



**25 APRIL 2017 (TUESDAY)**  
**CONCORDE HOTEL, SHAH ALAM, SELANGOR**  
**WORKSHOP A:**  
**STAINLESS STEEL FOR FOOD AND**  
**HYGIENIC SERVICE:**  
**SPECIFICATIONS AND USE**

**ORGANISED BY:**  
MALAYSIAN IRON AND STEEL INDUSTRY FEDERATION  
**IN COOPERATION WITH:**  
NICKEL INSTITUTE

**COURSE CONTENTS**

1. Basics of Stainless Steels including properties and family differences
2. Application examples and reasons why stainless is so widely used
3. Potential issues due to crevice, pitting or stress corrosion and the uncommon issues with sensitization and microbial corrosion – and how to avoid them
4. Defining the chemical and physical conditions to allow thoughtful design
5. Choosing grades, finishes and possible further treatments for cleanability, durability and flow;
6. Fabrication and its control to provide corrosion resistant and hygienic surfaces
7. A code of practice for design, grade, welding and finishing procedures of:
  - \* Process and other vessels/equipment
  - \* Process tube including purge welding requirements
  - \* Non-product contact surfaces and services handling
  - \* Practical issues such as layout, transport, installation, commissioning and insurance
8. Discussion of cleaning process and their effects, autogenous welding (or not), constraints on selection of valves and fittings, and other issues raised

**OBJECTIVES**

Stainless steels are widely used in food and beverage manufacturing and processing industries for manufacture, bulk storage and transportation, preparation and presentation applications. Depending on the grade of stainless steel selected, they are suitable for most classes of food and beverage products. Stainless steel has proven record of success in these areas where sanitation and ease of cleaning are so important.



**26 APRIL 2017 (WEDNESDAY)**  
**CONCORDE HOTEL, SHAH ALAM, SELANGOR**  
**WORKSHOP B: QUALITY WELDING**  
**STAINLESS STEELS**

**ORGANISED BY:**  
MALAYSIAN IRON AND STEEL INDUSTRY FEDERATION  
**IN COOPERATION WITH:**  
NICKEL INSTITUTE

**COURSE CONTENTS**

1. Stainless steels: Why they work and how they differ from each other and carbon steels
2. Welding processes and their characteristics
3. Metallurgical effects with austenitic, duplex and ferritic stainless steel
4. Workmanship, its control and troubleshooting defects
5. Defect limits especially for fatigue
6. Purge welding and the heat tint limits
7. Consumables and dissimilar metals, galvanic effects
8. Sensitization – carbides and intermetallics with highly alloyed materials
9. Health, safety and environment
10. Alternatives to welding: adhesives, soldering/brazing and fasteners
11. Maintenance and cleaning

**OBJECTIVES**

The workshop covers the fundamental metallurgical principals of welding all grades of stainless steel in practical, and easy to understand terms. The workshop will provide basic information regarding the welding metallurgy and weldability of a broad range of stainless steels. Attendees will be provided with detailed coverage of the weldability issues, applications and limitations, as well as directions for welding techniques to avoid failure in practical welding operations. This workshop intends to provide an understanding on the welding of stainless steel by reviewing the basic knowledge and reporting the latest technological development.



**ABOUT THE SPEAKER - DR. GRAHAM SUSSEX**

Dr. Graham has worked in materials engineering and corrosion prevention since 1979. First, at the Corrosion Centre of the University of Manchester, Institute of Science and Technology (UMIST), UK, then as an industrial materials consultant in Australia since 1987. From 2001, he has been the Technical Specialist for the Australian Stainless Steel Development Association, presenting seminars, writing technical articles and providing advice to architects, engineers, project managers and owners of institutions, buildings and infrastructure.

## Registration Form (Please Tick (✓))

- Please register the following person/s for the Workshop A  
 Please register the following person/s for the Workshop B  
 Please register the following person/s for the Workshop A & B

(PLEASE TYPE IN BLOCK LETTERS):-

1 Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Email: \_\_\_\_\_

2 Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Email: \_\_\_\_\_

3 Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Email: \_\_\_\_\_

Particulars of person confirming booking:

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Tel/Fax: \_\_\_\_\_

Email: \_\_\_\_\_

## REGISTRATION FEES/PROCEDURES

	EARLY BIRD Before 24 March 2017	Normal Rate	Discount Rate (If Attend Both Workshops)
Members	RM700 + 6% GST	RM800 + 6% GST	RM1,200 + 6% GST (EB) RM1,400 + 6% GST (NR)
Non Members	RM800 + 6% GST	RM900 + 6% GST	RM1,400 + 6% GST (EB) RM1,600 + 6% GST (NR)

(Note: **10% discount** will be given for registration of a group of 3 or more participants from a single company for the course).

- The registration form may be duplicated for additional participants.
- Confirmation of participation is upon receipt by MISIF of your completed registration form and payment, made payable to:  
**MALAYSIAN IRON AND STEEL INDUSTRY FEDERATION**. Payment can also be made by banking payment to MISIF's account at: **CIMB Bank Berhad Account No: 8002275287**. Please send a copy the bank-in slip to MISIF immediately together with the registration form as proof of payment.
- No refund** will be entertained although participants can be substituted at any time.
- Fees are inclusive of refreshments, luncheon and course materials.
- The organizer reserves the right to cancel, reschedule, postpone or amend the workshop date/venue/programme/etc. as it deems fit.



### Workshop A Details

#### *Stainless Steel for Food and Hygienic Service: Specification and Use*

**Date: 25 April 2017 (Tuesday)**

**8.30–9.00 a.m.:** Registration of Participants

**9.00–9.15 a.m.:** Welcome and Overview

**9.15–10.15 a.m.:** Workshop Begins

**10.15–10.30 a.m.:** Refreshment

**10.30–1.00 p.m.:** Workshop Continues

**1.00–2.00 p.m.:** Lunch

**2.00–4.30 p.m.:** Workshop Continues

**4.30 – 5.00 p.m.:** Q&A Session  
Refreshment  
End of Programme

### Workshop B Details

#### *Quality Welding Stainless Steels*

**Date: 26 April 2017 (Wednesday)**

**8.30–9.00 am:** Registration

**9.00–9.15 a.m.:** Welcome and Overview

**9.15–10.15 a.m.:** Workshop Begins

**10.15–10.30 a.m.:** Refreshment

**10.30–1.00 p.m.:** Workshop Continues

**1.00–2.00 p.m.:** Lunch

**2.00–4.30 p.m.:** Workshop Continues

**4.30 – 5.00 p.m.:** Q&A Session  
Refreshment  
End of Programme

### HRDF Claimable

Companies registered with HRDC can apply for refund under the HRDF.

### For Information, kindly contact:

Ms. Norlian Mohamed Najib

**MALAYSIAN IRON & STEEL INDUSTRY FEDERATION (MISIF)**

28E & 30E, 5<sup>th</sup> Floor, Block 2, Worldwide Business Park,

Jalan Tinju 13/50, Section 13,

40675 Shah Alam, Selangor, MALAYSIA

Tel: 603–55133970 / Fax: 603–55133891

Email: [norlian@misif.org.my](mailto:norlian@misif.org.my)

### Hotel Accommodation

For details about accommodation, kindly contact MISIF Secretariat.