2-Day Technical Skills Training (ME05)

" Stainless Steels & Processing Control "

Your Workshop Leader

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Dip Tech (TARC);
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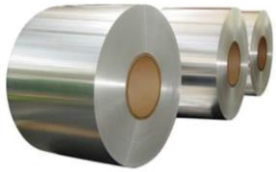
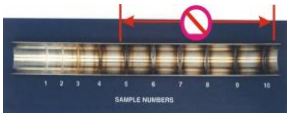
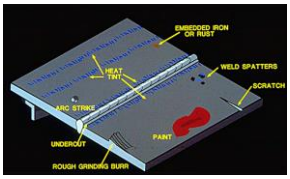
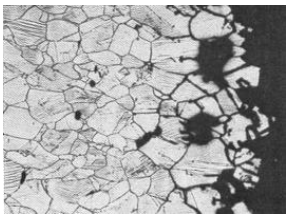
Course Overview:

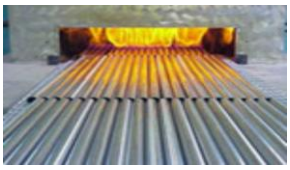
Stainless steels are very important segment of the steel industry. The use of stainless steels is based primarily on their corrosion resistance for many applications, although not limited to this. This course is designed to provide a good understanding of stainless steels. It will also reveal the strengths, limitations and metallurgy of stainless steels and how to select & process stainless steels to get the best possible result. In discussing the various stainless steel alloys and families, the metallurgical principles involved, the properties available and the correct processing practice, the participants will gain a greater level of confidence as they make recommendations and decisions, gather necessary information from or for customers or suppliers, and evaluate the problem situations they face in their work situations.











Benefits:

1. Understand the distinct differences between the various families of stainless steel, in terms of their chemistry, metallurgy and properties.
2. Recognize the limitations and processing characteristics of stainless steel.
3. Study how stainless steels work, how they fail and how to avoid failures by appropriate selection and processing.
4. Learn factors that can influence the performance of stainless steels.

Course Content:

1. Stainless Steels & Its Properties:

- Types of Stainless Steels.
- Mechanical Properties of Stainless Steels.
- Corrosion Resistance of Stainless Steels.
- Stainless steels and its Applications.

2. Cold Deformation of Stainless Steels:

- Residual stress during cold working.
- Work hardening & Recovery.
- Plastic deformation induced transformation and ferromagnetism.

3. Welding of Stainless Steels:

- Stainless steels welding characteristics.
- Welding Processes for stainless steels.
- Welding Guides & Practices.
- Hot cracking and carbide precipitation.

4. Heat Treating of Stainless Steels:

- Stainless Steels Metallurgy.
- Bright Annealing.
- Stress Relieve Annealing.
- Sensitization of Stainless Steels.

Target Participants:

This course is recommended for those who require information on how to select and process the many classes of stainless steels, including technical & non-technical personnel from design, manufacturing, fabrication, assembly, heat treatment, quality control, safety & maintenance, purchasing, sales and marketing departments. Target industry can be from medical industry, oil and gas, manufacturing, food and chemical industries, building and construction engineering.

Course Instructor

William Lee - Malaysian, Materials Engineer with an honorable Bachelor Degree awarded by The Engineering Council of London (EC, UK). He has over 28 years working & teaching experience in manufacturing industry. William possesses strong fundamentals knowledge in technical science & has special talent to communicate and explain to others the principles involved in various engineering fields. His ability to present and link the various engineering disciplines with real industrial use has made many of his course participants to appreciate the significant of technical details study for manufacturing improvement. Over the years, he has developed a series of patented Manufacturing Insights Skills (MIS) Training programs for various manufacturing industries. He is now a full time contract speaker for a few training organizers as well as professional associations in ASEAN & Australia. William will bring a wealth of teaching experience to this program along with his strong industrial background as a former engineering practitioner in tooling, materials, heat treatment, moulding & metal forming divisions. In addition, William is a versatile trilingual instructor who can instruct technical courses in English, Bahasa Malaysia or Mandarin (or a combination of the languages) to ensure full understanding of his presentation by his trainees from all levels.

Administrative Details

1. Should public training not be scheduled for this program we will consider opening an ad hoc public training class if you've minimum guaranteed participants to attend this program.
2. We can bring this program to your premises as in-house training event for your in-house employees only. Interested participating company may contact us for an in-house training proposal.
3. In-house training can be conducted on weekdays or weekends (including public holidays) to meet the scheduling needs of your targeted staff.
4. For in-house training, a list of participants complete with their full name & designation must be presented to training provider one week prior commencement of each program. The total no. of training manual is supplied to the actual no. of turned out attendees only.
5. Substitute is allowed to replace the earlier registered person if he / she is unable to attend the training program (both public and in-house training). Participating company must inform us the details of replacement person.
6. All programs are of SBL (Skim Bantuan Latihan) type. Eligible company (Human Resources Development Fund contributor) must apply through themselves for the rebate of any eligible expenses (including training fees) from Human Resources Development Council. Training provider bears no responsibility for the approval of training grants or any form of rebates between participating company and HRDC.

Organized by:

METALLOY CONSULTANT SERVICES PLT

(Registered Training Provider under Ministry of Finance: 357-02128315)

(Registered Training Provider under PSMB: LLP0003449-LGN)

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