

IATF 16949: 2016

ISO 14001: 2015

**CERTIFIED** 

**COMPANY** 

We are the Oldest Ductile Iron Foundry in the Region.

#### ABOUT THE COMPANY: BMC METALCAST PVT. LTD.

50
YEARS
OF EXCELLENCE

**BMC Group** of Industries was established in 1971. We are the Oldest Ductile Iron Foundry in the Region. BMC manufactures all grades of S.G Iron castings and supplies in a completely machined condition, conforming to International Standards, Quality & Grades.

**BMC Metalcast Private Limited,** earlier known as Bihar Metallurgical Corporation, was established in the year 1971. In 2012, BMC Metalcast expanded its production facilities and opened BMC Ferrocast Pvt Ltd.

#### **Annual Capacity: 5000 MT.**







#### ABOUT THE COMPANY: BMC FERROCAST PVT. LTD.

50
YEARS
OF EXCELLENCE

**BMC Ferrocast Pvt. Ltd.** (An IATF 16949:2016 & ISO 9001:2015 Certified) is a Ferrous foundry manufacturing Ductile Iron automobile castings, components and engineering castings for the past 8 years.

This is with the DISA MATCH HPML with 1 Ton Quad-trak furnace and ARPA 900 Line with 2 Induction Furnace of 2 MT capacity each.

#### **Annual Capacity: 21000 MT.**







#### **FUTURE EXPANSION PLANNING**

50
YEARS
OF EXCELLENCE

- Production to start in Feb 2024: Site Ready; Fabrication in Progress
- DISA MATCH 24/28 (150 molds per hour)
- Monthly Capacity: 1000 Tons
- State of the Art Machine Shop (To be developed once production starts)
- Automated Fettling











**DR. MAHABIR RAM,** Met. Engg. M. Met. & Ph.D. (Sheffield U. K.), MIIM, M.IIF, MIE, is the Chairman of BMC group of industries, Experience of 60 years in the field of foundry.



**Mr. HARSHIL DOKANIA**, Junior Director, B.Sc. Engineering from Drexel University, USA M.Sc. Management from Concordia University, Canada.



Mrs. JAYA DOKANIA, the Joint Director of BMC group of industries, is a Post Graduate with Administrative Experience of 55 years in the field of foundry.



**Mr. DEEPAK DOKANIA**, the Executive Director of BMC group of industries, is a Mechanical Engineer from NIIT Jamshedpur and MBA from XLRI Jamshedpur, Experience of 30+ years in the field of foundry.



**Mr. ROHIL DOKANIA,** Junior Director of BMC group of industries, Having Complete a B.Sc. In Economics and Management from Loughborough University U. K.









## **PRODUCTS**

#### **AUTOMOTIVE COMPONENTS**









Brake Spider



Front Hub



Rear Hub



Bracket



Bracket



Rear Hub 2



Shackle



Chamber Bracket



Brake Shoe



Chamber Bracket



Rear Hub 2



Differential Case



Adaptor Plate



Shift Housing





Modified Adaptor



**NBC Backing Ring** 



Wide Jaw Adaptor



Timken Fitted Backing Ring



Narrow Jaw Adaptor



Timken Axle End Cap



NBC End Cap

#### STATE OF THE ART INFRASTRUCTURE

## **Induction Furnace Capabilities**





BMC Metalcast Pvt. Ltd.	BMC Ferrocast Pvt. Ltd.
500 KG / 450 KW Dual Trak-2 Crucibles	2 Ton / 1500 KW Dual Trak-2 Crucibles
1 Ton / 750 KW Dual Trak-2 Crucibles	1 Ton / 750 KW Quard Trak-4 Crucibles

**Inductotherm Medium Frequency Induction Furnace** 

## STATE OF THE ART INFRASTRUCTURE



## **Molding Machine Capabilities**

BMC Metalcast Pvt. Ltd.	BMC Ferrocast Pvt. Ltd.
Two Lines of ARPA 450 by DISA (Box Size = 760/650 mm)	One Line of ARPA 900 by DISA (Box Size = 950/600, 850/950, 1100/1000 mm)
Hand Molding Capabilities of Single Weight Casting up to 400 KG per piece	One High Pressure Molding Line (DISA MATCH 24 X 28 - 710/610 mm)
Shell Molding Machine Fully Automatic shell core shooter Machine(Heater Plate Size-500/500 mm)	



## **Laboratory / Technology Capabilities**

- Digital Sand Testing Equipment
- Latest Spectrometer (Version : 1008i)
- Metallurgical Testing
- Mechanical Testing
- Conventional Metallography
- In-Situ Metallography
- Ultrasonic Testing
- Radiography- Outsourced
- Electronic Tensometer
- B-4 Viscosity Cup
- DFT Meter
- Load Testing Machine of 100 Ton
- Hardness Testing Machine
- Temperature Check by Optical Pyrometer- Only BMCF
- 3D Scanner (Carl Zeiss)- Only BMCF















## 50 YEARS OF EXCELLENCE

## **Core Shop Capabilities**

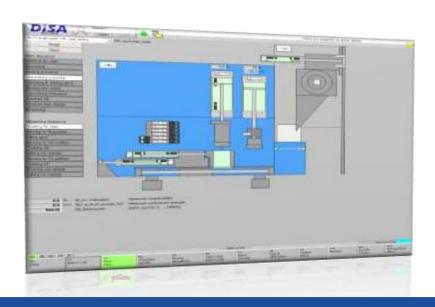
BMC Metalcast Pvt. Ltd.	BMC Ferrocast Pvt. Ltd.
3 Part Pepset Resin Core Making facility	Cold Box Core Shooter Machine 2 Numbers Capacity 600 kg Per Hour, Make COMPAX
Electrically Heated Core Oven	3 Part Pepset Resin Core Making facility
Maximum Single Piece Weight of Core 30 kg	Electrically heated Core Oven
	Maximum Single Piece Weight of Core 30 kg
	Core Sand Mixers 2 Nos Capacity 150 kg each

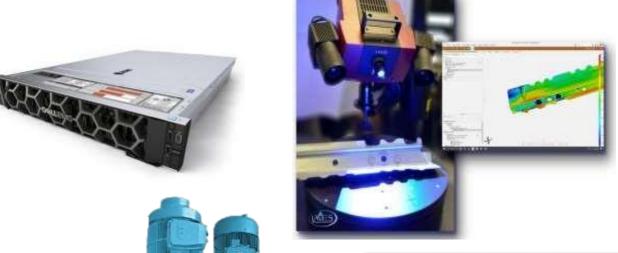




## **Technology Capabilities**

- AUTOCAD
- CATIA
- SolidWorks
- SOFTCAST
- Server based ERP System
- GOM 3D Scanner
- SEMENCE(Automated Sand Plant)
- DISA SMC Tech.









# 50 YEARS OF EXCELLENCE

## **Baling / Sectioning / Degating Machine**

**Degating Machine:** Removal of Riser done by Degating machine at fettling shop.

**Sectioning Machine :** To understand the soundness of the casting.

**Scrap Baling Machine :** Make HR/CR Scrap Bundle to make Melting process

Easier.







## **Advance Equipment's**

- Electric Stacker for Pattern Movement
- Ladle Preheating Machine
- Vibrator motor for furnace lining
- Slag cleaning by Pneumatic chisel
- Multiple advanced overhead cranes for Ladle Movement









## **Advance Machine Shop**

- 20 Lathe Machines
- 8 VMC's
- 10 VTL's
- 4 Turning Centre's
- Surface Roughness Tester Facility
- CMM Facility Available in House













#### TIE-UP WITH LEADING MACHINE SHOPS IN JAMSHEDPUR





IATF 16949: 2016 Certified Company



- 48 CNCs
- 17 VMCs
- 3 VTLs
- Automates
- Capstans

- SPMs
- Thread Rollers
- Center less grinding
- Tapping with PLC control

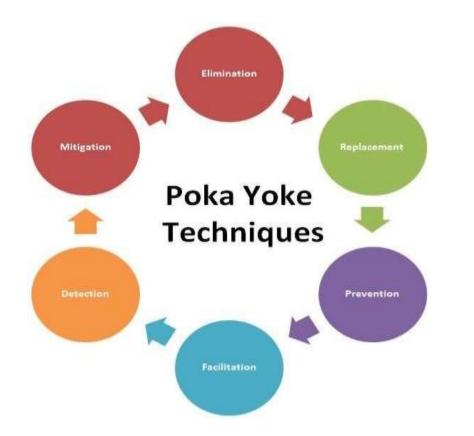




- Carl Zeiss CMM
- 7 robots
- 7 cobots
- 2 overhead gantries

#### POKA YOKE TECHNIQUE

- Proper core Print Location in core for proper core setting in Mold Box
- Pouring Ladle disconnects the power as soon as the seven minutes pouring time alarm rings and restricts the ladle to move to either side
- The Timer for SG treatment is attached with the Hydraulic cylinder tilting button
- Optimum Pouring Height crane hoist is provided with a limit switch /controller.













#### **DOJO TRAINING CENTRE**

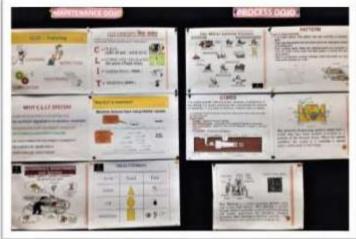
- Maintenance DOJO
- Quality DOJO
- Company Overview
- Process and Product
- Safety DOJO













#### **SUSTAINABILITY**

- We are filling black sand in the core to decrease the wastage of black sand.
- We are planning to put up a hydraulic press with trimming die for fettling of castings- this will reduce the dust.
- Lump breaker machine is used to reuse damaged cores.
- Biodiesel is used for ladle preheating and on the molding line.
- The slag generated is sold to the cement industry for their own processes.
- We are in early stages of forming a cluster for a sand reclamation plant, We visited the sand reclamation plant of Kolhapur Foundry Cluster on 5-8-23.













#### OUR ESTEEMED BUSINESS PARTNERS





















## AWARD FUNCTION AND SEMINARS















#### **OUR ACHIEVEMENTS & CERTIFICATIONS**



**2023-BIL Best Casting Supplier** 



2019-BIL Best Casting Supplier



**2022-BIL Best Casting Supplier** 



**2018-BIL Best Casting Supplier** 



2022-AAL Best Casting Supplier



**2021-AAL Best Delivery Performance in castings** 





#### BMC METALCAST PVT. LTD.

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#### **BMC FERROCAST PVT. LTD.**

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