Technical Training Courses available from NAMTEC

Course	Duration	Cost
Basics of Structural Engineering	1 Day	£300 + VAT
Carbon and Alloy Steel Metallurgy & Processing	2 Days	£600 + VAT
Combating Metallic Corrosion	2 Days	£600 + VAT
Heat Treatment for Heat Treatment Professionals	2 Days	£600 + VAT
Introduction to Corrosion	1 Day	£300 + VAT
Introduction to Fatigue	1 Day	£300 + VAT
Introduction to Heat Treatment	1 Day	£300 + VAT
Introduction to Hot/Warm Forging (Optional 2nd Day at £300 + VAT)	1 Day	£300 + VAT
Introduction to Non-Destructive Testing (NDT)	1 Day	£300 + VAT
Introduction to the Fracture Mechanics Approach to Fatigue Design	1 Day	£300 + VAT
Introduction to the Strain Life Approach to Fatigue Design	1 Day	£300 + VAT
Mechanical Testing of Metals (Optional 2nd Day at £300 + VAT)	1 Day	£300 + VAT
*Metallurgical Principles of Casting	1 Day	£300 + VAT
*Metallurgy for Absolute Beginners	1/2 Day	£195 + VAT
Metallurgy for Non Metallurgists	2 Day	£600 + VAT
Metallurgy of Special Steels, Nickel Based Superalloys and Titanium Alloys for Gas Turbine Applications	1 Day	£300 + VAT
Management Development Programme (for out of region clients £900 + VAT for SMF Yorkshire and Humber based clients)	6 Days	£1600 + VAT
Nickel Metallurgy	1 Day	£375 + VAT
*Quality Assurance	1 Day	£300 + VAT
Stainless Steels; Manufacture, Metallurgy & Applications	1 Day	£300 + VAT
Titanium Metallurgy	1 Day	£375 + VAT
Welding of Steel	1 Day	£300 + VAT

For further information email skills@namtec.co.uk

* not yet submitted for IOM3 approval

Supported by Yorkshire Forward – The Region's Development Agency

IOM3 PD Approved

Introduction to the Fracture Mechanics Approach to Fatigue Design

TECHNICAL TRAINING COURSES

Introduction to the Fracture Mechanics Approach to Fatigue Design

1 Day Workshop

namtec national metals technology centre

COURSE DETAILS

This is a one day workshop intended as an optional extension to the one day 'Introduction to Fatigue' course. It will explore in greater detail the application of the approach in fatigue design. In addition to explaining the principles, the course will cover the provisions of several design codes, and will also include important aspects of the provision of appropriate materials data and sources of stress intensity factor solutions. There is a further optional day available; Introduction to the Strain Life Approach to Fatigue Design.

Who should attend
The course is aimed at design engineers seeking a sound understanding of the fracture mechanics design approach, and at materials technologists seeking an appreciation of the ways in which different approaches to testing relate to the requirements of the design community.

Speakers
Course Manager: Colin Davies. BSc (Hons) Metallurgy
Colin has been working in industrial Research and Development for 26 years. Through project work and failure investigations covering a wide range of metal using industries (including mining, shipbuilding, civil and structural engineering, aerospace and renewable energy devices) he has gained a sound understanding of structures and their failure mechanisms, and in particular the role of fatigue. He has previously lectured on aspects of metallurgical failure investigations for the IoM3. He is currently a Senior Technologist in the Structural Integrity group of Transport Applications Department at Corus RD&T.

Venue
NAMTEC is located in Swinden House, conveniently located close to both the M1 and M18. See www.namtec.co.uk for directions.

08.45-09.00hrs Registration. 17.00hrs Finish

- Welcome and Introductions
- Introduction to Fracture Mechanics Concepts
- SIF Solutions
- Material Behaviour & Fatigue Crack Growth Rate Tests
- Applications - Constant Amplitude Loading
- Applications - Variable Loading (with interactive demonstration)
- Design Codes & Inspection Planning

The enrolment fee is £300 + VAT. Fees must be paid in advance of the course.

To **register your interest** for Introduction to the Fracture Mechanics Approach to Fatigue Design, please complete the following and return to: NAMTEC, Swinden House, Moorgate Road, Rotherham S60 3AR or fax to 01709 724999. Alternatively, you can book online at www.namtec.co.uk

Name:
Job Title:
Organisation:
Address:
Telephone:
Email Address:

For further information please email skills@namtec.co.uk