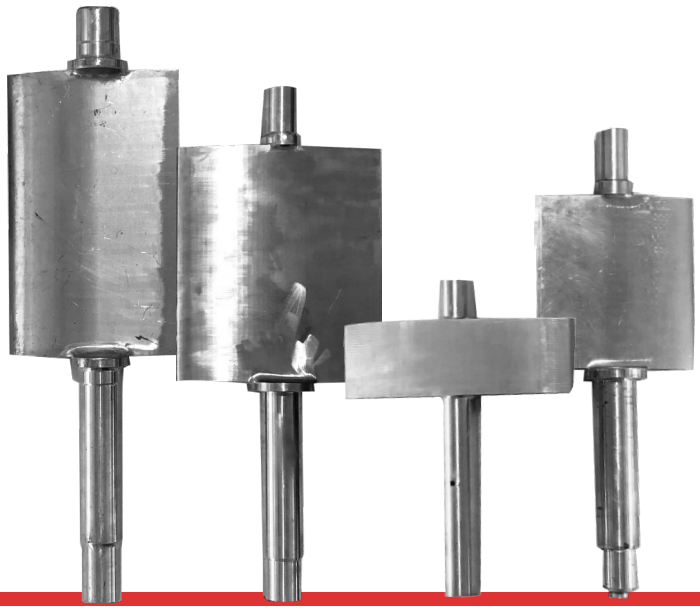
Ferrous and non-ferrous lost wax spares for pump industry



Graded ductile Iron lost foam spares for heavy compressor and Engine.

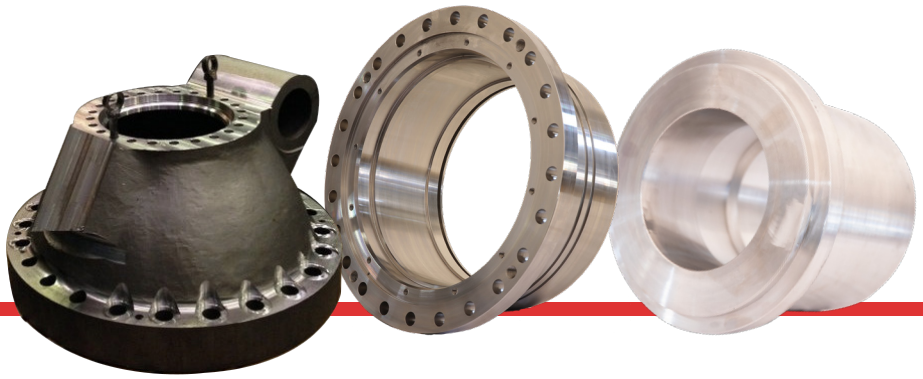


Stainless steel multi-volute pump casings



Machined rotors for Hydro and Marine Industry

Casted,Machined and
Fabricated complete turbines.

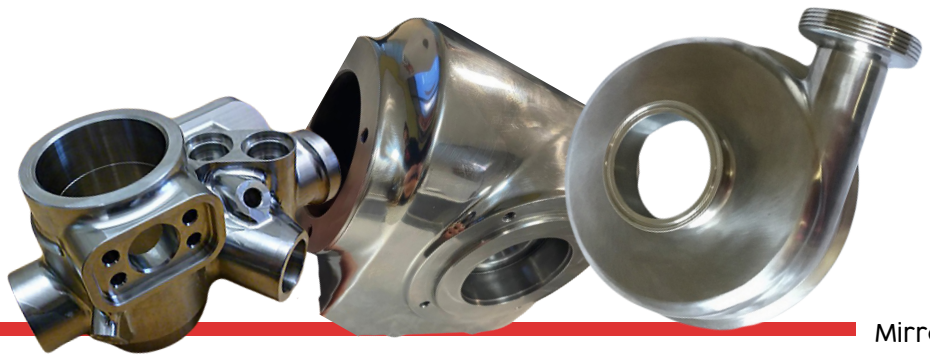


Sand Casted and centrifugally
casted Turbine spares.

Alloy Steel Machined spares of
Kaplan Turbine.

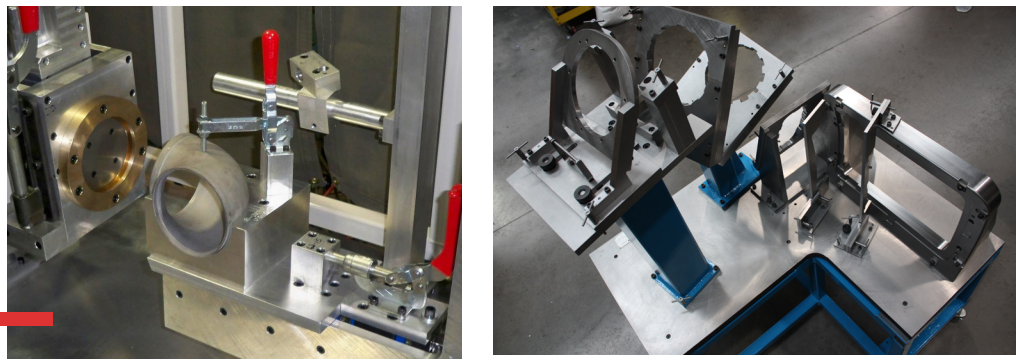
Single piece casted and machined Turgo and Francis runners.

Alloy Steel sand casted spares for Multi-Stage and Scew pump.

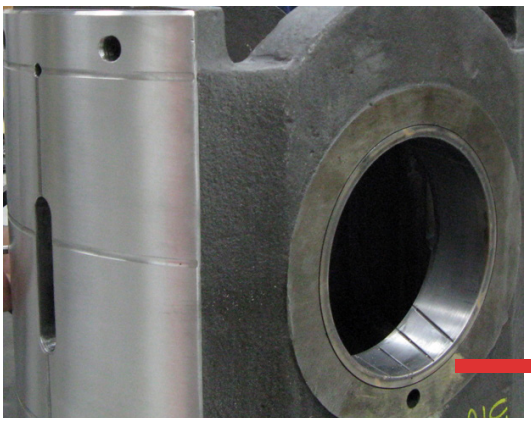


Mirror polished castings for food , pharmaceutical and aerospace industry

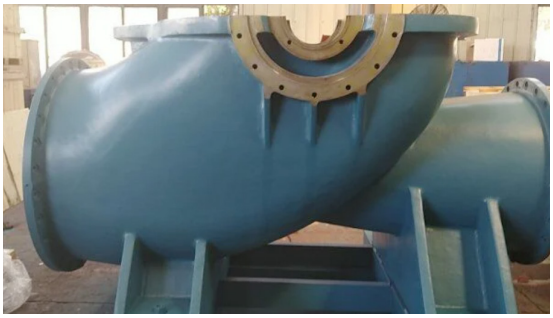
Machining of Monoblock Impeller



Critical jigz and fixtures



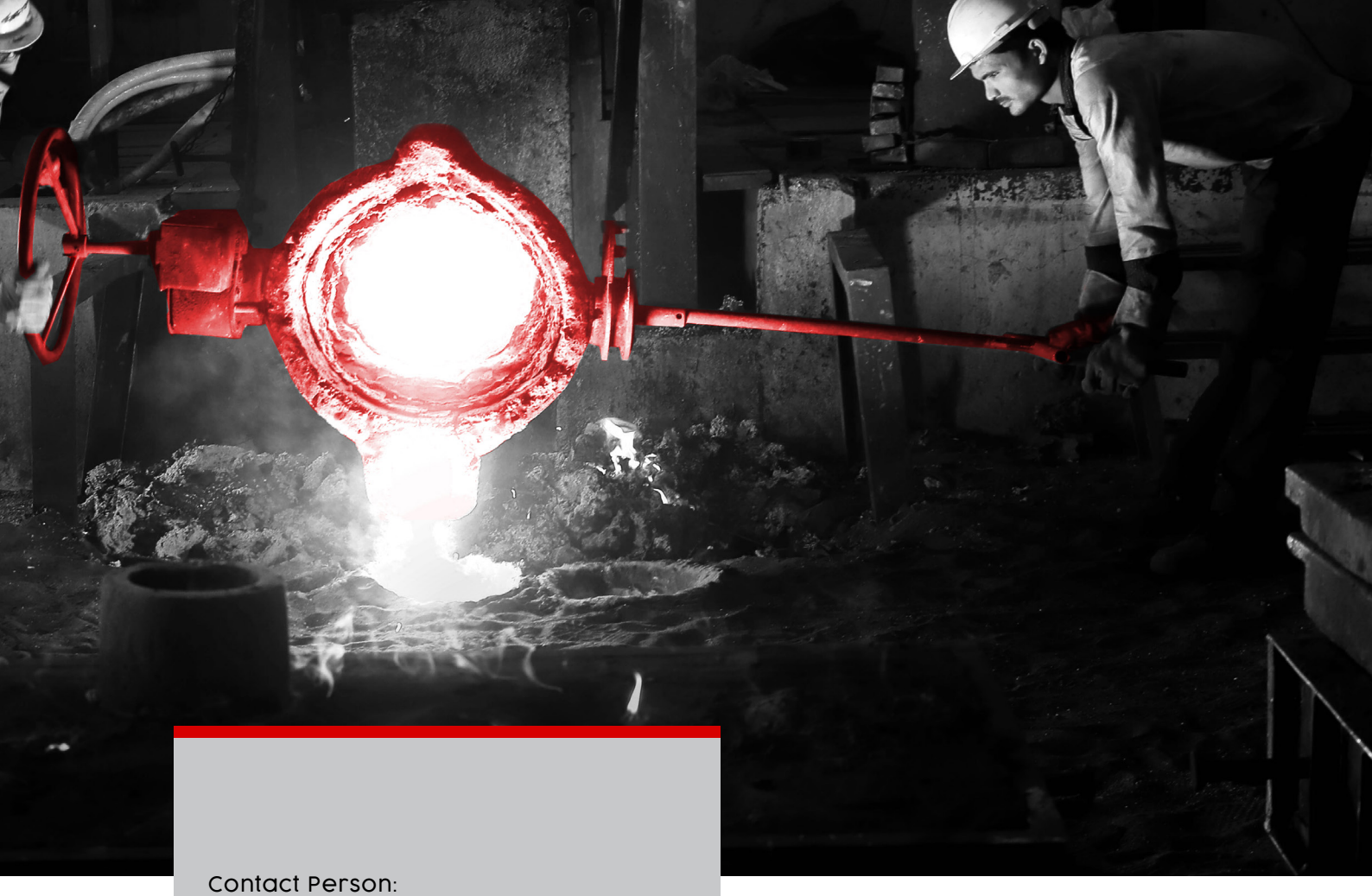
Machined Reciprocating Pump spares



Split Pump Casting

Machining of impeller and kaplan blade

Machining of Crown and Labyrinth for fracis turbines



Contact Person:

Mr. Hitesh Gorasia

+91 9824218179

Mr. Chintan Gorasia

+91 9033933330

Atul Precision Cast

91, Balaji Industrial Estate, Manda Dungar, Bhavnagar Road,

Rajkot-360 003. Gujarat, India.

Email:

info@atulprecisioncast.com

Website:

www.atulprecisioncast.com

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