

Injection Moulding Training

Injection Moulding:

Processing and Design

3 day course



POLYBRIDGE Training Ltd

Training Dates: 2011

January	18 th 19 th & 20 th
February	22 nd -23 rd & 24 th
March	8 th 9 th &- 10 th
May	3 rd - 4 th & 5 th
June	7 th - 8 th & 9 th
July	19 th 20 th & 21 st
September	6 th - 7 th & 8 th
October	18 th 19 th &- 20 th
November	29 th , 30 th & 1 st
	of December

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Injection Moulding Processing & Design

3 Day Course

Who is it for?

Anyone already involved in the design, procurement and manufacture of injection mouldings or Injection moulds.

- **Moulding Engineers.**
- **Process Technicians**
- **Product Designers.**
- **Sourcing & Liaison Engineers**
- **Toolmakers & Tooling Engineers,**
- **Project & Process Engineers**
- **Quality Assurance**

Course Objectives

- Fully understand the whole manufacturing process
- Identify an optimised process
- Identify designs for efficient production
- Understand how design affects mould & production costs
- Evaluate existing designs for flaws & improvements
- Identify the root cause of moulding problems
- Evaluation of product faults
- Choose the right mould type: how & why
- Understand how plastic behaviour affects quality
- Choose the right plastic for your product
- Identify cost reduction areas.
- Improve your fault-finding skills

Day 1

Process Theory

- The injection Moulding Process
- The moulding Cycle
- The moulding Machine, types & construction
- Introduction to plastic flow effects

Practical setting of a Moulding machine


- Hands On set-up of a production machine from scratch
- Systematic set-up of the Injection moulding machine
- Production of parts to specification & within cycle

Day 2

Plastics Materials

- Material selection
- How polymers affect moulding quality
- Processing, effects on different polymers
- Polymer problems during processing
- Product problems after moulding & in service
- Choosing the right moulding conditions
- Plastic Flow in relation to moulding
- Problems caused by shrinkage
- Reinforced plastics, their effect during moulding
- Cooling Time Calculation

Injection Moulds

- Mould costs
- Manufacturing methods
- Mould construction materials
- Mould terminology
- Gate Location & its importance
- Mould Types & choosing the right one
- Hot Runner moulds; advantages & disadvantages
- Cooling, methods & effects on product quality
- Cores & side actions.
- Clamp force calculation
- Overview of CAD & flow analysis programs
- Prototyping methods
- **Practical Mould design** 
 - *Designing the mould from a CAD model*
 - *Parametric design*
 - *Parting line identification*
 - *Incorporating side actions*
 - *Selecting Mould Bases using existing catalogues*

Day 3

Injection Moulding Troubleshooting

- Moulding Faults: Cause & cures.
- Fundamental problems in Moulding
- Faults caused by inappropriate machine selection
- Faults caused by poor mould design
- Faults caused by poor product design
- Faults caused by poor material choice
- Systematic Troubleshooting Techniques
- Cooling Time Calculation

This course has been created in response to requests to combine our existing 2 day courses

- *Injection Moulding Theory & Practice &*
- *Injection Mould Design & Procurement*

It eliminates the overlap in content necessary for them to operate independently, whilst retaining their quality

It also expands on troubleshooting section, once again in response to customer surveys.

Locations, Stafford & Telford

Course Fee: £730.00 + VAT per person and includes course materials, lunch and refreshments.

Registration Form

Fax to +44 (0) 1746 761 875

Injection Moulding Processing & Design

Email to info@polybridgetraining.co.uk

Select Desired Course Date: 2011

Please use a separate form for each delegate, photocopies are acceptable

January 18th - 20th

February 22nd - 24th

March 8th - 10th

May 3rd - 5th

June 7th - 9th

July 19th - 21st

Sept 6th - 8th

Oct 18th - 20th

Nov 30th - Dec 1st

Surname: _____ Title _____

Forename: _____

Position/ Job Title _____

Company: _____

Contact Details;

Company _____

Contact name _____

(If different from above)

Address: _____

Postcode: _____

Tel: _____

Fax _____

Email _____

Invoice Address (if different from Contact Details opposite)

Company _____

Contact _____

Address _____

Postcode _____

Tel _____

Fax _____

Email _____

Payment Information

NOTE:

Payment must be received prior to attending the course

Cheque payable to "Polybridge Training Ltd"

Payment enclosed

Please Invoice my company:

Purchase Order No: _____

NOTE: Please read this carefully

Cancellation Terms,

By completing & returning this registration form, delegates are agreeing to be bound by the Conditions of Registration which can be found on the following page.

Full terms & conditions can be found on our website:

www.polybridgetraining.co.uk/downloads/calculator/terms

Please return to:

Training /Seminars,
Polybridge Training Limited
42 Linley View Drive,
Bridgnorth,
Shropshire.
WV16 4RT
United Kingdom.

Fax +44 (0) 1746 761 875

Info@polybridgetraining.co.uk

BOOKING TERMS & CONDITIONS

Payment is accepted in £GB

Discounts given for multiple registrations: 10% discount for 2 or more delegates from the same company registering at the same time for the same dates

Conditions of Registration

Written confirmation is required: letter, fax, email.

Payment must be received prior to attending the course.

Accommodation is NOT included in the fee.

Cancellation up to 14 days prior to the course start date will be refunded minus a 20% administration charge. Cancellation after this date will be subject to the FULL fee with NO REFUND.

Transfer to a later course, prior to the course start date can be accommodated without charge.

Transfer within the 14-day period prior to course start date will incur a 20% administration charge.

All transfer requests must be confirmed in writing by the delegate requesting transfer or their representative. The option to transfer can only be used once after which non-attendance will be treated as a cancellation subject to the terms above

Delegate substitutions can be made without incurring penalty

Locations

The final course delivery location will be advised at the time of booking. Location choice is dependent on majority course candidates moulding discipline and travel logistics.

Tailor Made "In-House" Courses

This has for many years been our core business, providing companies with cost effective solutions to meet their own specific needs.

Please contact us if this route will be more effectively meet your company's individual needs.

Polybridge reserve the right to modify this course schedule without notification.



POLYBRIDGE Training Ltd

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