



KMRI:

A LEADING CASTINGS MANUFACTURER

Company Profile & Overview December, 2025



- KMRI –Overview
- Business Strategy & Financial Information
- Product Portfolio & Certifications
- Product Development & Quality Metrics



KMRI - Overview

Quality and Customer Satisfaction Focus are the Drivers of Our Success



A LEADING CASTINGS MANUFACTURER

Several Strategic Vendor Relationships with Large OEMs



OUR VALUES

Others see things as they are and say “Why” –
but we dream of things that never were and ask “Why not?”

–GB Shaw



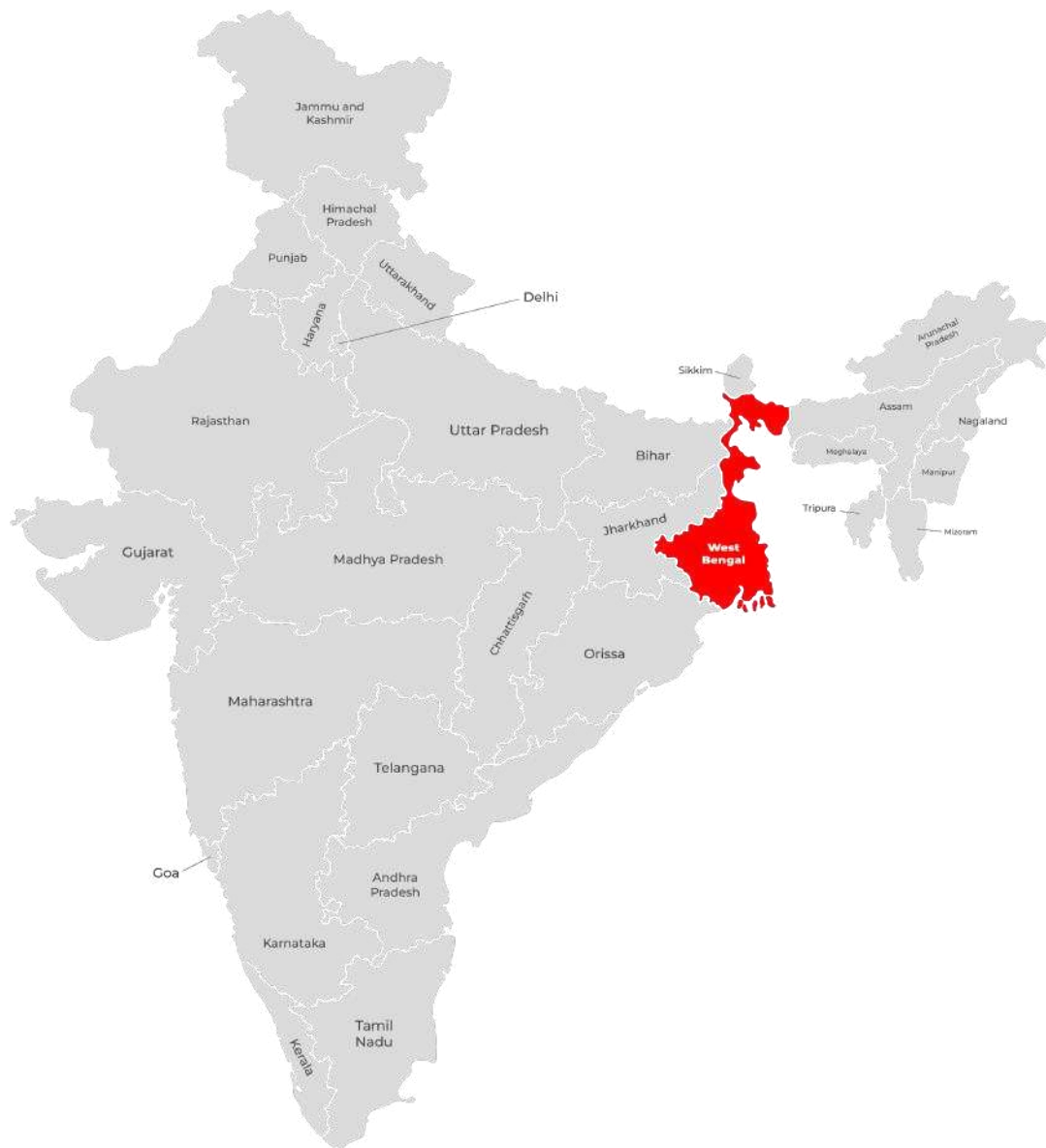
MISSION

Manufacture high-quality steel-castings, cast-steel motor shell, industrial spare-parts and other engineering products matching international quality standards at cost-effective prices

Kharagpur Metal Reforming Industries Pvt. Ltd.

- Has emerged as a leading manufacturer of various types of cast-steel, S.G. iron, cast-iron and fabricated mechanical spare parts & components
- Strategic Suppliers for Indian Railways Locomotive, Railway Bogies, Railway Coaches, Automotive & Steel Plants, General Engineering, Bearing Companies, Earth Moving Equipment and Other Special Purpose sectors

At KMRI, we are proud of a successful history of executing on
our ambitious vision of delivering quality castings



OUR SCALE OF OPERATIONS

Situated in Kolkata West Bengal, an eastern-Indian state where skilled man-power availability is abundant

LOCATION OF UNITS

FOUNDRY: UNIT-I

Kharagpur Metal Reforming Industries Pvt. Ltd. (CAPTIVE FOUNDRY)
(Registered Office) Koushallya, Kharagpur, District –Paschim Midnapore
P.S. –Kharagpur, Pin Code –721301, West Bengal, 03222–255340 | 03222–255589
Website: www.kgpmetal.com

MACHINE SHOP: UNIT-II

Kharagpur Metal Reforming Industries Pvt. Ltd.(CONVENTIONAL MACHINE SHOP)
AndulRoad,Thanamakua, P.O. –D.S.Lane,District –Howrah, P.S.–Sankrail,
Pin Code 711109,West Bengal
033–2688 6283 | 033–2688 5084 | 033–2688 5714 | 033–2688 7452

MACHINE SHOP: UNIT-III

Kharagpur Metal Reforming Industries Pvt. Ltd.
(CNC MACHINE SHOP & FABRICATION UNIT) ChadmariRoad, P.O.–
D.S.Lane,District –Howrah, P.S.–Jagacha, Pin Code –711109,West Bengal

FOUNDRY: UNIT-IV

Kharagpur Metal Reforming Industries Pvt. Ltd. (HI-TECH CAPTIVE FOUNDRY)
Khatranga, Kharagpur, District –PaschimMidnapore
P.S. –Kharagpur, Pin Code –72, West Bengal

MACHINE SHOP: UNIT-V

Kharagpur Metal Reforming Industries Pvt. Ltd. (CNC MACHINE SHOP)
JalanComplex,District –Howrah, P.S.–Jagacha,Pin Code –711109,West Bengal

OUR GLOBAL CUSTOMER-BASE

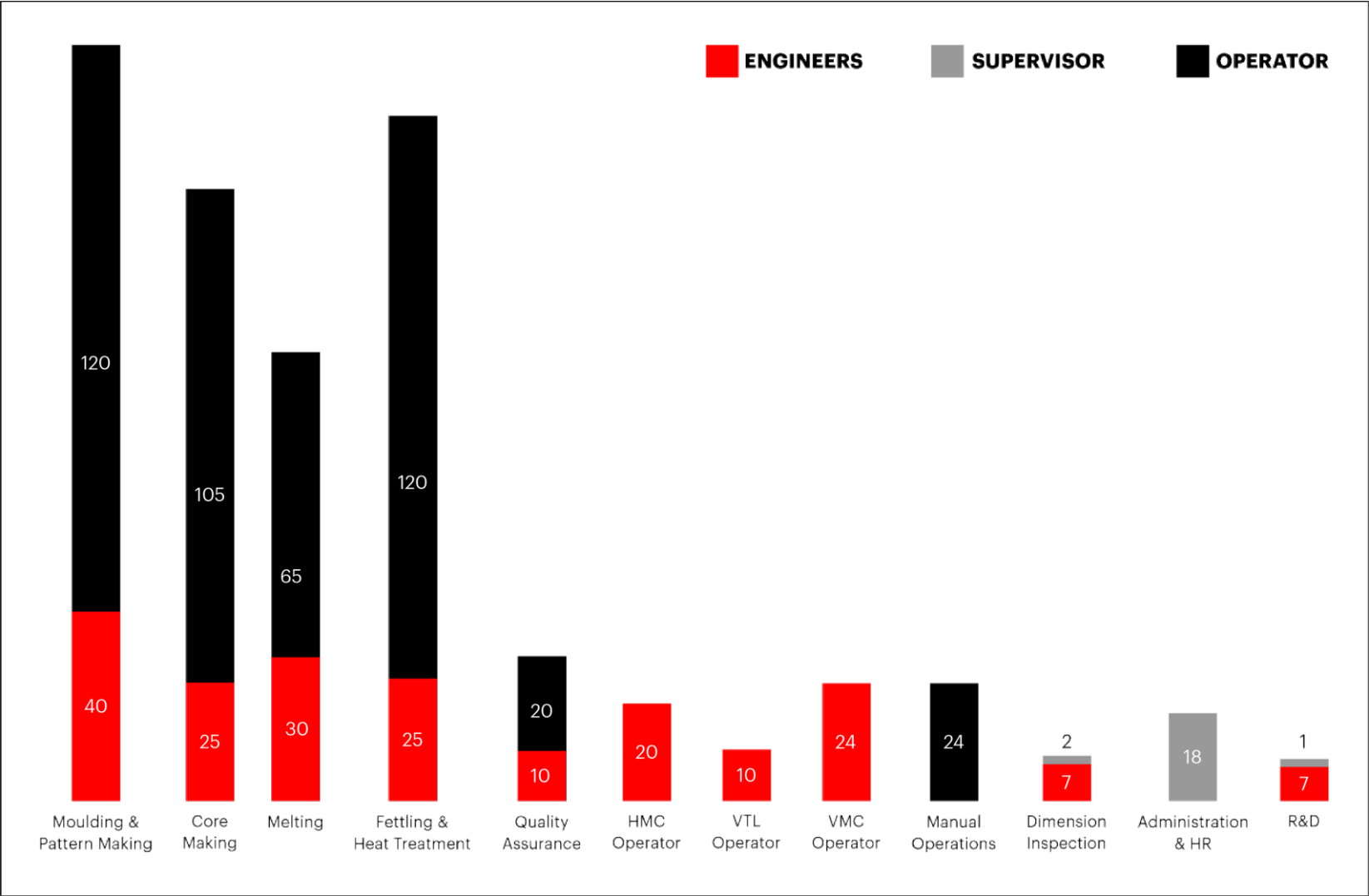


5 Manufacturing Locations in India

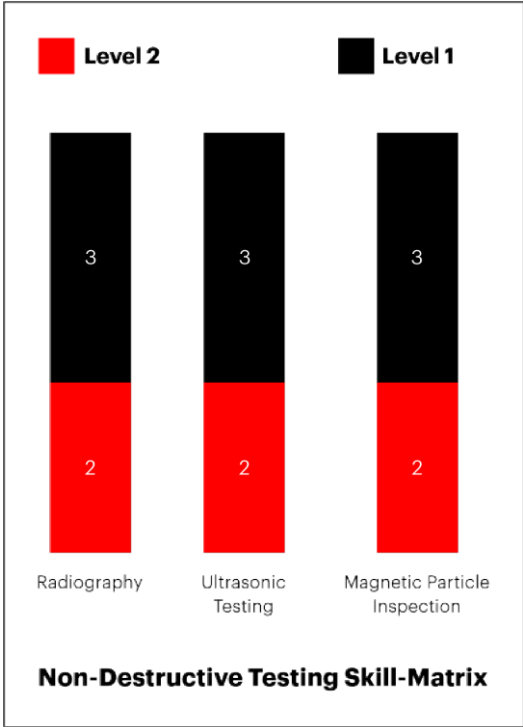


Customer

KMRI SKILL MATRIX



Balanced Distribution Of Manpower Between Technical And Other Functions

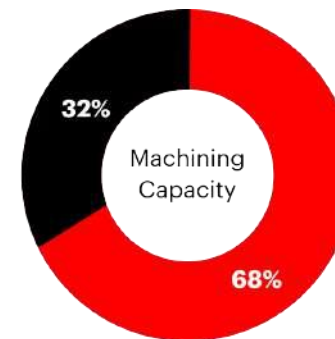
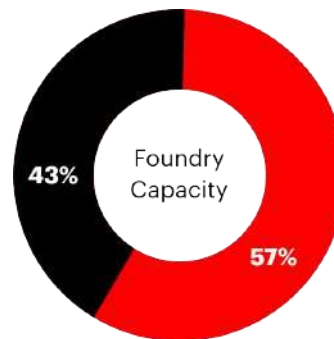




MANUFACTURING CAPABILITY HIGHLIGHTS

- **Monthly Capacity:** 2500 MT which include New No-Back Line at Existing Facility supported with 18 Nos. Heat Treatment Furnace
- In-house **Captive Steel & S.G Iron Foundry:** 5kg-to-9,000kg single-piece cast component manufacturing capability
- Automated **Green Sand Moulding-Line** and **No-Bake Moulding-Line** operational
- **World-Class Heat Treatment Facility:** for annealing, tempering and hardening processes
- Fully-equipped **In-House Testing facility** inc. sand, physical, chemical, NDT, MPI, DP, Radiography
- All **CNC-Machining** done in-house with **CMM/ ZEISS Checking**
- **RDSO-Approved CLASS-A Foundry** as per IS-12117:2023 guidelines

SIGNIFICANT GROWTH IN AVAILABLE FOUNDRY & MACHINING CAPACITY



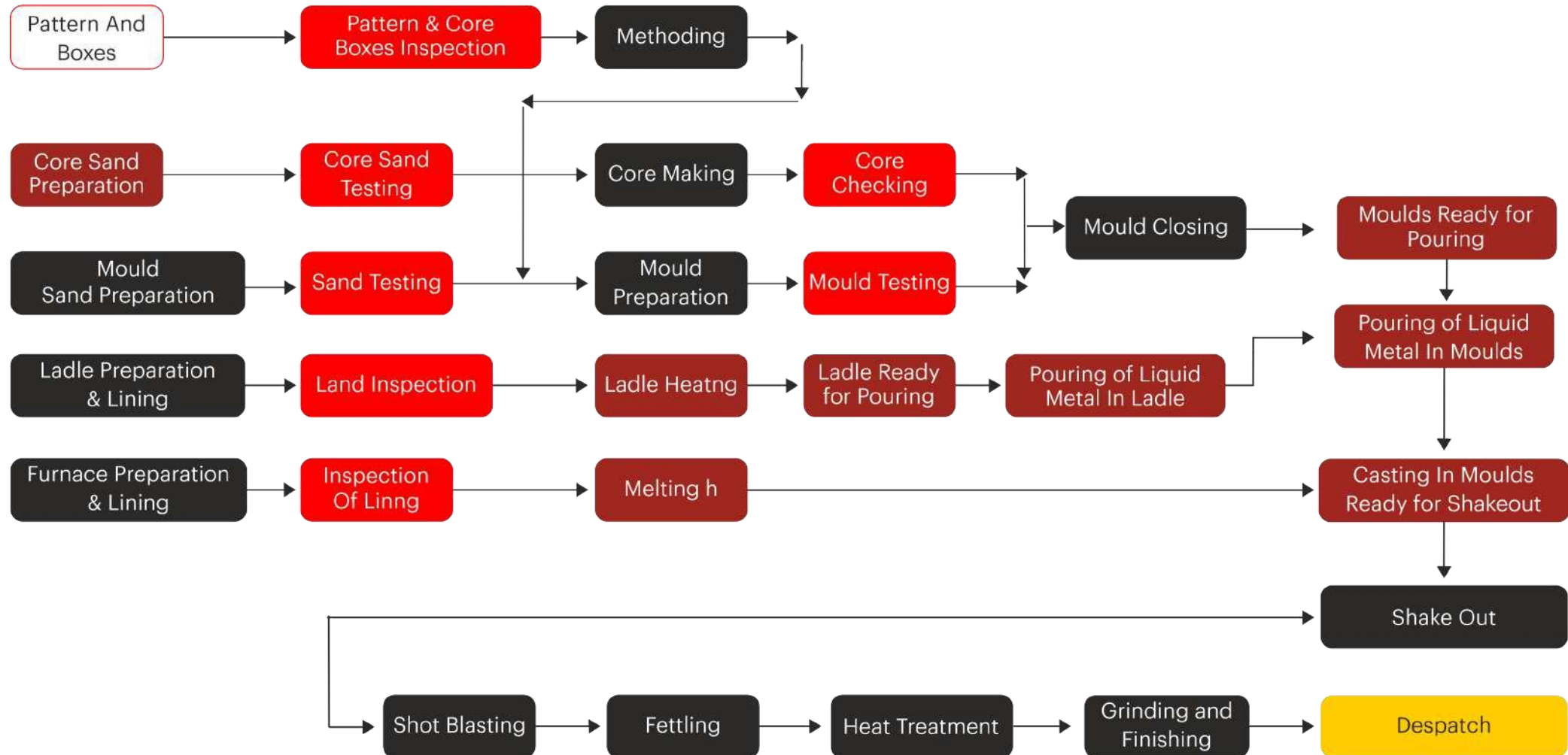
Utilization :
Capacity of 2,500 MT per Month

■ Capacity Utilized

■ Capacity Free for Load

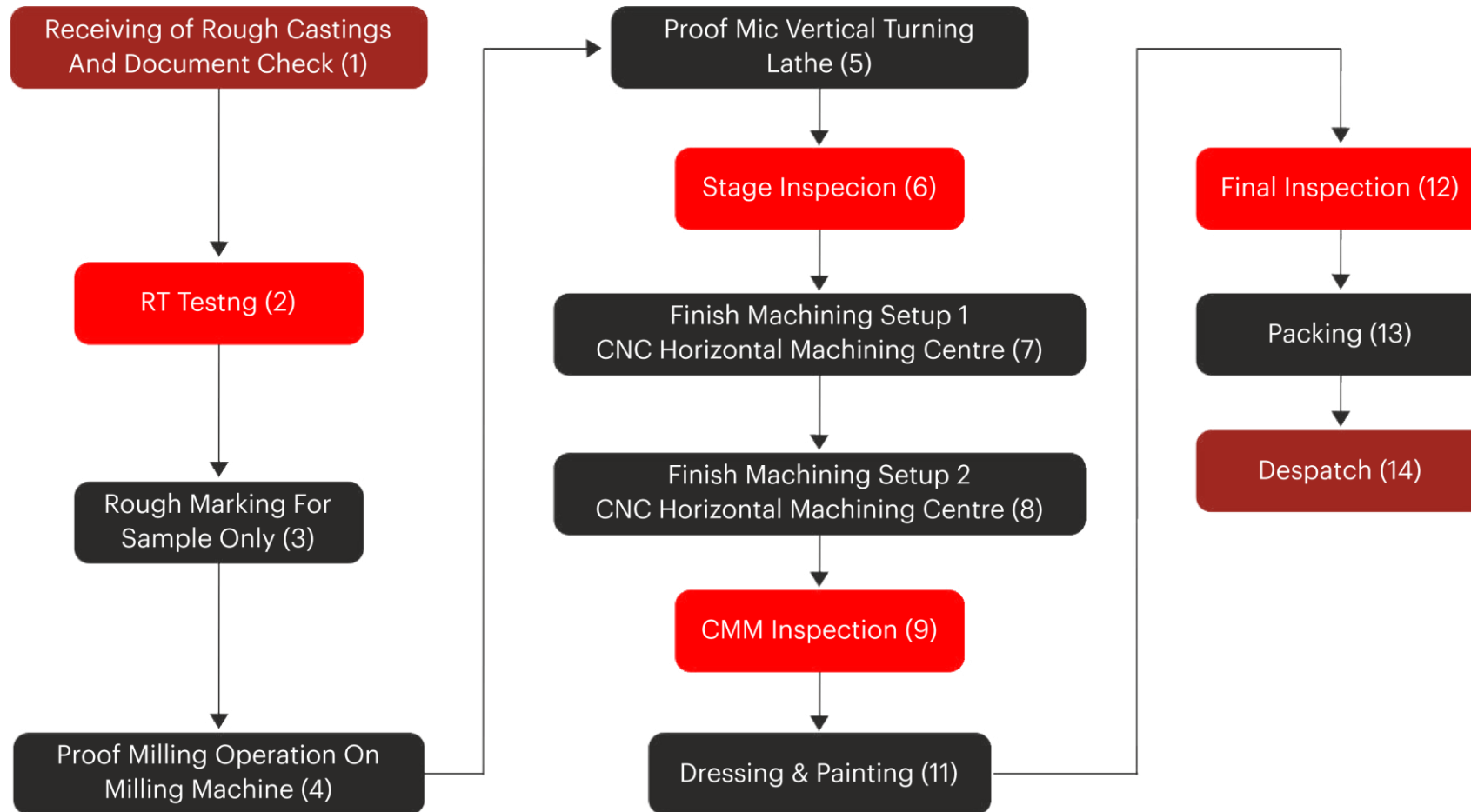
PROCESS OVERVIEW

Foundry Process Flow-Chart



PROCESS OVERVIEW

Machine-Shop Process Flow-Chart



CERTIFICATION HIGHLIGHTS

- Approved supplier for all **locomotive manufacturers** in India e.g. CLW, DLW, DMW, ALSTOM
- Approved supplier for coach factories in India e.g. ICF, RCF
- Approved supplier for FAG, NBC, TIMKEN, SKF
- Approved supplier for BHEL, CG Land other **traction motor manufacturers**
- Approved suppliers for bogie & wagon, Couplings components for RDSO, Faiveley, Webtech
- Exporting railways components to USA and Canada for General Motors, Caterpillar
- Certified as ISO:9001:2015 from British Standard
- Certified as ISO:14001:2015 from British Standard
- Certified as OHSAS:45001:2018 from British Standard



QUALITY, EHS, OHS CERTIFICATES

AUDIT RESULTS

- ✓ CASTING AUDIT
- ✓ MACHINING AUDIT
- ✓ HEAT TREATMENT AUDIT
- ✓ GENERIC PROCESS AUDIT
- ✓ SUPPLY CHAIN AUDIT
- ✓ MPI AUDIT
- ✓ PAINT AUDIT

FOUNDRY WITH FULLY AUTOMATED POURING & MOULDING LINE (1/2)

Unit-IV: Green-Field No-Brake Foundry
Shed & Shop-Floor



IMF Italy Fully-Automated Moulding
Line at Unit-IV (Alpha Set System)



UNIT-IV GREEN-FIELD NO BRAKE FOUNDRY WITH FULLY AUTOMATED MOULDINGLINE (2/2)



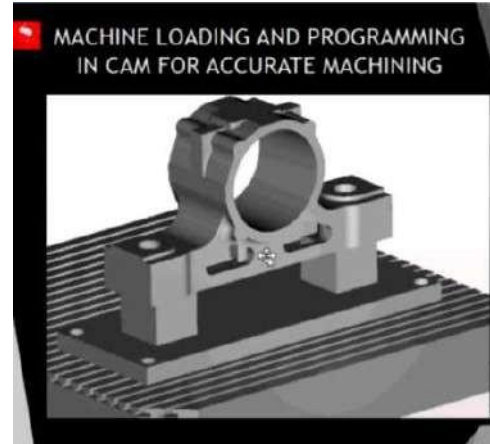
Unit-IV: Fettling & Finishing Shed

Unit-IV Heat Treatment Facility:
Hardening, Tempering (5 MT -18
Nos.), Auto-Quenching (within 30
seconds)

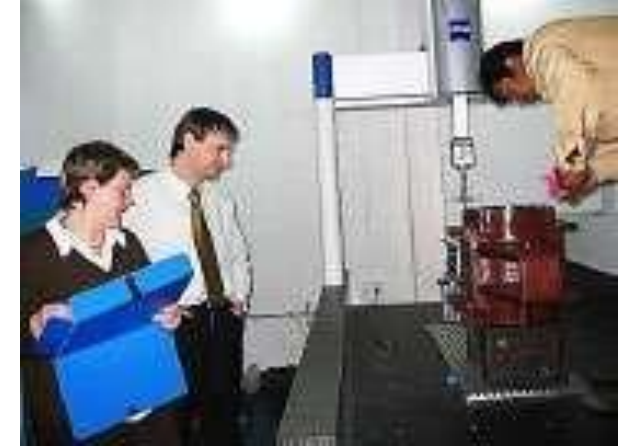


WORLD-CLASS CNC MACHINING FACILITY

Horizontal Machining Centers



Measuring Machines (Zeiss)



CNC Turning Centers



Vertical Turning Centers



ROBUST QUALITY MANAGEMENT PRACTICES WITH BEST-IN-CLASS IN-HOUSE TESTING INFRASTRUCTURE



Sand Testing Laboratory



Spectro/ Chemical Testing Laboratory



Physical Testing Laboratory (Impact, Tensile)



Micro-Graphy Testing Facility



Non-Destructive Testing
(Magnetic Particle, Ultrasonic)



Radiography Testing



FEEDBACK FROM OUR VALUED CUSTOMERS



Performance of coke crushing rings found to excellent. KMRI has supplied full materials within delivery time as per our urgency

–AGM, Rourkella Steel Plant



Quality of Guides is good and delivery schedule has been maintained

–GM, Maintenance, RDCIS SAIL Ranchi.



Mud gun nozzle developed by KMRI has given life 6X more than Original Equipment Supplier

–GM, Tata Metalillics Ltd.



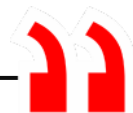
Bench–Mark Foundry in India for Alstom.

–M. Fuckert –Alstom



Perhaps it is one of my most productive and fruitful days, when I visited M/s KMRI & specially meeting with your people. The depth of knowledge, the zeal to produce quality product, the sincerity to give after–sale service were simply outstanding. I wish we have more firms and people like them definitely will take our country India, from under–developed to Most Developed in the world!"

–CEE, TM CLW CRJ

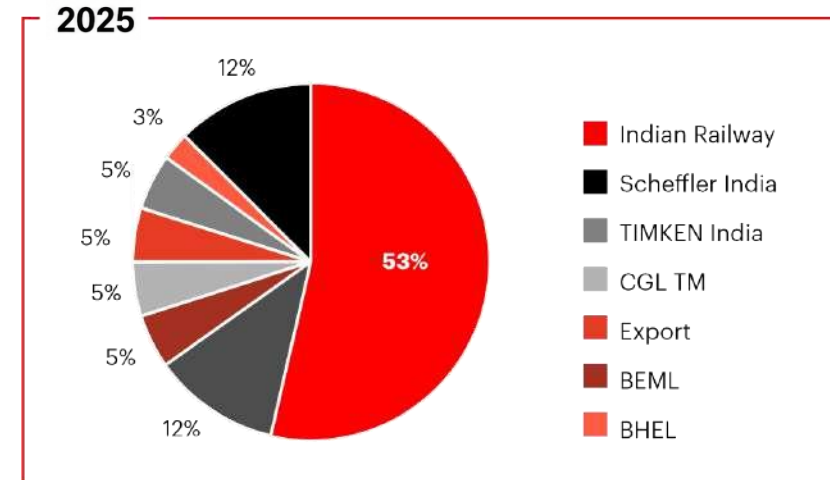
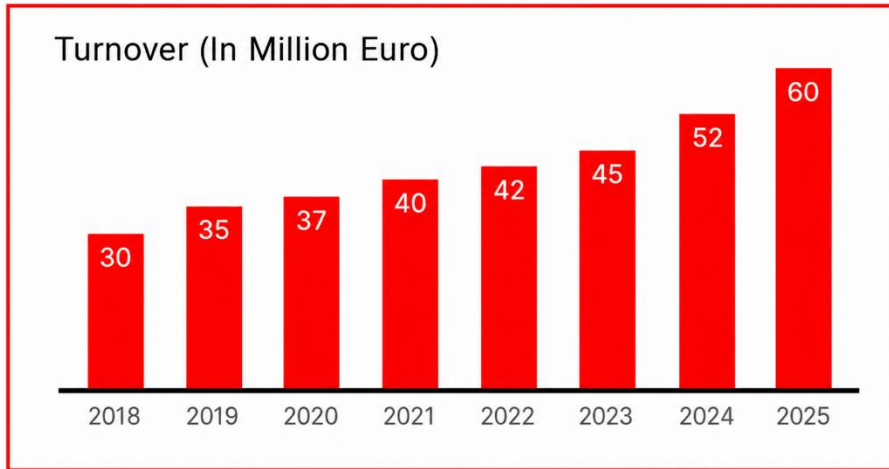


BUSINESS STRATEGY

- Growth & Customer Satisfaction Focus
- Well Defined Investment Plan to Increase Manufacturing Capacity



BE A GLOBALLY RECOGNIZED SOURCE OF CASTING PRODUCTS & LEADING SUPPLIER OF PRECISION ENGINEERING REQUIREMENTS



OUR STRATEGIC FOCUS AREAS

- Drive growth through consistent customer satisfaction
- Expand foundry capacity
- Focus on quality
- Invest in manpower development

OUR FUTURE INVESTMENT PLAN

- Proposed investment of €22.3 Million in 2026-27 for foundry capacity expansion
- New unit for Machining to start production by December 2026 –total investment of €7.6 Million
- New facility will have fully loaded machine-shop

MORDEN MACHINE SHOP



Horizontal Machining Center (5 Nos)



MAZAK Turning Center (2 Nos)



Vertical Turning Center VCN-700D MAZAK Japan



CNC Vertical Turning Lathe - 1200 RL - 3 Nos



CNC Coordinate Measuring Machine Accura-II
Zeiss Germany- 2 Nos



Vertical Turning Center- 10 Nos

RELEVANT PRODUCT PORTFOLIO & QUALITY CERTIFICATIONS



ONLY FOUNDRY CERTIFIED BY

INDIAN RAILWAYS (RDSO & CLW)

- India has 3rd-largest railway network in the world with 650 electric locomotives produced annually
- Only approved foundry & company for **Electric Locomotive Components** in India by Directorate of Electric Locomotive (RDSO Lucknow) and Chittaranjan Locomotive Work (CLW)

LARGE RANGE OF COMPONENTS CERTIFIED:

- Canon Box & components
- Gear Case
- Stator cum Magnet Frame & components
- Axle Boxes
- Pivot Assembly
- Motor Frame Components
- Traction Motor Holders
- Rotor End Ring
- Wheel Set Guide (Link Match)
- High Capacity Side Buffer Assembly
- Couplers (Grade – E)
- Knuckles (Grade – E) – for both Goods (WAG-9, WAG-9 H) and Passenger Locomotive (WAP-7/ WAP-5)

INDIAN RAILWAYS APPROVAL CERTIFICATES

FOR TRACTION MOTOR PARTS

देशी/Tele : 91-0522-2450189(Direct)
: 91-0522-2451200 (PBX)
: 91-0522-2450115(DID)
देशी/Fax : 91-0522-2450189
: 91-0522-2450100
email : qamrcho@gmail.com

भारत सरकार-रेलकचक्र
अनुसंधान और मानक संगठन
संस्थापक- 2001
Government of India-Ministry of Railways
Research Design & Standards Organisation
Lucknow - 226011

No. QAM/Regn/Kharagpur Metal/K
Dated: 18.01.2017
Fax: 03222-255589, 033-26887452, Email: kgmatal@vsnl.com
✓ M/s Kharagpur Metal Reforming Industries Pvt. Ltd.,

'FRESH REGISTRATION'

Sub: Fresh registration of firm for inclusion in the "Vendor Directory" as per Spec. IS 12117:1996.

Ref: On line application with Vendor reference ID No. QAM2016/7374 dated 09.07.2016.

Vide online application under reference above, firm had applied for FRESH REGISTRATION.

After satisfactory processing, Competent Authority has approved the inclusion of the below mentioned firm in the "Vendor Directory" for the items given below:-

1. Firm Name & Address:

Name of the firm	Office Address	Works Address
M/s Kharagpur Metal Reforming Industries Pvt. Limited	Andul Road, Thanamakua, PO-D S Lane, Howrah-711 109.	Vill & PO-Khatranga, PS-Khagapur Local, Distt- West Midnapore-721 149.

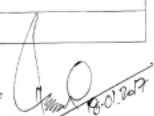
2. Items for which approved:

SN	Item Description	Drawing	Specification
1.	RDSO approved firm for Class 'A' Foundry		IS 12117:1996

3. Capacity: 18000.00 MTPA
4. Date/Dates of visit: 12.11.2016 & 21.11.2016.
5. Approval Details:

Firm RDSO Approved Initials: KM
Allied Sister NIL
Concern/concerns

Next Quality Audit due on: **31.01.2018.**
(1 year from date of this audit)

Signature: 
Name of Officer: **J R Khan**
Designation: **AtE/I&L/RDSO**

Copy to:
Director/I&L, RDSO,
3, Kailaghat Street,
Kolkata-700 001.

RESEARCH DESIGN & STANDARD ORGANISATION
MINISTRY OF RAILWAYS

File no- EL/1.3.10/3/KMRI / 5 Date: 14.03.2012

CERTIFICATE OF APPROVAL OF REGISTRATION IN PART-I CATEGORY

Your request for up gradation from Part-II to Part-I source for manufacture & supply of Assembly Components of Traction motor (Stator Chamber, End Frames, Labyrinths) type 6FRA 6068 for Electric Locomotives has been considered and approved as per the following details:

SN	Particulars	Details
1	Name of the Firm	M/s Kharagpur Metal reforming Industries Pvt. Ltd., Howrah
2	Name of the Item registered	Assembly Components of Traction motor (Stator Chamber, End Frames, Labyrinths) type 6FRA 6068 for Electric Locomotives
3	Category of registration	Part-I (Regular)
4	Firm's Registered office address	M/s Kharagpur Metal reforming Industries Pvt. Ltd., Andul Road, Thanamakua, Howrah-711 109
5	Phone no	033-2688-5084, 2688-6283
6	Fax no	033-2688-7452
7	Firm's Works address	16, Badal Bose Sarani (Chandmani Road), P.O. D.S. Lane, Howrah-711 109
8	Governing specification no	CLW Specn. No. 4TMS 095.059 & 68
9	Governing Drawing no	Drawings as per vendor list
10	Governing STR no	RDSO STRs Nos RDSO/2007/EL/STR/021 Rev '1'
11	Validity of registration	10.03.2015

1. The validity as above shall be subject to the following conditions:

1. No design change or change in Bill of Material shall be made without the prior approval of RDSO.
2. The supply, will meet the requirement of the specification.
3. Notwithstanding this approval, vendor is wholly and completely responsible for quality, on line performance, reliability and life of the item/items supplied by him and supply within the deliver period.
4. Complete compliance to the conditions given in purchase order of Railway Board/Railways/Production units.
5. All future changes in location of firm, equipment, facilities and establishment at your works should be promptly communicated to Electrical Directorate of RDSO.

Page 1 of 2

RESEARCH DESIGN & STANDARD ORGANISATION
MINISTRY OF RAILWAYS
ELECTRICAL DIRECTORATE

File no- EL/1.3.10/3/KMRI / 6 Date: 14.03.2012

CERTIFICATE OF APPROVAL OF RENEWAL OF REGISTRATION IN PART-II CATEGORY

1. Your request for renewal of registration in Part-II category for manufacture & supply of Assembly components of Traction motor (Stator chamber, End frame, Labyrinths) type 6FXA 7059 for Electric Locomotives has been considered and approved as per the following details:

SN	Particulars	Details
1	Name of the Firm	M/s Kharagpur Metal Reforming Industries Pvt. Ltd., Howrah
2	Name of the Item registered	Assembly components of Traction motor (Stator chamber, End frame, Labyrinths) type 6FXA 7059
3	Category of registration	Part-II (Developmental)
4	Firm's Registered office address	Andul Road, Thanamakua, Howrah-711 109
5	Phone no	033-2688-5084, 2688-6283
6	Fax no	033-2688-7452
7	Firm's Works address	16, Badal Bose Sarani (Chandmani Road), P.O. DS Lane, Howrah-71 109
8	Governing specification no	CLW Specn. No. 4TMS 095.059 & 68
9	Governing Drawing no	As per latest vendor list
10	Governing STR no	RDSO STRs No RDSO/2007/EL/STR/021 Rev '1'
11	Validity of registration	10.03.2015

2. The validity as above shall be subject to the following conditions:

- 2.1. No design change or change in Bill of Material shall be made without the prior approval of RDSO.
- 2.2. The supply, will meet the requirement of the specification.
- 2.3. Notwithstanding this approval, vendor is wholly and completely responsible for quality, on line performance, reliability and life of the item/items supplied by him and supply within the delivery period.
- 2.4. Complete compliance to the conditions given in purchase order of Railway Board/Railways/Production units.
- 2.5. All future changes in location of firm, equipment, facilities and establishment at your works should be promptly communicated to Electrical Directorate of RDSO.
- 2.6. RDSO shall have the liberty to carry out the fresh prototype/routine inspection at any time, if the condition so warrants, checking the consistency of the product.

Page 1 of 2

LOCOMOTIVE BOGIE COMPONENTS

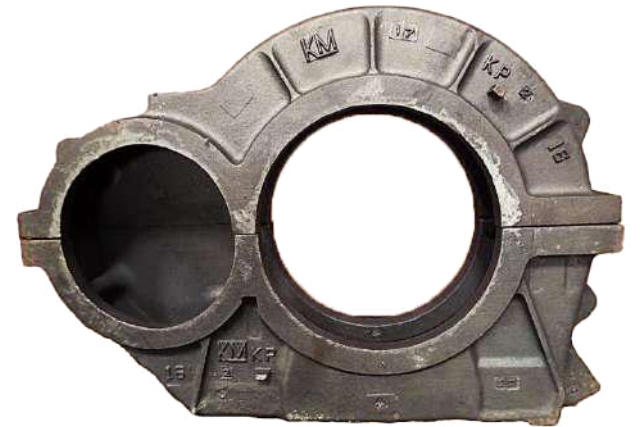
Casting: Canon Box ABB LOCO



Casting: Axle-Box Housing ABB LOCO

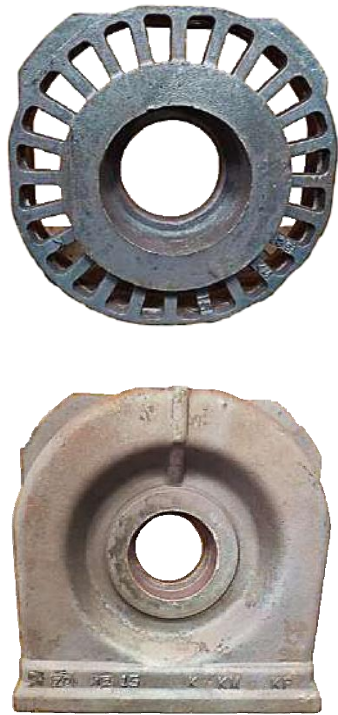


Casting: Gear Casing Assembly ABB LOCO



TRACTION MOTOR COMPONENTS

**Casting: End Shield (Driving End
& Non-Driving End) ABB MOTOR**



Casting: Stator Frame FUJI MOTOR



Casting: Gear Casing WAP-5 Loco



OTHER LOCOMOTIVE COMPONENTS

Casting: Pivot ABB LOCO



Casting: LOCO SIDE BUFFER ASSLY

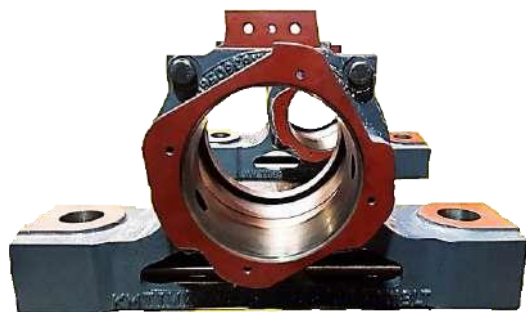


Casting: Canon Box GM Loco



COMPONENTS FOR ALSTOM TRANSPORT METRO AND LOCOMOTIVE

Finished Product: Axle Box Metro Application
(Lucknow, Kochi, Sydney, Sao Paulo)



Finished Product: Gear Casing Fuji Motor



Finished Product: Gear Case Alstom

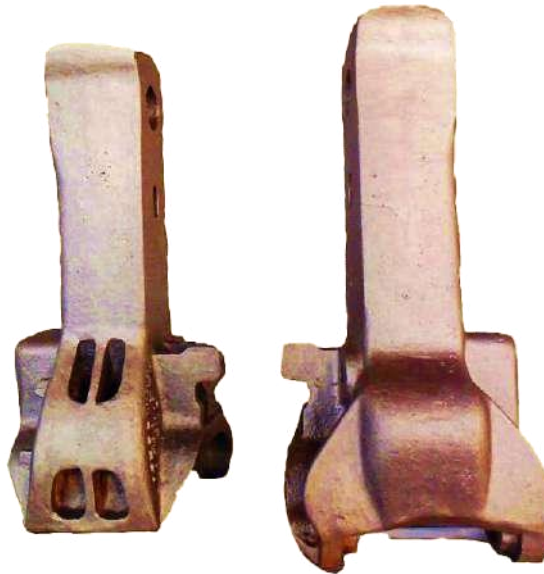


COMPONENTS FOR COUPLER ARRANGEMENT

Finished Product: IR Coupler for Freight Wagons



Finished Product: IR Coupler for Locomotive



Finished Product: IR Knuckle



COMPONENTS FOR COUPLER ARRANGEMENT

Finished Product: Wabtec/ Voith Coupler



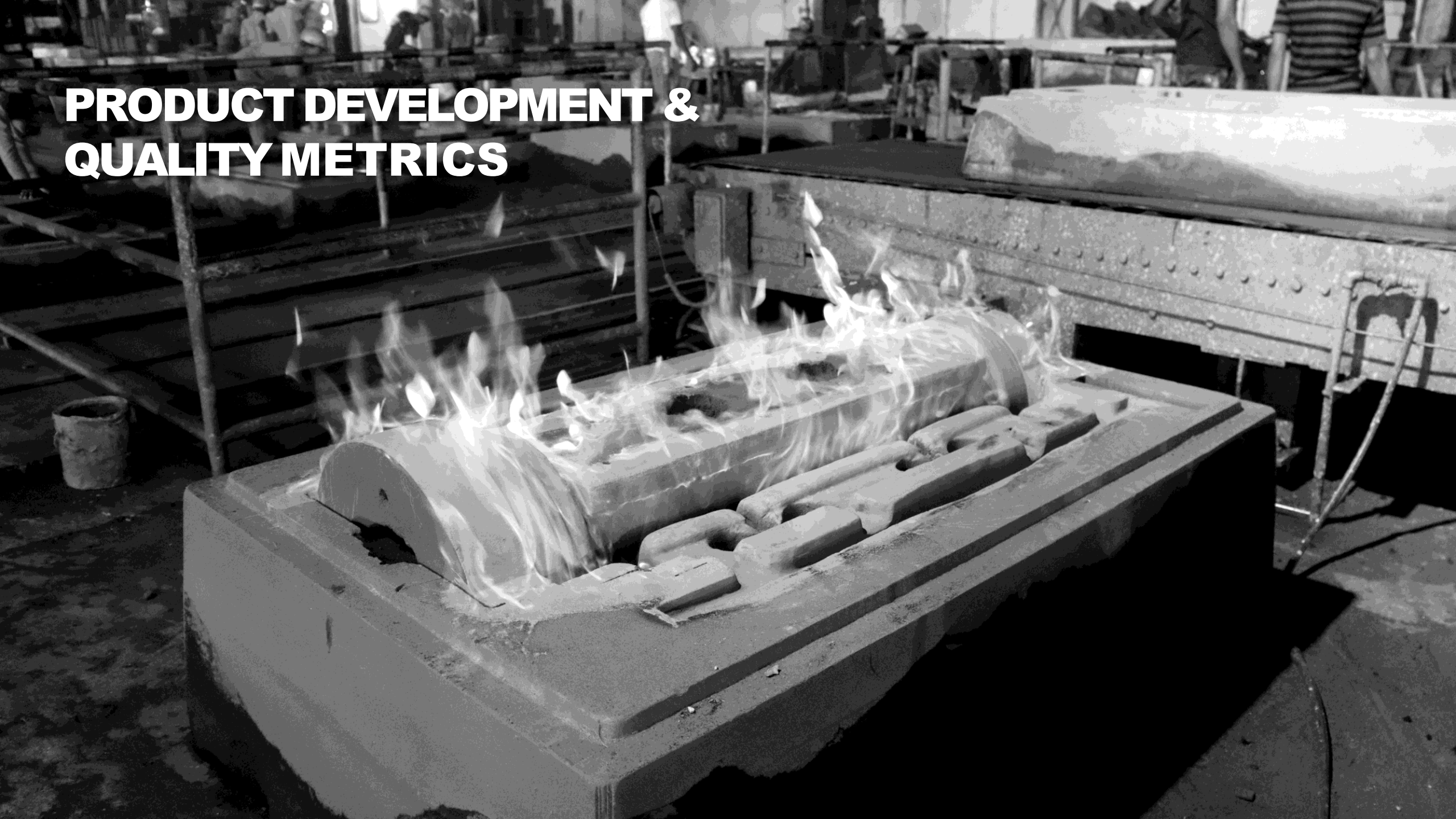
Finished Product: Wabtec/ Voith KNUCKLE



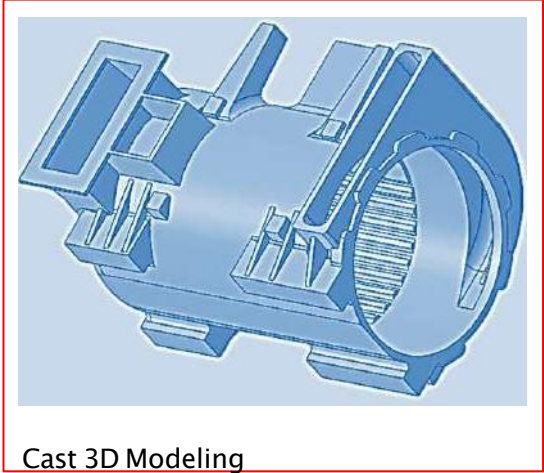
Finished Product: Wabtec/Voith LOCK



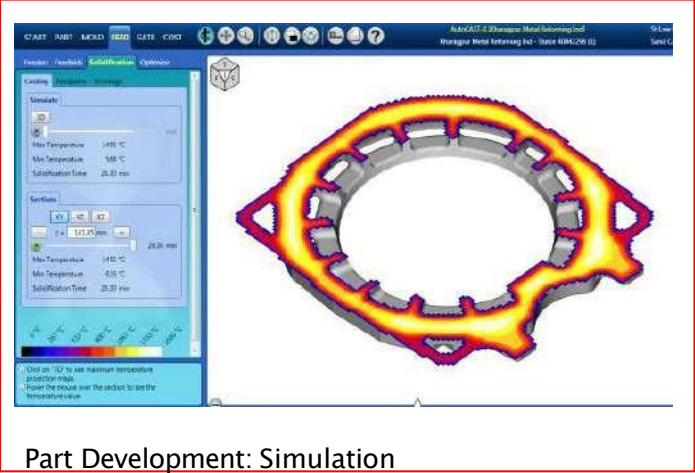
PRODUCT DEVELOPMENT & QUALITY METRICS



PART DEVELOPMENT: STATISTICS & PROCESS BEST PRACTICES



Cast 3D Modeling

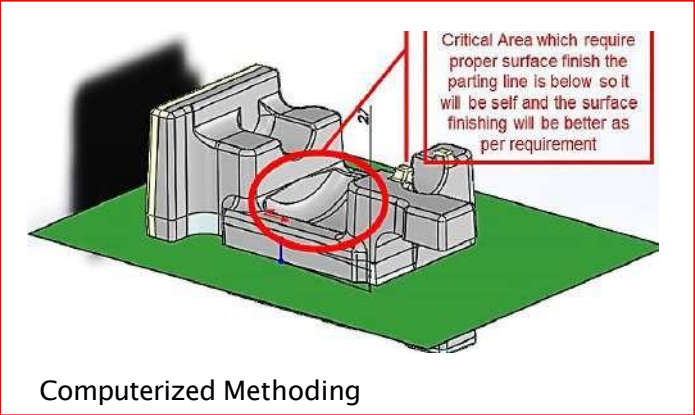


Part Development: Simulation

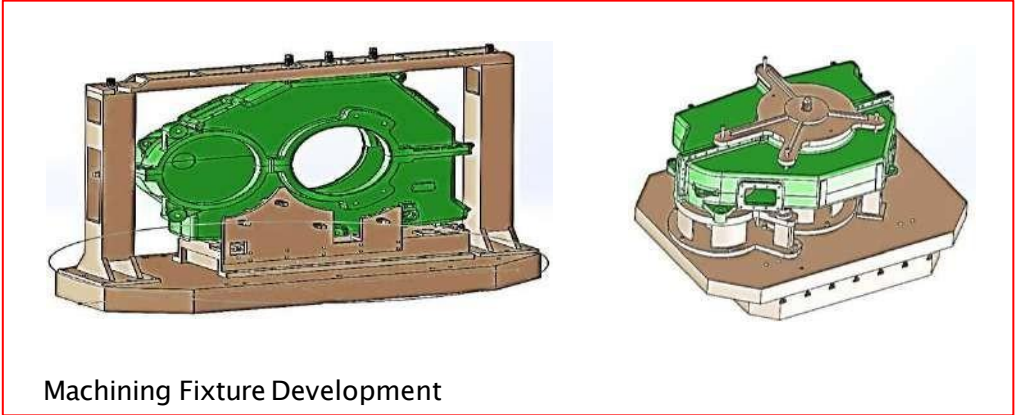
COMPONENT	DEVELOPMENT CYCLE-TIME
Bogie Component	3 months
Canon Box & Suspension Tube	4 months
Gear Case	5 months
End Shields	5 months
Stator Frame	6 months



Metal Tooling



Computerized Methoding



Machining Fixture Development

PART QUALITY: BEST PRACTICES

- Stringent Process Control practices adopted at all levels of manufacturing
- Quality control practices are supported by well equipped laboratory
- Prime Quality of Scrap used: absolutely free from rust, very-low in C, S, P content
- Zircon-based paint used for cores.
- Mold Management: proper drying, faster and perfect curing
- De-gassing Liquid Metal: de-gassing agents added, argon-gas purging in ladle
- Shot-blasting casting before and after heat-treatment to ensure smooth finish

Argon Purging



Double Shot Blasting



Skin Drying





THANK YOU

WE PROVIDE TOTAL SOLUTIONS UNDER ONE-ROOF