



CASTED TO PERFECTION

**AIC CASTING PRIVATE LIMITED** 

## **COMPANY** OVERVIEW

Established in 1971 by Late Shri Bajrang Lal Adukia, Adukia Industries is a leading manufacturer of high-quality iron and steel products.

With the support of his wards, Shri Dinesh Adukia, Shri Vivek Adukia, and Shri Gyan Adukia, we have achieved a turnover of ₹25,000 million and built a strong distribution network covering major parts of India.

Adukia Industries' success is a testament to the founder's vision, hard work, and commitment to producing superior products that meet the needs of our customers.



To become the global leader in steelmaking and castings.

## MISSION A

To build a fully integrated setup capable of producing 3 million tons of superior-quality steel annually, while implementing reliable and environmentally sustainable manufacturing practices.

# AIC MORE THAN JUST CASTINGS



### N.N. Ispat (P) Limited

N.N. Ispat Private Limited, located at Dewandighi (Burdwan), West Bengal, is a highly reputable manufacturer of TMT bars. With a production capacity of 4 lac tons per annum, we produce various high-quality steel products, including TMT bars, billets, wire rods, and HB wire. We are recognised for our commitment to provide quality products and services at the most reasonable prices.

### RAIC Integrated Sponge & Power (P) Limited

RAIC Integrated Sponge & Power Private Limited is located in Jamuria (Burdwan), West Bengal. We have an annual production capacity of 2.2 lac tons of DRI, 3 lac tons TMT Bars and 6000 tons of ferroalloys. We have a power plant of 20 MW. We are expanding to become self-reliant in terms of power supply, contributing to the overall development of India.



### AIC Iron Industries (P) Limited

AIC Iron Industries Private Limited located in Purulia, West Bengal has an annual production capacity of 3.6 lac tons of DRI and 2.5 lac tons of mild steel billets, HR narrow strips, and pipes and has a power plant of 25 MW. Our commitment to quality and state-of-the-art facilities has established us as a reliable supplier of high-quality steel products to various industries.

# **ABOUT**AIC CASTING

AlC Casting, established in 1994, is a trusted name in the foundry industry with a strong footprint in both Indian and global markets with the manufacturing of Cast Iron Casting and Ductile Iron Casting.

We have a production capacity of 20,000 tons per annum.

Our mission is to become the leading global supplier of premium-grade sand castings of all sizes and weights. We advocate customer satisfaction

through an array of exceptional products and prioritize using modern technology in line with international standards such as ASTM, DIN, EN, and BIS.

We have a well-equipped testing laboratory to conduct metallurgical and mechanical testing to ensure the highest standards of output produced. We use state-of-the-art technology to cater to diverse requirements that blend with superior products at just the right cost.

**Expansion plans:** We are coming up with a new state-of-the-art green foundry at Foundry Park, near Kolkata, West Bengal. The facility will have a capacity of 36,000 tons per annum and manufacture grey iron, ductile iron, alloy castings, and more.

## **FOUNDRY STANDARDS**

## AND CERTIFICATIONS













Sound management
at every step



Quality sample development process



Commitment of consistent quality





## MUNICIPAL CASTINGS

## MANHOLE COVERS AND FRAME

AIC Casting is a leading manufacturer and exporter of high-quality Cast Iron Manhole Covers, Ductile Iron Manhole Covers, Building Materials, and Sanitary Castings in India for drainage and sewerage usage.

We adhere to globally accepted EN-124 and ASTM standards. We have 2500 readily available patterns and state-of-the-art in-house VMC machines for pattern making.



PRODUCT RANGE INCLUDES

- Catch basin covers
- Circular manhole covers
- Recessed manhole covers
- Kerb drain manhole covers
- Carriageway / Telecom covers
- Square & rectangular manhole covers
- Gas & airtight inspection manhole covers





♦ Material:	Cast Iron (ASTM A48) (GG 20, GG 25) and Ductile Iron (ASTM A536) (GGG 50)
♦ Sizes:	300 mm X 300 mm (12" x 12") to 1000 mm X 1000 mm (48" X 48")
◆ Load Rating:	A15, B125, C250, D400, E600 and F900
• Painting:	Black Bitumen, Epoxy
♦ Marking:	Custom Logo and Special Lettering
◆ Lifting Options:	Non-Penetrating Pickhole, Penetrating Pickhole, Vent Pickhole, Pick-Bar and Drop Handle
• Other Features:	Hinging, Machining, Locking provision available, Leak proof and customized design available

## MUNICIPAL CASTINGS





## TRENCH GRATES

AIC Casting also produces cast iron trench grates. It is a framework of parallel crossed bars typically used as a partition, guard & cover over an opening or gully.

This feature prevents access through the opening while permitting communication or ventilation.



### Trench grates come in 2 forms

**Gully Gratings:** These are used to drain out rain and wastewater from roads and enclosed compounds. The hinges in these gully gratings keep the openings tightly shut and make them easy to pull out for maintenance.

Channel Gratings: Channel grating drainage systems, as the name suggests, are floor drainage systems with channel structures used for the fast flow of surface water. These channels have long lengths and are simple and easy to install.

<ul><li>◆ Material</li></ul>	Grey Iron (ASTM A48) (GG 20, GG 25) and Ductile Iron (ASTM A536) (GGG 50)
◆ Width	150 mm to 600 mm
◆ Length	300 mm to 1000 mm
◆ Load Rating	B125, C250, D400, E600 and F900
◆ Painting	Black Bitumen or Epoxy
• Other Features	Hinging and bolting provisions available and customised designs available



## MUNICIPAL CASTINGS





## **SURFACE BOX**

AIC produces a wide range of cast iron and ductile iron surface boxes depending upon customer requirements.

Surface Box is one of the most important structures required for electrical connections underground.

We make this box available in different dimensions and structural configurations as per demand.

◆ Material	Grey Iron (ASTM A48 Class 30 / Class 35), and Ductile Iron (ASTM A536)
• Lids	Standard, Locking & Traffic Rated
<ul><li>◆ Markings</li></ul>	Logo & Custom
◆ Coating	Black Bitumen or Epoxy



# MUNICIPAL CASTINGS







## **METER BOXES**

AIC's cast iron water meter boxes come in different sizes and designs, depending on the specific needs of the water utility or municipality.

We typically design them with a removable lid to provide easy access to the water meter for maintenance and repairs.

Our Meter Box remains popular for its strength, durability, and resistance to wear and tear.

◆ Material	Grey Iron (ASTM A48 Class 30 / Class 35), and Ductile Iron
◆ Type	Standard Boxes, and Municipality Specific
• Lids	Standard, Locking, AMR Hole, Recessed AMR Hole, and Knockout AMR Hole
<ul><li>◆ Markings</li></ul>	Custom Logos Available
◆ Coating	Black Bitumen & custom



## MUNICIPAL CASTINGS



AIC is one of the leading manufacturers of cast iron and ductile iron valve boxes.

These valve boxes are designed to enclose and protect sensitive components in otherwise high stress areas like underground electrical parts, gas pipelines, irrigation control systems among many others.

Our valve boxes come in various dimensions and structural configurations to meet clients' needs.





<ul><li>Material</li></ul>	Grey Iron (ASTM A48 Class 30 / Class 35), and Ductile Iron (ASTM A536)
◆ Type	Screw, Slip, Roadway Box and Service Box
◆ Lids	Standard, Locking & Traffic Rated
<ul><li>◆ Markings</li></ul>	Logo & Custom
• Extension & Risers	Various Sizes
◆ Coating	Black Bitumen or Epoxy

# INDUSTRIAL CASTINGS







## **COUNTERWEIGHTS**

We at AIC, are soon building quality counterweights by utilizing advanced casting techniques and state-of-the-art equipment.

Counterweights are used in a variety of applications where balancing or stability is required. From earthmoving equipment in construction and mining industries to forklifts, counterweights stabilise balance and aid in lifting.

◆ Material	Grey Iron (ASTM A48 Class 20 / Class 30)
<ul><li>◆ Machining</li></ul>	Drilling, Boring, CNC
• Painting	Primer / Topcoat as per customer requirement
◆ Packaging	Wood / Steel Pallets
◆ Size	up to 3 MT SMT single piece
• Weight	3 kg to 3000 kg



# INDUSTRIAL CASTINGS

# MOTOR BODY FRAME

AIC is a pioneer when it comes to motor bodies. We can manufacture high-quality engine blocks, producing more reliable and efficient vehicle engines.

Cast iron is favoured for motor bodies due to its high strength and durability, which makes it resistant to wear and tear.

We produce frame sizes starting from 160 to 400 mm.











### AIC ADVANTAGE

AIC has an edge over others in the manufacturing of motor body frames in Eastern India, offering a distinct advantage in the market.

◆ Material	Grey Iron (ASTM A48) (GG 30)
• Painting	Epoxy and other paint as per the RAL no. provided by customers
• Other features	Full machining
<ul><li>Manufacturing Capacity</li></ul>	3 kg to 3000 kg

# INDUSTRIAL CASTINGS







## GEAR BOX HOUSING

AIC's gearbox cases are ideal for a wide variety of applications. We make housing for different types of gearboxes, such as:

- Helical
- Cooling Tower
- Extruder
- Worm
- Crane Duty





◆ Material	Grey Iron (ASTM A48) (GG 30)
• Painting	Epoxy and other paint as per the RAL no. provided by customers
• Other features	Full machining
<ul> <li>Manufacturing Capacity</li> </ul>	3 kg to 3000 kg

# MACHINING FACILITIES



**HMC** (PALLET CHANGER)

Make: BFW Controller: FANUK

 Size
 Machine-1
 Machine-2

 X AXIS
 1000 MM
 700 MM

 Y AXIS
 850 MM
 560 MM

 Z AXIS
 1000 MM
 560 MM



### VMC (PALLET CHANGER)

Make: BFW Controller: FANUK

 Size
 Machine-1
 Machine-2

 X AXIS
 1050 MM
 1000 MM

 Y AXIS
 610 MM
 600 MM

 Z AXIS
 610 MM
 600 MM



## CONVENTIONAL LATHES

Make: PATHAK MACHINERY

LENGTH TURNING DIA 3000 MM 750 3000 MM 600 3000 MM 750 1080 MM 400



## CONVENTIONAL VERTICAL MILLING

Make: HINDUSTAN

Size Machine X AXIS 500 MM Y AXIS 400 MM Z AXIS 500 MM



## CONVENTIONAL HORIZONTAL MILLING

Make: HINDUSTAN

 Size
 Machine-1
 Machine-2

 X AXIS
 600 MM
 500 MM

 Y AXIS
 700 MM
 600 MM

 Z AXIS
 900 MM
 800 MM



## VERTICAL TURNING LATHES

Make: BULARD

RAM STROKE CHULK DIA 1117.6 MM 1320.8 MM 812.8 MM 1016 MM



### HORIZONTAL BORING MACHINE

Make: NILES

Size Machine X AXIS 1000 MM Y AXIS 850 MM Z AXIS 1200 MM



### **SHAPING MACHINE**

Make: GOLDEN MACHINERY

Travel Stroke: X AXIS 800 MM Y AXIS 600 MM Z AXIS 1200 MM



### RADIAL DRILL MACHINE

Make: GOLDEN MACHINERY

SWING DRILLING RADIUS CAPACITY
1000 MM 38 MM
500 MM 38 MM



We have a well-equipped testing laboratory to conduct metallurgical and mechanical testing, ensuring the highest standards in output produced.





### **Sand Testing Lab**

- AFS Analysis
- Clay Content Test
- Permeability Testing
- Compressive Strength Testing





### **Spectrometer**

- Mass Spectrometers
- Emission Spectrometers
- Absorption Spectrometers



### **Hardness Testing**

- Poldi Hardness Tester
- Brinell Hardness Tester
- Digital Rockwell Hardness Tester



### **Carbon Silicon Analyzer**

Carbon Silicon Analyzers measure carbon and silicon content in steel production to ensure the final product's quality and properties.



### **UTM for Tensile**

UTM testing involves applying a tensile force or pulling force to a material sample until it reaches its breaking point.



### **ERP Software**

We use Lighthouse ERP for all business operations, from procurement to HRM, including finance, production planning, sales, logistics, quality, and marketing. Our system ensures consistency across all departments, reducing the chances of mistakes and duplication of effort.

## INDUSTRIES SERVED



Transmission Plants



Sanitary Industry



Rail Industry



Airports and Ports



Water Distribution Solutions



Automobile Industry



Electric Motors



Textile Industry



Defense Industry

# **NUMBERS**TO REMEMBER

















### **Export Packaging and Shipping**

Our castings are packed in wooden crates, securely strapped with iron strips, and then wrapped in plastic for added protection. Each crate is labeled, and we ensure fumigation in containers and radioactivity testing to meet export standards.





## AIC CASTING PRIVATE LIMITED

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