2-day Training 9am-5pm (ME05)

# "Stainless Steels & Processing Control"

# **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 reveal the strengths & limitations 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. Recognize the stainless steel grades, how they work, how they fail and how to avoid failures by appropriate selection and processing.
- 2. Understand the distinct differences between the various families of stainless steel and the types within the families, in terms of their chemistry, metallurgy and properties.

# **Course Content:**

- 1. Stainless Steel: The Five Families.
- 2. Mechanical Properties of Stainless Steels.
- 3. Corrosion Resistance and Stainless Steels
- 4. Metallurgical Principles of Stainless Steels.



Your Workshop Leader
Dr. Graham Sussex
PhD. (Metallurgy & Materials Engrg.)
Failure Analyst & Corrosion Expert











- 5. Fabrication and Surface Finishes for Stainless Steels.
- 6. Welding of Stainless Steels.
- 7. Chemical Treatments and Measuring Condition of Stainless Steels.
- 8. Applications of Stainless Steels (and when not to use them) in Chemical, Oil/Gas, Food/Pharmaceutical industries.

# **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, heat treatment, quality control, safety & maintenance, purchasing, sales and marketing departments. Target industry can be from oil and gas, manufacturing, food and chemical industries, building and construction engineering.

# Workshop Leader:



**Dr. Graham Sussex** has worked in corrosion and failure investigation since 1979, with 8 years at the Corrosion Prevention Centre in Manchester (UK), 8 years at ETRS, Melbourne, (an engineering testing and consulting company), 5 years running courses for the Institute of Materials Engineering and, since 2001, contracting for half his time as technical specialist to the Australian Stainless steel Development Association mainly answering questions on their technical hotline.

He is active in Australasian Corrosion Association and has frequently run courses and presented lectures on failure analysis and corrosion prevention in Australia and overseas. He has extensive experience in recognizing, eliminating and avoiding failures in the manufacturing, oil/gas, food and chemical industries, building and construction including reinforced concrete and coatings.

# **Administration:**

- 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

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**♦ Developing K-Workers; Promoting Scientific Manufacturing ♦** 

### **Contact Person:**

- ▼ Nancy Hee Technical Training Administrator