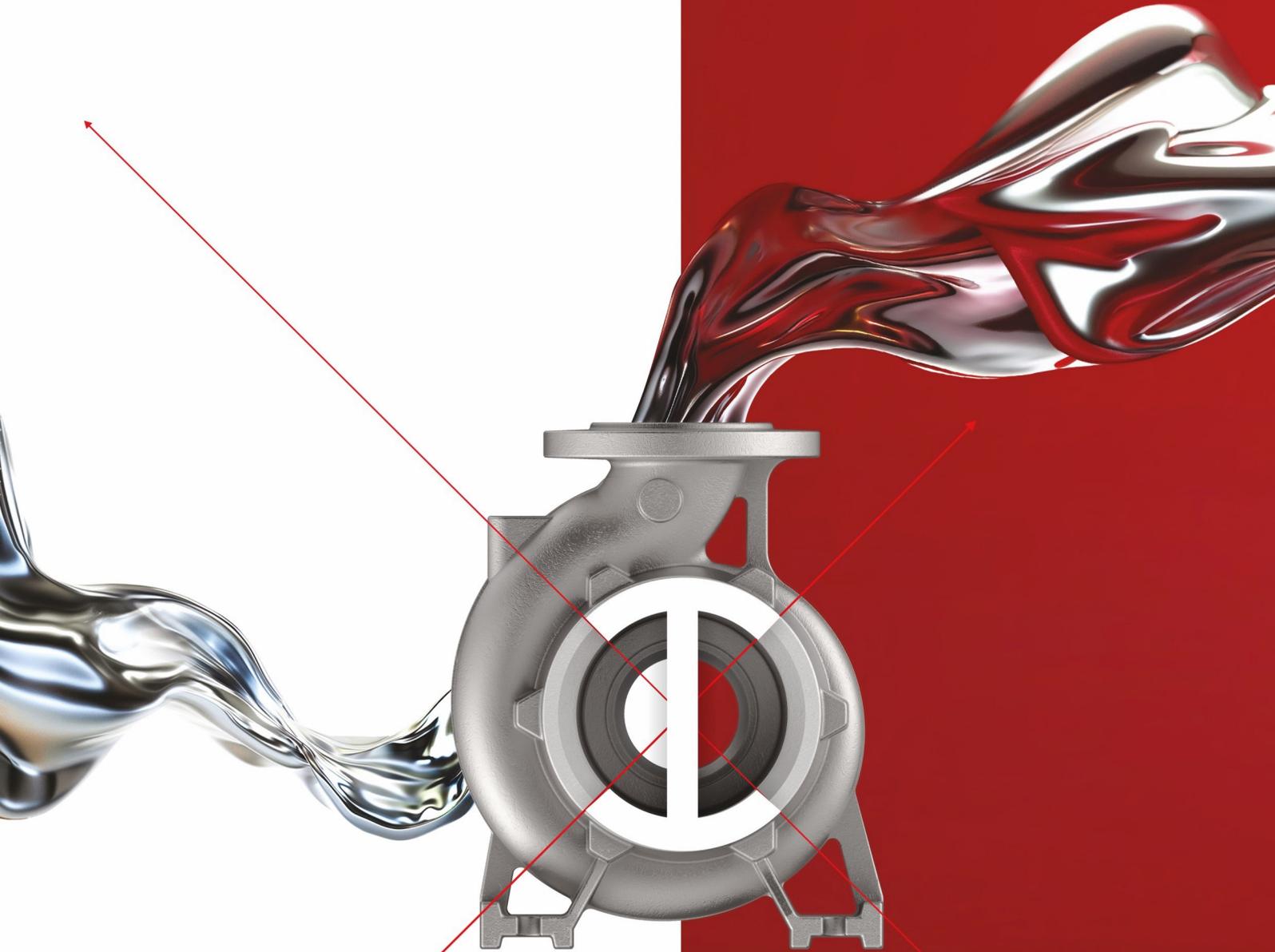


**SOLUTION SUPPORTING IDEAS  
MORE THAN A FOUNDRY:**  
YOUR RELIABLE PARTNER IN PROGRESS



**INTRICAST**  
INVESTMENT CASTING | SAND CASTING | MACHINING



POURING VALVE &  
**SINCE 36 YEARS**

PUMP CASTING  
& STILL CONTINUING



**36** GLORIOUS YEARS  
IN THE ART OF CASTING





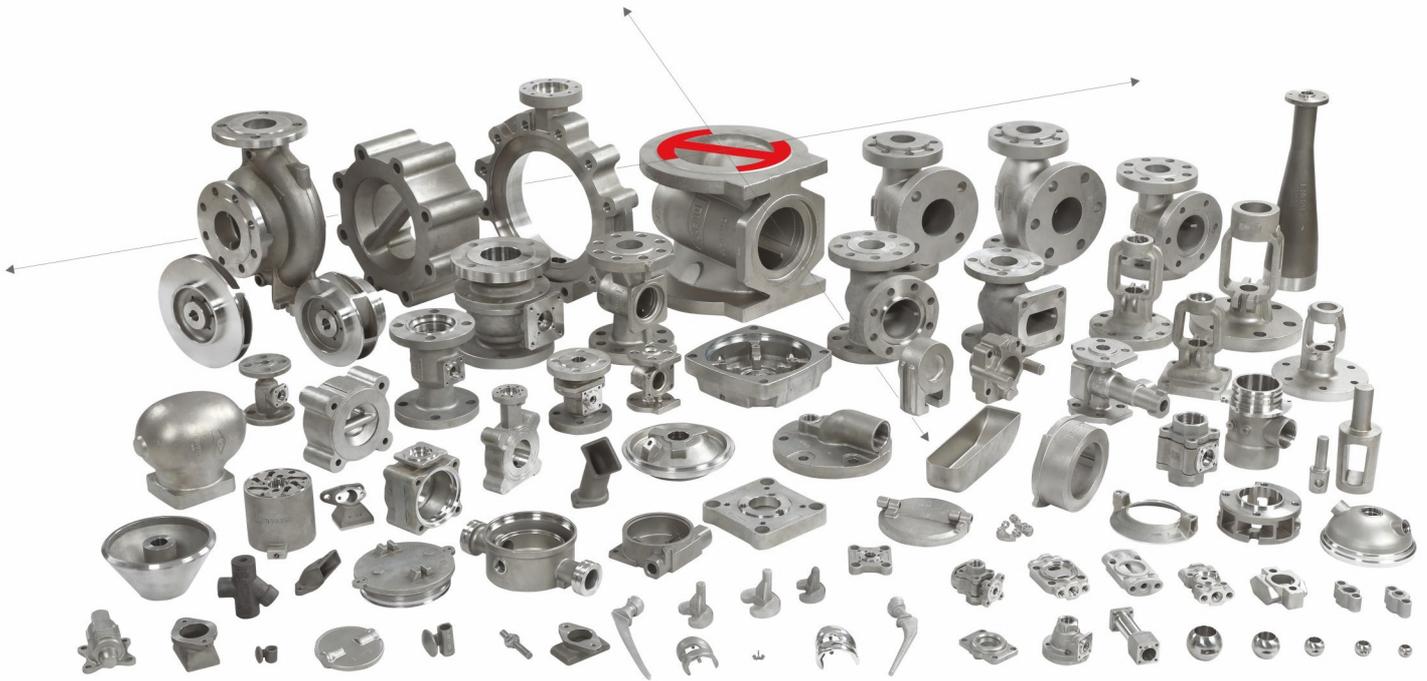
INTRICAST PVT. LTD. an Investment Casting foundry was established in year 1988. To meet the increasing demand of Investment castings and to satisfy the need of bigger size castings, INTRICAST had added three more manufacturing location under the name of **intolcast pvt. ltd.** (an Investment casting foundry, year 1994), **GUJARAT INTRUX LIMITED** (a sand castings foundry, year 1998) and **invac CAST LTD.** (an Investment castings foundry, year 2012 to produce Vacuum and Air melt Investment castings for Valves - Pumps - Turbine Wheel - Orthopaedic Implants). Comprising all four locations, total built up area spread over to 29591 mt<sup>2</sup> (plot area 85692 mt<sup>2</sup>) and yearly manufacturing capacity is 8000 tonnes. Out of yearly (year 2023-2024) produced 4428 tonnes, 90% of production (3985 tonnes) are shipped to Valve & Pumps companies which consists of all Ferrous alloys, Low & High alloys, Steel & Stainless Steel, Duplex Steel & all air melt Nickel and Nickel alloys including some selected Non Ferrous grade like Brass and Aluminium Bronze. The weight handled in Investment Castings is from few grams to 180 kg and in Sand castings from 50 kg to 1800 kg.

The financial strength as appraised by D & B:

**Performance and Credit Rating is SME2**

(Highest Performance capability and High Financial Strength)

In our quest to be close to the customer, INTRICAST has created global sales linkage by bringing together a seasoned team of casting specialists from all over the world, foundry having it's global sales network in Europe, U.K., U.S.A & in India. 65% of production are being exported to various parts of world viz Germany, Israel, Spain, The Netherlands, Sweden, Hungary, UK, USA, Mexico, Italy, France, Austria, Denmark, Argentina, Slovenia and Portugal . To test and certify in accordance to standard, foundry is having state of art testing facilities including Radiography Source IR-192 & Co-60 isotopes. Approvals we have are for ISO 9001-2015, AD 2000- Merkblatt W0, PED acc to directive 2014/68/EU, ISO 14001-2015 , ISO 45001-2018, API-20A, Lloyd's, DNV-GL, Bureau Veritas, KRS, IBR, ABS & EIL. Apart of this, foundry having an approval for manufacturing of castings for world renowned refineries and certification bodies like NORSOK.



## INVESTMENT CASTING & It's **SCALE**

At INTRICAST, we manufacture Investment Castings weight of single piece casting 40 Kg. ideally (having facility & technical capabilities to cast up to 180 Kg). We are equipped with 47 nos. of high tech wax injection presses, state of art shelling area having environment control with respect to temperature, humidity and 3 nos. of auto clamp for de-waxing.

Our melting shops are equipped with: Six medium frequency Induction furnaces of 250KW with varying crucible of 50kg, 150kg, 350kg & 750 Kgs. (9 nos.) and one medium frequency Vacuum melting for type VIM-IC 1 E-BP, Equiaxed Bottom Pour, designed for melting and castings for turbine wheels and orthopaedic implants. Our Heat treatment shop is equipped with three gas fired, Batch type, size: W 1500mm x D 1200mm x H 750mm, having loading capacity of 1000kgs. and two Electrically heated, Batch type having loading capacity of 400kgs. All Heat treatment furnaces are monitored by SCADA base software for real trends of different zone for individual furnace.

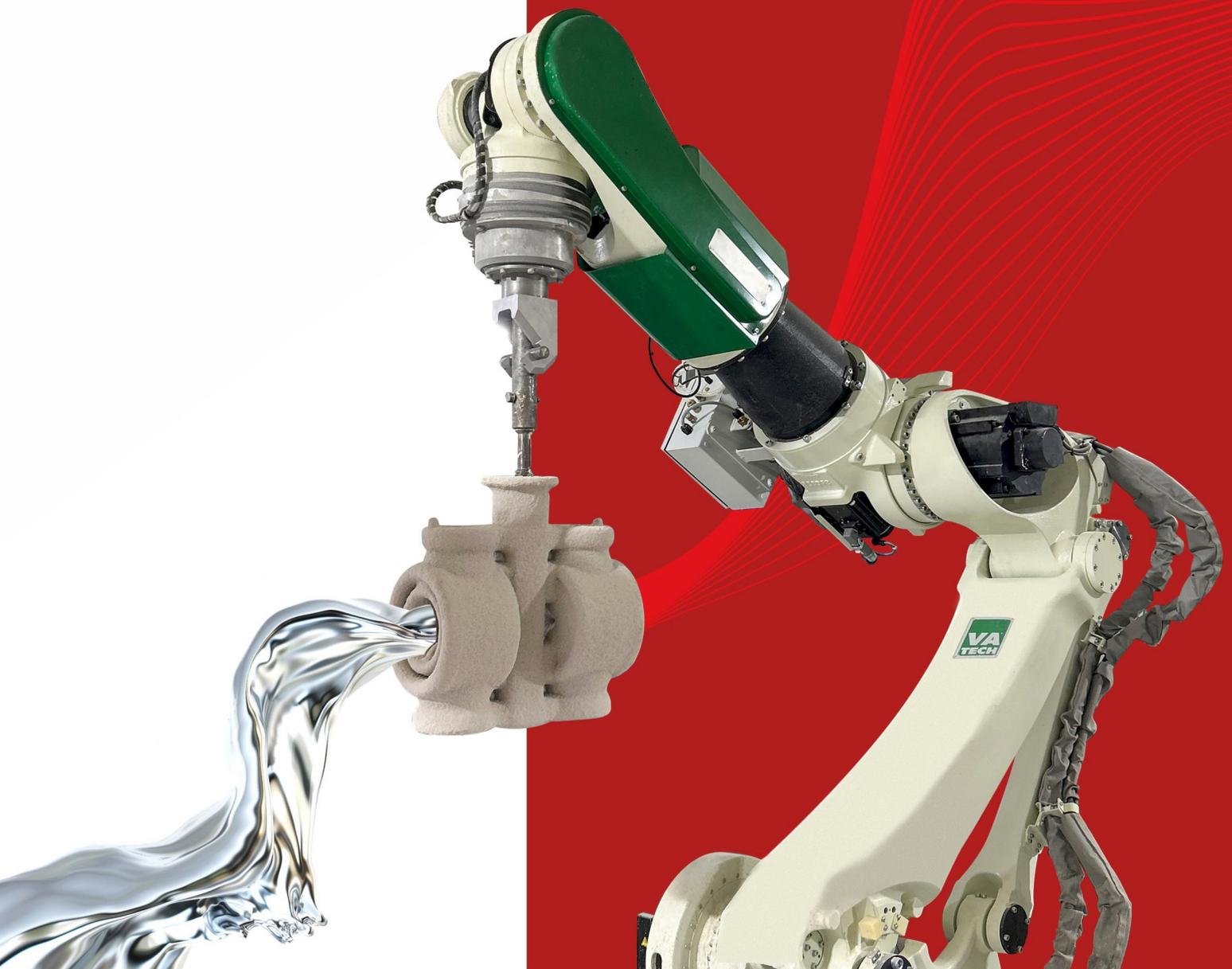
Entire operations are running with ORACLE base customized foundry software, which is unique for our process. 90% of production capacity are utilized for manufacturing of Valves & Pumps castings viz 3 pc, 2 pc & Single pc ball valve, Top entry ball valve, Plug, Diaphragm, Swing check, Safety relief, Dual plate check valve, Trunnion mounted ball valve (TMBV), Soft seated, Knife gate, Pneumatic, Steam trap, Butterfly, Non Returned, Gate, Globe valve, Pressure transmitter, Transducer, Actuator, Slurry pumps, Dairy pumps, Chemical handling pump, Submersible pumps, Screw pump, Diaphragm pump & castings for sea water handling and used in RO process etc.

Composition we cast are Ferrous alloys, low & high alloys, steel, stainless steel including duplex steel, all air melt Nickel, Nickel alloys and selected Non Ferrous alloys and selected Nickel base vacuum melting alloys.



## ROBOTIC SHELLING FACILITY

The system is fully automatic for processing shells for coating operation. 6 DOF Robot with load carrying capacity 250 Kg. Hence it is capable of processing heavy weight shells for investment casting. It has integrated software which helps to run the whole system in auto mode supported by program developed or tailored to the coating requirements.

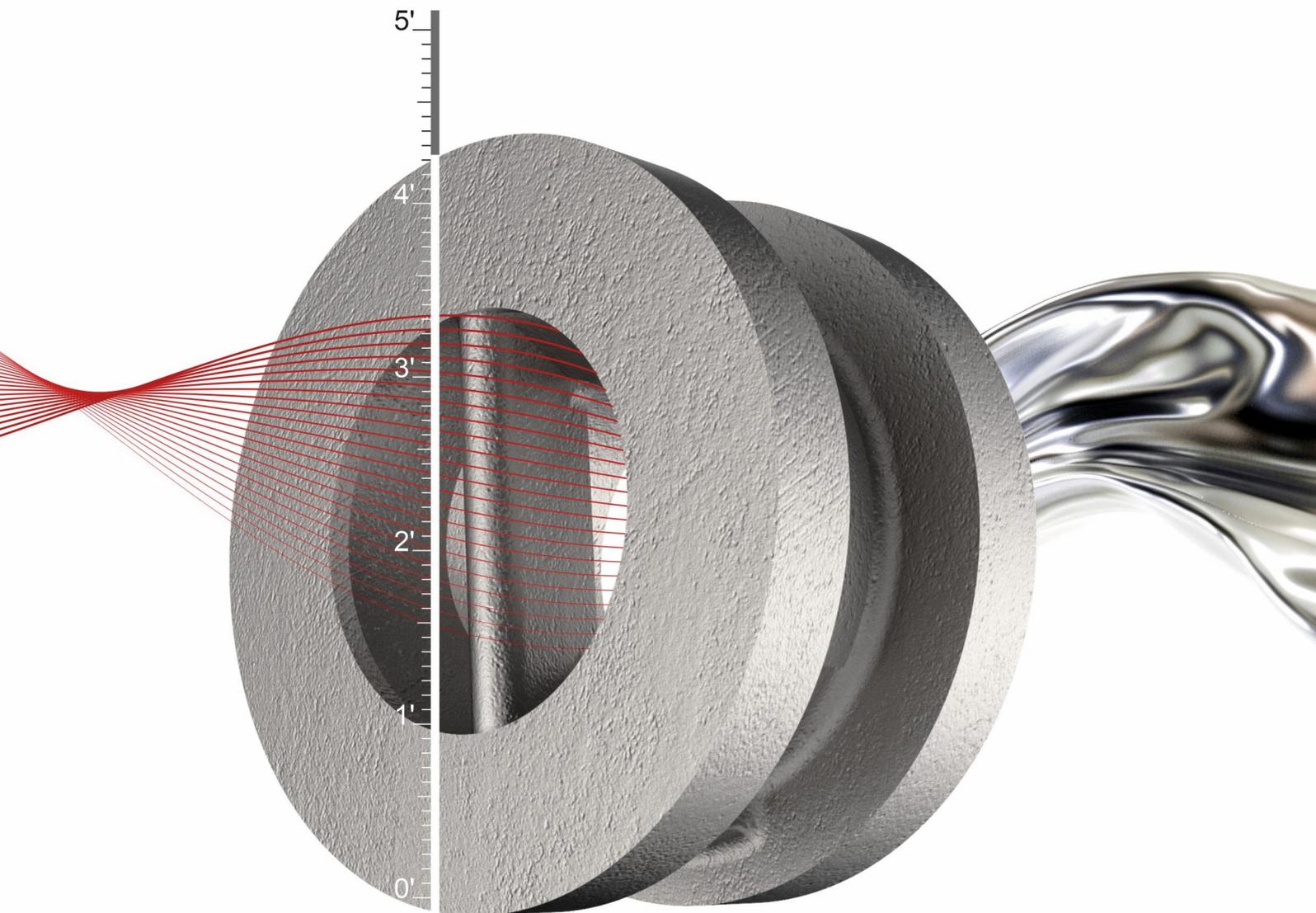




## **SAND CASTING & It's SCALE**

At INTRICAST we manufacture Sand casting single piece weight of 50 Kg. to 1800 Kg which is approximately 36" class 150 Ball Valve Body. Our melting shop is equipped with two medium frequency Induction Furnaces of 450KW & 1000KW, with varying crucible of 100 Kg., 350Kg, 750Kg, 1200 Kg., 1500Kg & 3000Kg. To support the need of small Qty requirement in high alloys or in Nickel alloys we have specifically installed a small crucible of 100 Kg.

Heat treatment furnace we have is gas fired, Batch type, Size: W: 1500MM X D: 2000MM X H: 1200MM, having loading capacity of 3000 Kg. It is monitored by UNISCAN software to know the real trends of temperature in different zones. The heat treatment furnace is surveyed as per ASTM A991, API-6A. Our moulding shop is equipped with Semi mechanized loop line suitable for small weight - high qty & hand moulding for bigger sizes. We have state of art machining facility equipped with CNC, VMC & HMC.



**Through AIR & VACUUM melt Investment casting & AIR melt Sand casting  
SOME OF ASTM, DIN, BS & proprietary alloys poured are:**

DIN 1.4107, 1.4408, 1.4306, 1.4308, 1.4462, 1.4837, 2.4686, 1.4581, 1.4309, 1.4552, 1.4409, 1.4584, 1.4828, 1.4825, 1.4313, 1.4470, 1.4435, 1.4517, 1.7357, 1.4512, 1.4511, 1.4086.

WCB, WC6, WC9, CA15, CA40, HE, HH, CF8, CF8M, CF3, CF3M, CN7M, CD4MCu, CG8M, CK20, Ch20, CK3MCuN, M35-1, M25-S, CW12MW, N-12MV, N7M, CY-40, CW-6M, CW-6MC, Cu5MCuC, Cz100, 50Ni-50Cr-Cb, CB7Cu-1 (17-4PH), CD3MN (Duplex 4A), CE3MN (Duplex 5A), CD3MWCuN (Duplex 6A), CD4MCuN, HK, CA6NM, M-30C, Cobalt alloys 6 & 12, CW-2M, CX-2MW, CD3MCuN, CD3MWCuN, F75 CoCr Alloy (for orthopaedic implants), B148 C95800 (AB2) and SB-62 (UNS C-83600) Bronze.

**Proprietary alloys:** Inconel 713C (Through vacuum melting for Turbine Wheels) BS3100 Gr. 316C16, BS3146 part 2 ANC2, BS4659 BD2, BS3071 N A1.



## List Of Testing Equipments

- Three nos of Spectrophotometers-  
One is: SPECTRALAB M8 direct reading optical emission, Spectro Germany, three base Fe-Ni-Co, 24 elements (C, Mn, Si, S, P, Cr, Ni, Mo, Cu, Nb, Ti, V, W, N, Pb, Co, Se, Al, Mg, B, Zr, Fe, Bi, Sn).  
Second one is: SPECTROMAXx direct reading optical emission spectrometer- Spectro Germany, two base Fe-Ni, 24 elements  
Third one is: SPECTROMAXx direct reading optical emission spectrometer- Spectro Germany, Four base Fe-Cu-Ni-Co, 30 elements
- Chemical (Wet) analysis laboratory
- P.M.I- XL2 800 Alloy Analyzer (Make: Thermo Niton USA)
- Ferrito Scope FMP30 (Make: Fischer)
- Mechanical Testing Laboratory: Ys, Ts, % of elongation, reduction of area, bend test and Impact test @ room temp to -196°C)
- Hardness Testing: Brinell as well Rockwell Hardness tester (optical with 3000 kg load).
- Metallographic Laboratory equipped with:  
Trinocular Inverted Metallurgical Microscope-50X-1000X- Carl Zeiss Make and Stereozoom Microscope 8X-45X Dewinter Make.
- Inter Granular Corrosion Test (IGCT) facility for practice A, B, E as per ASTM A262 and corrosion test as per ASTM G48 method A.
- Dye (Liquid) penetrant test facilities - ASNT Level II
- Magnetic Particle testing equipment for Dry and Wet (fluorescent) ASNT Level II.
- Radiography: Source-IR-192 & Co-60 isotopes.- ASNT Level II
- Ultrasonic testing- ASNT Level I
- 3-D Coordinate Measuring machine "Spectra" (CMM)
- Portable CMM, quantum-s 7 Axis 2.5m (FARO Make)
- RAD CHECK METER With External Detector, Type no. RC705B, Range Covered 0-10,000  $\mu$ R/hr
- Flexoscope: effective length 570mm X Outer diameter 4.2mm, viewing angle: 0 Degree, Field of vision:100 Degree
- Design, Simulation and Image Analysis Software:  
CREO Parametric version 2.0 | NX Version 8.5 | AUTO CAD LT Version 8.5 | Softcast for simulation | Dewinter Image Analysis Software 4.5

## Approved castings suppliers for various projects:

Following end customers, through our various customers has conducted a evaluation survey and have given their approval to our customers for use of castings manufactured by our foundry:

INVESTMENT CASTINGS  
INTRICAST – INTOLCAST – INVAC CAST

SAND CASTINGS  
GUJARAT INTRUX LIMITED

NORSOK M650- Edition 5 for Grade 4A &6A

Saudi Aramco, Chevron, TOTAL-FINA-ELF, Exxon Mobil

National Petroleum Construction Co. (NPCC) -Abu Dhabi WO MED000577-WO MED00586

Petrofac International- WO MED00567

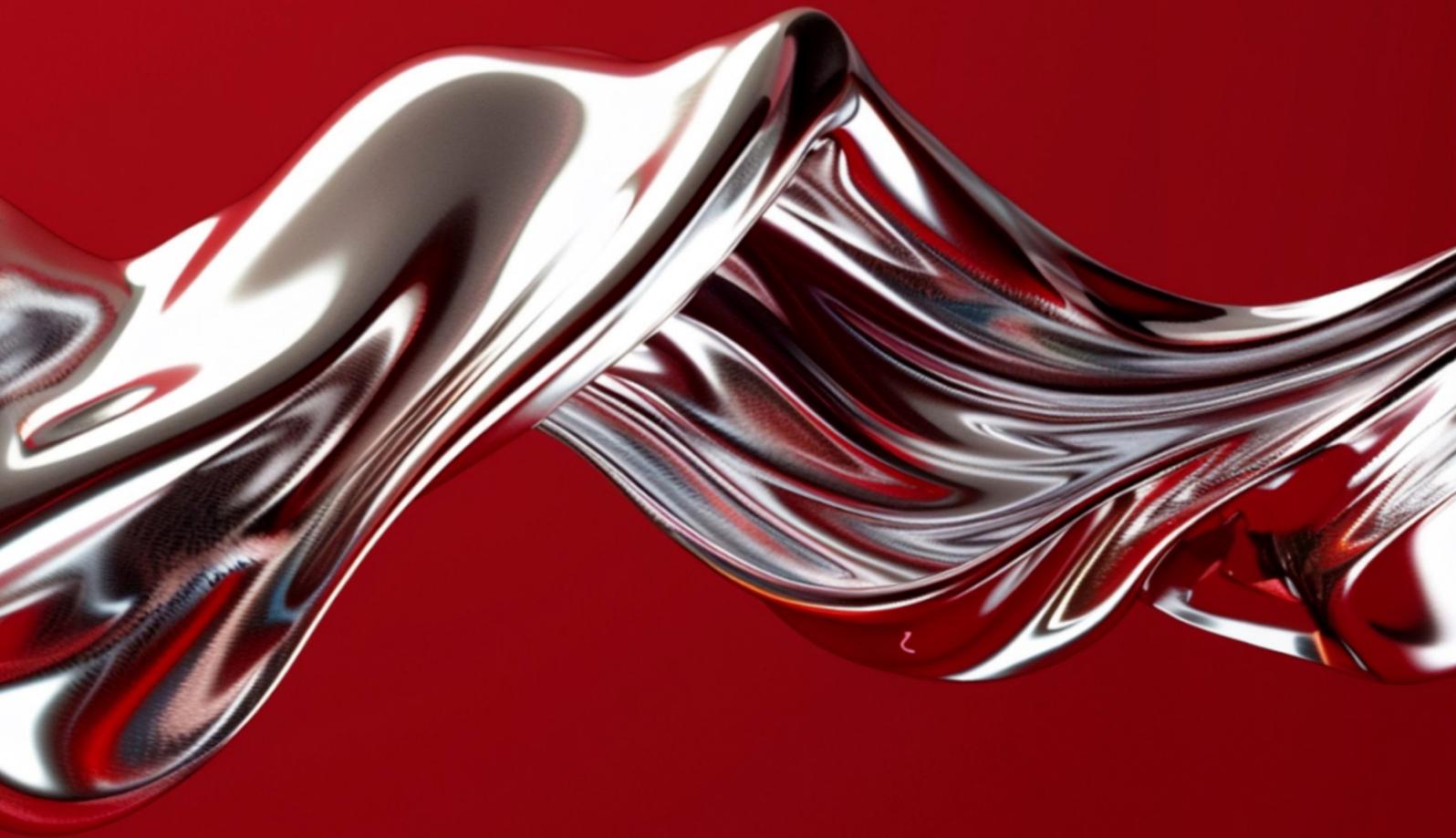
BASF | Chiyoda Corporation Limited -Japan

### Why INTRICAST will be your source for Valve & Pump Castings?

- Through a span of 36 Years with the continues & continual improvement, dedicated & highly focused vision in the field of foundry especially for catering castings need for Pumps & Valves industry. Out of yearly produced 4428 tonnes, 90% of productions, 3985 tonnes are cast for Valve & Pump companies. Capability to cast single piece Investment castings weight from few grams to 180 Kg. & Sand castings from 50 kg. Kg to 1800 Kg.
- LESS REJECTION – TIMELY DELIVERY – COMPETITIVE PRICE.
- Pouring around 127 various Alloys.
- Small batch production runs: We have range of melting crucibles which allows us to run small batch productions.
- **Modern tool making facility:**  
To implement the exact thought of your product design, we have most modern tool and pattern making facility which includes Vertical Machining Centre (VMC), Milling Machine, Electro Discharge Machine, Conventional Lathe Machine, Conventional Drill Machine with use of varying of latest software.
- **Modern Measuring facility:**  
We have at INTRICAST, a 3-D Co Ordinate measuring M/c “Spectra” (CMM) and FARO Arm. Portable CMM, quantum-s 7 Axis 2.5m (FARO Make)
- **Single Vendor Sourcing Advantages (SVSA):**  
Apart from Investment castings, INTRICAST have their Sand casting facilities having capacity to produce annually 3000 MT of alloys and Super alloys castings. Shipment together for Investment and Sand castings in one single container is the fast and cost effective logistics solution.
- State of art machining facility equipped with 45 nos. of CNC turning centre, 9 nos. of VMC, 11 nos. of HMC, other supporting



# Approvals we have are for



## Awards & Approvals:

Consecutively since last 25years (from year 1996 to 2021) we are awarded for Export Excellence & Highest exporters trophy in recognition of achieving highest export performance in western region by Engineering Export Promotion Council (EEPC, a independent Government Body).



## STATE OF ART MACHINING FACILITY EQUIPPED WITH:

### MACHINE

45 nos. of CNC Turning centre

9 nos. of VMC

11 nos. of HMC

### MACHINE DETAIL

Chuck size 160, 210, 300, 450 & 600mm

XYZ Travelling is 600mm x 150mm x 320mm (5nos.), 762mm x 406mm x 500mm, 810mm x 510mm x 510mm, 1270mm x 508mm x 635mm

Table size 400mm x 400mm



# 36 GLORIOUS YEARS IN THE ART OF CASTING



## Associate Group Companies

### **intolcast pvt. ltd.**

Steel and alloy steel investment castings

### **GUJARAT INTRUX LIMITED**

Steel and alloy steel sand casting

### **invac CAST LTD.**

Vacuum & air melt investment casting  
For valves - pumps - turbine wheels -  
Orthopaedic implants



## INTRICAST

INVESTMENT CASTING | SAND CASTING | MACHINING

### **Work & Group Head Quarters :**

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