

COURSE FACULTY



Mr. V. K. Purohit : At present he is CEO of Kores Foundry and earlier has worked in Hindustan Gas & Industries. He has done his Metallurgical graduation from Malaviya Regional Engg College. He has total working experience of 30+ years in automotive, non-automotive, malleable iron, SG Iron, Gray Iron castings with variety of molding process. Under his leadership Kores has consistently delivered high-quality products in ductile iron castings as a result of meticulous quality control, production capabilities, technical expertise, state-of-the-art equipment and team work. Apart from SG Iron Castings, produced high-value, critical centrifugal castings and chilled shell moulded casting, which are used in high power and performance engines.



Mr. Jayant V. Patankar : Currently working in MPM Infosoft, Pune as Advisor (Technical Services). He is done Graduation from VRCE, Nagpur in 1966 and after that ME in Foundry Science & Engg from Indian Institute of Science, Bangalore in 1968. He has total experience of 48+ in Kishor Pump as executive director; Kores Ltd, Pune as General Manager (production & sales); Continental Castings Ltd., Nasik as Technical Director; and Goetze Ltd., Bangalore as Senior Manager. His main areas of working are Foundry operation of Cast, Ductile Iron & Steel Castings production. Special proficiency in gating & risering of castings & Process control.



Mr. B. R. Galgali : Chairman, ASM Pune and former Quality Head at Commercial Vehicle Business Unit Tata Motors, Pune and has worked for 36 years. He has completed Graduated in Metallurgical from NVIT, Nagpur and also has ME by research. Throughout career worked as metallurgist and successfully handled areas like metallurgical & materials engineering - raw materials, forging, casting, failure analysis, heat treatment, surface treatments, induction hardening. The significant contribution was in steel development specifically a) micro-alloyed steels for critical applications like crankshafts, connecting rods etc. Also he has contributed in the development of HSS & AHSS for auto body light weighting. Failure analysis & steel development have been the main focus areas in his career. He is currently the chairman of ASM Pune chapter & freelance consultant.



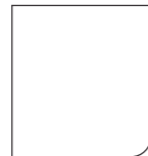
Mr. D. D. Kumbhar : Currently working as a Technical Director at Pooja Casting, Chakan. He has done B.Sc. and D.Met and presently technical director of Pooja Casting, Chakan. Also worked in menon piston Kolhapur and PHB engg, Agra. He has a total working experience of 25+ years in foundry, particularly in GDC, piston manufacturing and other special Processes.



Mr. Apshankar : Currently runs own firm Energy Systech in Pune. He has completed B Tech, Mechanical from Indian Institute of Technology, Kanpur and M Tech in Mechanical from IIT Bombay and specialized in Heat Transfer. His specialization in Energy Conservation in furnaces and is an expert in product producing same. At present his focus on Aluminium casting industry through furnaces for melting, holding & Heat Treatment of castings. He is an active member of professional organizations like ASM Pune, GDC Tech Forum and Institute of Indian Foundry men and currently holds responsible positions there.



Mr. Radhakrishnan : Presently Managing Director, Derkson Castings Private Limited. Entire air conditioned shop floor & 100% women Operators, which is first in World with a motive to develop village female workers. No supervisor, manager, quality control department, Everyone owns Quality. He is a first to develop SG Iron 12 & 16 V cylinder block weighing 2.2mt right first time. Also received best foundry man award in 2012 and published many technical papers published by IIF & foundry journals.



Mr. Raman Ramchandran : Presently working at Spicer India, Pune.



Mr. Bhushan Bhatt : He is engineering graduate from PVG College, Pune in 2005 and later done International Automotive Engineering from Fachhochschule Ingolstadt, Germany in 2007. Presently active partner in Auto Design Online company. He has experience in TUEV SÜD Automotive GmbH, Munich, Germany and Hoerbiger Holding AG, Schongau, Germany.



Mr. Suhas Paknikar : Diploma in Mechanical & Metallurgy and later completed B.E. (Metallurgy) from University of Pune. He has total working experience of 40+ years. Out of which, practical experience in Durgapur Steel Plant, Mining and Machinery Corporation, Cooper Engineering Ltd. And Modern Foundry Ahmednagar. Also he has a teaching experience at Metallurgy Department, Government Polytechnic, Pune.



Mr. Sudhir Phansalkar : Currently runs own business Saneesa Chemicals, Pune. Graduate from College of Engg Pune. Authority in NDT. Experience of over 4 decades out of which majority of experience in Tata Motors, Pune and Spicer India. He is Active with ASM Pune chapter and has been instrumental in starting of training programs, finalizing the contents of training. He has also played vital role ASM Pune students activities.



Mr. Rahul Gupta : Currently working as a Secretary, ASM Pune chapter and runs own firm Gupta Foundry, Bhosari. ME - Met, from College of Engg Pune. Worked in Mukand Iron & Steel & Noduron Foundry (Now Maval Foundry). Is Now Partner in ND Gupta Enterprises - Heat-treatment unit and foundry for over 15 years, Practicing metallurgist for over 30 years in steel making, heat-treatment, surface treatment, and foundry. Currently Secretary of ASM International Pune Chapter.



Mr. Udayan Pathak : Currently working as AGM, Head Learning Centre, ERC Tata Motors, Pune. B. E (Metallurgy) from Visvesvaraya Regional College of Engineering (Now VNIT), Fellow, Institution of engineers (India) and has over 25+ Years of professional experience. At present working in Engineering Research Centre, Tata Motors Limited Pune, as Assistant General Manager - Materials Engineering. Previously worked with John Deere, DGP Hinoday, Spicer India, Bharat Forge. Chairman, Public Relations Committee, ASM Pune Chapter. Immediate past Secretary of ASM Int, Pune Chapter. Expert in Material forming and heat-treatment, Materials Selection & Testing, Technology Strategist. He has 1 International & 4 National Patents to his credit.



Dr. K. C. Vora : Sr. Dy. Director & Head of Academy, ARAI, Pune. He has his Ph.D. from IIT-Bombay. He has a vast industrial & academic experience of 30+ years. He has specialized in the field of Automotive Education, Technology Development, Knowledge Management, Engine R&D and Emission Controls.

3 Days Proficiency Improvement Programme on

FOUNDRY TECHNOLOGY

(Automotive Sand Casting and Die Casting included)

from 22nd to 24th February 2017 (Wednesday to Friday)

Please email/post duly filled-in registration form on or before 13th February 2017 to :

Dr. K. C. Vora, Sr. Dy. Director & Head, ARAI Academy

ARAI-Forging Industry Division, Chakan, B-16/1, MIDC Chakan, Taluka Khed, Dist Pune 410 501 (INDIA),

Contact No : 02135 25 9595; 25 9042 / 44, 02135 396 660 / 61

Email : nadeshmukh.fid@araiindia.com; sakle.fid@araiindia.com; training.fid@araiindia.com



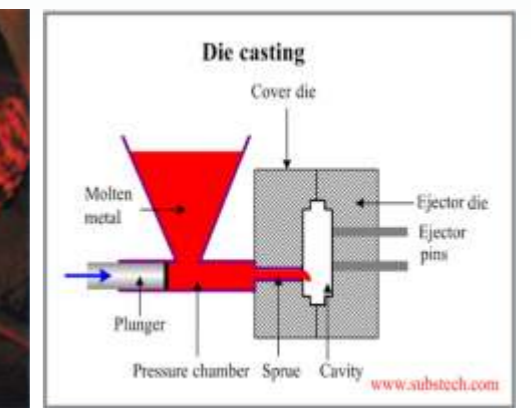
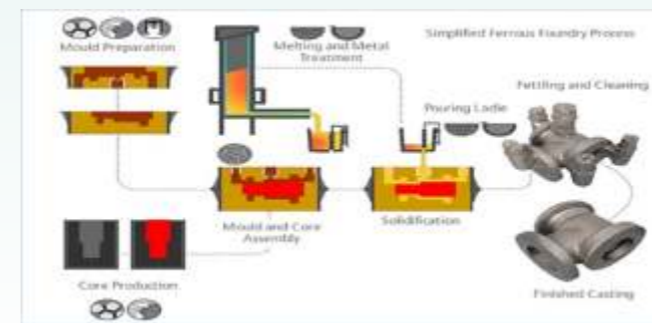
Designers perspective on Casting covered

3 Days Proficiency Improvement Programme on

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(Automotive Sand Casting and Die Casting included)

This Training is delivered by ASM Industry Experts



Gear up for Global Casting Business & Automotive Regulations

at

ARAI-Forging Industry Division,

(The Automotive Research Association of India)

Plot No.B-16/1, MIDC, Chakan, Taluka : Khed, Dist. : Pune 410 501.

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(Wednesday to Friday)

Jointly Organized by



BACKGROUND & OBJECTIVES

Casting is the oldest manufacturing process and has inherent advantages of design flexibility, high production rate and ability to produce large & complex shapes. Challenges to Indian Metal Casting Industries are high cost of technology (Modern equipments), cost of energy and environmental hazards. The focus is more on Quality (not on the Quantity), right at first & every time, waste reduction (improving the productivity), defect prevention (not on defect rectification) and Reduction in lead time (design & produce). Due to globalisation, Indian foundry must understand changing global scenario, new challenges to grab new opportunities.

This course introduces the process of metal casting and provides a broad picture of casting production from designer's perspective. It illustrates the technology, complexity involved, types of castings, casting design, process selection, methoding, casting tools & equipment's & quality assurance and key safety and environmental regulations & competitiveness. A detailed coverage of iron melting, solidifications & related processes, metallurgy of casting process & product and identifying casting defects & remedies will be discussed. Characterisation & properties of iron & aluminium alloys and their general applications along with decision making process will be discussed.

The speakers selected for each topic are experts in their field and bring along a rich experience of theory and its application, and has through understanding of Automotive industry requirements.

INTENDED LEARNING OUTCOMES

On the completion of program, participants will be able to implement techniques & standard practices related to their work and will be able to:

- Understand Designer perspective of sand & die casting theory.
- Understand the future global requirements of automotive casting.
- Understand methoding for sand & die casting process.
- Understand and interpret OE's requirements.
- Understand metallurgy of casting process and materials.
- Understand the FMEA (PFMEA & DFMEA) to make design & process right at first time & every time.
- Understand the casting defects, remedies for it and methods to detect them.
- Decide the priority for taking actions to minimize waste/risks/mistakes, etc.
- Know the important benefits of Casting Simulation & Resource Planning.
- Demonstrate independent learning ability necessary for conducting professional development.
- Become self-disciplined self-motivated, demonstrating personal responsibility in the pursuit of studies and professional practice.

PROGRAMME

Day 1 : Wednesday - 22nd February 2017

- 09.00 Registration & Breakfast
- 09.30 Key Note 1: Introduction to Sand and Die Casting
- 10.00 Key Note 1: OE's Expectation from Casting Manufacturing and Gearing up for Future Automotive Regulations (Euro 5 / Euro 6) through Casting
- 10.45 Tea Break
- 11.00 Types of Castings and Future Automotive Engine requirements
- 11.45 Including Fe-C Diagram & Solidification Process
- 13.15 Lunch
- 14.15 Methoding of Ferrous Casting
- 15.30 Tea Break
- 15.45 NDT for Casting Defect Detection
- 17.00 Q&A and Conclusion

Day 2 : Thursday - 23rd February 2017

- 09.00 Metallurgy of Cast Iron & Ductile Iron and Heat Treatment
- 10.00 Casting Tools & Equipments, Quality Assurance and Factory Automation
- 11.30 Tea Break
- 11.45 Melting and Processing of Al, Zn and Mn Alloys (Die Casting)
- 13.15 Lunch
- 14.30 Visit to Foundry Industry for understanding the Concepts
- 17.00 Q&A and Conclusion

Day 3: Friday - 24th February 2017

- 09.00 Simulation Process and Foundry Resource Planning
- 10.45 Tea Break
- 11.00 Aluminium Alloy Casting: Methoding of Die Casting (GDC & PDC)
- 13.15 Lunch
- 14.00 CQI – 27 from Buyer's Perspective
- 15.00 Casting DFMEA / PFMEA
- 16.00 Written Examination
- 16.30 Conclusion & Certificate Distribution

WHO SHOULD ATTEND ?

This training is useful for all industry professionals, who needs to have comprehensive understanding of Casting / Foundry Technology (Sand & Die casting), its fundamentals, operations, quality assurance and product design & development and best practices followed in it. Also suitable for working professionals in the area of:

- Engineers working in Design Dept., Product Development, R&D, Inspection, Testing, Quality Assurance & CAE.
- Working in in a techno commercial activities.
- Vendor Development Engineers
- Small and Medium Scale Entrepreneurs interested in understanding Foundry & Die Castings.
- Metallurgists / Materials Engineers
- Senior Scientists from Research Institutions / Laboratories
- Academicians from Institutions.
- Interested working professionals.
- Marketing Professionals and Manufacturers.
- Engineers / Managers working as Supervisors, Technicians, Graduate / Diploma Trainees & Executives

MODE OF PAYMENT

At Par / Multicity cheque or demand draft in favour of
The Automotive Research Association of India
 payable at Pune.

ARAI, over five decades, has provided its design and development expertise to the Indian automotive industry, focusing on the testing and evaluation of components and systems to meet national and international standards. ARAI strives to achieve international recognition in these areas. In keeping with the globalization of economy and business, ARAI continues to enlarge its scope of services to meet the requirements of automotive industries around the world. In addition to utilizing state-of-the-art technology, laboratories and highly-trained personnel, ARAI recognizes the need to develop a new generation of engineers to meet the demands of the automotive industry, not just in India but across the globe.

ARAI ACADEMY is classified into three divisions:

LEARNING CENTRE has embarked upon a programme of building up human resources by commencing educational programme (Graduate, Post graduate & Doctoral) with specialization in Automotive Engineering. It has tied up with VIT University (Vellore), Veltech University (Chennai), College of Engineering (Pune), Christ University (Bangalore), University of Alabama (USA), Tennessee Tech University (USA), Loughborough University (UK) and University of Braunschweig (Germany).

TRAINING CENTRE, In line with Post Graduate and Doctoral Programs conducted by various universities abroad, ARAI Academy has devised various Proficiency Improvement Programmes (PIPs), to be taught by ARAI, Academia & Industry Experts. PIP gives engineers, faculty and student's knowledge and technical expertise in a wide range of automotive disciplines. It helps in understanding system's view point for automotive design and manufacture, with specific skills in formulating automotive engineering solutions in terms of their function and performance, through optional modules.

Based on the present system in universities, credits are proposed for each module, so that the graduate engineers can attend various modules and sum-up the credits required for Master's or Doctoral

REGISTRATION FEES

Category	Registration Fees (Rs.) (per participant)	Total Fees including Tax of 15% (Rs.)* (per participant)
Engineers & Professionals	8000.00	9200.00
Teaching Faculty	6000.00	6900.00
Engineering College Students	4000.00	4600.00

*Service Tax is as applicable at the time of program.

Registration fees include:

- Breakfast
- Lunch
- Delegate Kit
- E-Learning Module

Programs. Participants also get chance to visit related laboratories of ARAI and get hands on experience. Certificates are issued on the basis of attendance & written test conducted at the end of the programme. We also conduct Training Programmes through WEBEX and Domain Training Programmes for Automotive Industry. **KNOWLEDGE CENTRE** It has collection of around 23,000 books, standards, project reports, seminar/conference proceedings and around 75,000 SAE technical papers. It also has 237 eBooks. It subscribes to 40 national and international journals. It regularly publishes a monthly magazine 'Automotive Abstracts'. It also conducts literature / patent search for customer's projects. Please visit www.araiindia.com for more information.

ABOUT ASM INTERNATIONAL PUNE CHAPTER : ASM is a society dedicated to serving the materials science and engineering profession. Through its network of 36,000 members worldwide, ASM provides authoritative information and knowledge on materials and processes, from the structural to the nanoscale. As an engineering and scientific society, ASM International is led by members, guided by member needs and fueled by member participation. ASM members share information and ideas through international conferences and expositions, seminars and local Chapter meetings, through publications like Advanced Materials & Processes and the renowned ASM Handbook series, and online through the ASM Community website. The Pune Chapter of ASM International was founded in the year 1991, which has been furthering the mission objectives through various activities. The chapter is very interactive with many societies, chapters and organizations, and also has a memorandum of understanding with the ASM Detroit Chapter which is one of the oldest chapters. ASM Pune Chapter also supports three student chapters at the College of Engineering, Pune and Singhgad Institute of Technology, Pune. Please visit: www.asmpune.org for more information

Training Venue

ARAI-Forging Industry Division, Chakan