

**GREAT DIECASTING TECHNOLOGY FORUM** 

# Melting & Metal Treatment and Metallurgy of Aluminium Cast Alloys

**23-24 (Tue-Wed) July 2024** | **Time:** 9.30 am to 5.30 p.m.

Venue: Ahmedabad Management Association,

1, Dr Vikram Sarabhai Marg, University Area, Ahmedabad, Gujarat 380009



### INTRODUCTION

This 2- days training program is designed to arm you with knowledge required in facing future challenges in Aluminum casting industry.

With fast growing Indian Industry and the entry of EVs, Aluminum industry is experiencing unprecedented accelerated changes. Casting customers (like OEMs) are expecting higher involvement from the casting suppliers (foundries); right from early stages of casting design, to achieving cost effective process and production. Such involvement requires deeper and upgraded knowledge. This training will be your slight edge in gaining the new businesses. Key to success right now is good understanding of technology, process variables, process control and sound knowledge of metallurgy.

Small scale and medium scale aluminum foundries usually find a gap in the knowledge and are unable to use proper technology to produce quality castings, at competitive costs. Keeping all this in mind, we have designed this training program to help you improve the understanding of metallurgy and help you improve casting quality with consistency & competitiveness.

#### **CONTENTS**

- · Melting,
- · Holding Furnaces,
- Fuels,
- Crucible Care,
- Metal treatment and its quality assessment :Metallurgy of Aluminium cast alloys
- Why Aluminium Alloys?
- Melting of Aluminium Alloys Melting Furnaces and Crucibles
- Melting and Solidification behaviour
- Molten metal treatment Fluxing, Degassing, Refining and Modification
- Integrated molten metal treatment
- Quality control of aluminium melt
- · Advances in molten metal quality control

#### WHO CAN PARTICIPATE?

- ✓ Engineers, managers, working in Aluminium Casting Foundries-SAND GDC, LPDC or HPDC, in various areas-Manufacturing, Methoding, NPD, Process Design, QA, etc, purchase
- ✓ New entrants to foundries, Middle, Senior management level.

- ✓ New generation entrepreneurs.
- ✓ Casting designers, QA persons in OEMs
- ✓ Vendor Development Engineers, Managers.

#### **COURSE FACULTY**



#### Mr. R. V. Apshankar

Mr. R V Apshankar passed his engineering from IIT Kanpur in 1984. He completed his M Tech in Mechanical Engineering from IIT Bombay and specialized in the subject of Heat Transfer.

Since 1993, he has been running the firm Energy Systech in Pune. Mr. Apshankar specializes in the subject of Energy Conservation in furnaces and is an expert in product building. The Electrical and Fuel-fired Furnaces

developed by Mr Apshankar are known in the market for their efficiency and reliability. The present focus of Energy Systech is on service to the Aluminium casting industry through furnaces for melting and holding and for Heat Treatment of castings. Energy Systech also makes Melt Treatment equipment like Rotary Degassing and Density Index Unit.



#### Dr Kedar Nitin Bhojak

Director R And D
REDSHIFT ENGINEERING LLP
Educational Qualifications:
BE(Mech), MS(USA), PhD(Mech), PDF(IIT, Bhubaneswar)

Relevant Experience 5+ years of academic career, 10+ years of industrial career, Innoval Technology Cold Rolling Technology Course

#### Certified

- 1. GUJCOST Award of Grant for Patented Technology of Ultrasonic Degassing in year 2015-16 from Govt of Gujarat
- $2.\,Robert\,V\,Neher\,Award\,Nominee\,and\,Runner\,up\,in\,2018\,at\,Germany$
- $3.\,Patents\,Granted\,in\,USA\,and\,EU$

We encourage & invite case studies/questions/issues concerning your organisation beforehand for discussion. No issue is too big or too small!

Please send your registration form and payment details by email.

## **Registration Fees**

Category Members Non-Members

Individual Rs. 7,080.00 Rs. 7,788.00

Corporate Rs. 19,116.00 Rs. 21,028.00
(3 delegates)

Inclusive of GST

Delegate Fees includes Course Material, Tea & Lunch etc. during the program.

#### **RTGS / NEFT details**

Account Name : Great Diecasting Technology Forum

Bank Name : UCO Bank

Branch Name : Deccan Gymkhana Branch

Account No. : 06870210002889 IFSC Code : UCBA0000687 MICR : 411028009

Type of A/c : Current
Payment to be made in favor of 'Great Diecasting
Technology Forum' payable at Pune.

## **GDC TECH FORUM**

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