

Frech Die Design Training Seminar 2012

The Trainer



Martin Schlotterbeck is Head of the Training Dept at Oskar Frech Gmbh & Co KG and has over 30 years of experience as a Toolmaker and Process Engineer with the Frech Group. His experiences have involved the die casting of most alloys including zinc, aluminium and magnesium across many parts of the World, and have covered the casting of the thinnest mobile phone casings to V8 aluminium engine blocks! Martin is highly regarded within Frech and indeed throughout the die casting industry, speaking regularly at major industrial events and seminars around the World. He also acts as a consultant Process Engineer to several, well known, brand name Companies, advising them on their part designs and assisting their suppliers to achieve optimal quality at lowest cost.

The Seminars

The Principles of Diecasting Die Design

| Day 1 Hot Chamber Diecasting - Zinc | Day 2 Cold Chamber Diecasting - Aluminium |
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| The Modern Hot Chamber Injection Unit | The Modern Cold Chamber Injection Unit |
| The Major Factors Influencing Casting Quality | The Major Factors Influencing Casting Quality |
| <ul style="list-style-type: none">Geometric Die Design | <ul style="list-style-type: none">Geometric Die Design |
| Basic principle of metal flow | Basic principle of metal flow |
| Types of Gating System | Types of Gating System |
| Runner Design & Flow Engineering | Runner Design & Flow Engineering |
| Sprue Design and Part Arrangement | Die Layout & Part Arrangement |
| Metal Velocities in the Casting System | Metal Velocities in the Casting System |
| Die Ventilation | Die Ventilation |
| Die Temperature Control | Die Temperature Control |
| <ul style="list-style-type: none">Mathematics of Die Design | <ul style="list-style-type: none">Mathematics of Die Design |
| Specific Casting Pressures | Specific Casting Pressures |
| Casting Area and Casting Force | Casting Area and Casting Force |
| Calculation of the Required Locking force | Calculation of the Required Locking force |
| Casting Parameters and Casting Capacity | Casting Parameters and Casting Capacity |
| Calculation of Critical Dimensions and Settings | Calculation of Critical Dimensions and Settings |
| Shrinkage and Heat Transmission Effects | Shrinkage and Heat Transmission Effects |

Aim of the course

To increase the knowledge and awareness of the importance of proper die design and its relation to the injection technology of the modern diecasting machine

Who should attend?

Those interested in the quality of the castings being produced and the subsequent profitability in the foundry such as die casting die designers, process engineers, machine setters and other quality control personnel. Participants should have a basic awareness of the diecasting process.

Seminar Cost

Each training seminar costs **£295 per delegate per day**, or both days can be booked for a reduced price of £495 each (excluding VAT). A training manual will be provided as well as lunch and refreshments on each day. Accommodation can be arranged if required.

Date and Venue

27th & 28th March 2012 (09:00 – 17:00) Frech UK Ltd, Eckington, Nr Sheffield, S21 4DA.