







CONFERENCE ON
MAGNESIUM CASTING
MANUFACTURING TECHNOLOGY CHALLENGES AND OPPORTUNITIES

22-23 January 2025 | The Pride Hotel, Pune



Dear Magnesium Fraternity Members,

It gives immense satisfaction in organizing the FIRST EVER conference & Table Top Display on "Magnesium Casting Technology" at Pune on 22-23 January 2025 at The Pride Hotel, Pune, partnering with International Magnesium Association (IMA).

First of all I must acknowledge the great support by our Conference Committee CHAIRMAN,

Dr. T. V. L. Narasimha Rao, Head, Special Projects, Center of Excellence for light weighting, SUNDARAM CLAYTON LIMITED

Vice Chairman

Mr. Shripadraj Ramchandra Ponkshe, General Manager - Materials Engg.-WC, TATA MOTORS LIMITED CONVENOR

Mr. Revanth Katta, Executive Director, BHAGYANAGAR MAGNESIUM PVT. LTD.

The guidance given by Mr. V. N. Anil Kumar, General Manager (F & F), HINDUSTAN AERONAUTICS LTD and his team, Mr. P. V. Deshmukh, Ex. Managing Director (MIG), HINDUSTAN AERONAUTICS LTD., Mr. Suraj Narvekar of ING RAUCH FERTIGUNGSTECHNIK GES MBH, and all committee members were more valuable and their helping nature motivated me to a greater extent.

I would like to keep on record the every helping, supporting and guiding nature of Dr. Ing. Martin Tauber, European Representative, International Magnesium Association (IMA), was of great strength.

Overall the conference was great success with over 180 participants, 21 Technical papers and Panel Discussion.





Partner Association

Associate Association











Chief Guest – Inauguration, Mr. Ing.
 Martin Tauber, European Representative
 International Magnesium Association
 (IMA)

Chief Guest – Inauguration, Dr. Ing. Martin Tauber, European Representative, International Magnesium Association (IMA), inaugurated the Conference & Exhibition.

Guest of Honour Mr. Vinay Kumar, Joint Secretary, Dept of Science and Technology, Govt. of India, addressed the audience and released the Technical Volume of the Conference.

Keynote address given by Mr. V. Bhargava Reddy, Deputy General Manager Development), HAL on behalf of Mr. V. N. Anil Kumar, GM (F & F), HAL covered following very important, relevant and interesting points

- Why Mg. casting alloys are preferable in Aerospace and Automotive.
- Why demand for Mg. alloy castings is sluggish in the Four to Five decades in spite of promising future during world war.
- What are the technological challenges associated to manufacture Mg. alloy castings?
- What are the Emerging technologies and Future potential For Mg. alloy castings?
- What re the Govt initiates to promote make in India and Self-reliant in the Defence sector.

21 Technical papers were presented by eminent speakers on various subjects, like Methodizing & Design Aspects of Magnesium Alloy Sand Castings for Aerospace Applications, Surface Treatment of Magnesium Alloys, Mg Die Casting - Opportunities And Manufacturing Challenges, Thixomolding of Magnesium - Efficient Process, Industrialization by Combining a Digital Twin and Systematic Casting Trials, Latest Developments in Magnesium Aerospace Technologies, Die Casting Machine for Magnesium, etc...

As exhibition was organised along with the conference. 12 companies participated as below

- Bhagyanagar Magnesium Pvt. Ltd.
- Hindustan Aeronautics Limited, Koraput, Odisha
- Hindustan Aeronautics Ltd, Bangalore
- G Plast Pvt. Ltd / Bark Magnesium GmbH
- JDS Technologies
- Exclusive Magnesium Private Limited

- Hishinuma Machinery Co. Ltd
- Henkel Adhesives Technologies India Pvt Ltd
- Yizumi Precision Machinery Technical Center Pvt Ltd
- Musto Et Bureau Srl
- Lubrikote Specialities Pvt. Ltd.
- L. K. Machinery India Pvt. Ltd.

The feedbacks and suggestions for "WHAT NEXT" will enthuse me to organise next conference with much more confidence.

Let us meet again during our Mega Event GDCTECH 2025 with the theme of "TRANSFORMING DIECASTING THROUGH INNOVATION" on 4-5-6 December 2025 at The Orchid Hotel, Pune.



Release of Technical Volume



Inauguration of the Exhibition



Technical Conference

Hello Friends,

It is our great pleasure to share the feedback on the FIRST EVER Magnesium Conference. The conference was very well received with more than 180 participants from all over India along with participants from Germany, Italy, Japan, Austria, China.

The opening Speech from Dr. Ing. Martin Tauber, European Representative, International Magnesium Association (IMA), in his inaugural address, he touches the comparison of Aluminium Vs Magnesium, Global Magnesium Market (Demand) and sustainability Road Map of IMA. He also explained the status of Magnesium Industry in China. He advised Indian Magnesium Industry to take steps as under:

- "The Success of Magnesium participating in the growing Indian Market will be based on developing the Complete Value Chain (transport, defence) including a competitive green primary supply base, processing & Recycling.
- Adapt Magnesium also into all other innovative technologies, such as batteries, medical, hydrogen storage and transport.....
- Include Magnesium in National and Regional Strategic & Priority Policy making to support projects, production, education, R & D Recyling and Trading.

There was a special panel discussion on "Market & Challenges" was moderated by Dr. Sanjay Arole. Panelists were representing Automotive, Non Automotive, Foundry and Sourcing Agency.

- Mr. Revanth Katta, convenor of the event and Executive Director, BHAGYANAGAR MAGNESIUM PVT. LTD.
- Mr. V. Bhargava Reddy, Addl. GM (Mfg), HAL, Bangalore,
- Mr. Viswasai Konduru, Vendor Development, ROYAL ENFILED,
- Mr. Vijay, Dahiya, Asst. VP – Operations, SANDHAR COMPONENTS, MANESAR,
- Mr. Hemant More, DGM, Tata Motors Ltd.

Mr. G. P. Srikanth, Managing Director, HCM IBEX ENGINEERING PVT. LTD, gave the Valedictory address and briefed on his experience of running Magnesium Casting unit.

We thank all the participants, authors, Exhibitors and sponsors for making this event a great success. We look forward to seeing you all in large number at Mega Event GDCTECH 2025 with the theme of "TRANSFORMING DIECASTING THROUGH INNOVATION" on 4-5-6 December 2025 at The Orchid Hotel, Pune, which will include technical conference non only Aluminum but also Magnesium.







Valedictory Chief Guest Mr. G. P. Srikanth, Managing Director, HCM IBEX ENGINEERING PVT. LTD.

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Very positive feedback shows the not only satisfaction & also the Topics suggested for next conference shows the need of such conference & Exhibition.

- Risk Management 1.
- 2. With respect to Magnesium, need to create skilled Labor & infrastructure also create some short trainings.
- Gathering of R&D divisions of OEM/AUTO/NON AUTO for awareness & propagating 3. Magnesium development.
- "Involve other Industries who were not part of this conference". 4.
- 5. "For future programs, we recommend inviting more engineers and professionals from the foundry, especially those with expertise in magnesium casting technologies from oversea".
- Casting technologies, with Case Studies, Metallurgical aspects and Design aspects. 6.
- Include the representative from Power Train Hand tools and portable personal & White 7. Goods manufactures who will benefit greatly from being lightweight and may go for using magnesium casting.
- Government subsidies for the introduction of advanced overseas machinery to help 8. accelerate this development.
- Detailing in-depth on Magnesium Recycling, Furnace Design, New Applications. 9.
- 10. More focus on R&D and academia co operation.
- 11. Understanding more on Export opportunities.
- 12. Opportunities for JV Technology Transfer.
- 13. Thixomolding Technology.

of course Government plan to setup unit for Magnesium extraction.

















Glimpses of Magnesium Conference & Exhibition



Mr. Anil Kulkarni, President, GDCTECH FORUM



Mr. Suraj Narvekar, Country Head, RAUCH Furnace Technology GmbH presented Technical Paper



Dr. Ross Baird, Director of Growth - Magnesium Alloys, LUXFER MEL TECHNOLOGIES presented Technical Paper



Exhibition



Convenor Mr. Revanth Katta, Executive Director, BHAGYANAGAR MAGNESIUM PVT. LTD.



Dr. Petra Becker , Specialist Application Technology, KIND & CO EDELSTAHLWERK GmbH & Co. presented Technical Paper



Exhibition



Exhibition

Glimpses of Magnesium Conference & Exhibition











FORTHCOMING EVENT

GDCTECH is planning to take delegation to **China during 16-18 July 2025 – CHINA Diecasting Show** along with Industry Visits including visiting Machine Manufacturers, Aluminium and Magnesium Diecasting Foundries and Tool Rooms.

If any one is interested to join please **contact GDCTECH** office.



For Details Contact Organised by GREAT DIECASTING TECHNOLOGY FORUM

'Guruprasad', 1st Floor, 37/4/A, 6th Lane, Prabhat Road, Pune 411 004, INDIA

Mobile: +91 9764711315 | gdctech@arkeycell.com, arkeyconference@arkeycell.com

www.gdctechforum.com