



## PROGRAMMING COURSE

**Course title : H2 Heidenhain iTNC 530 Vertical & Horizontal 4 Axes Machining Centres**

**Course length : 4 days Course cost : £600.00 (+ VAT)**

### Day 1

**Start Time**

**Finish Time**

Introduction & General Layout of Machine.  
 Operator, Keyboard & Soft-key Explanation.  
 Axes Configuration. X, Y, Z.  
 Control power up and referencing procedure, safe shut down procedure.  
 General control system operation comprising:  
 Operating mode selection and screen layout and display options.  
 Program management and file handling.  
 How to Start Making a Program, Safety Start.  
 How to End a Program.  
 Contouring functions.  
 Canned cycles.  
 Absolute & Incremental Programming.  
 F Max & Feed Rate Commands.  
 Feed/Rev or Feed/mm.  
 Clockwise & Counterclockwise Moves.  
 Polar Commands.  
 Helical Interpolation.  
 Setting Work Data.  
 Setting Tool Data.  
 Examples Using The Above Information.

9:30 AM

5:00 PM

### Day 2

**Start Time**

**Finish Time**

Setting Work Data.  
 Setting Tool Data.  
 Examples Using The Above Information.  
 FK programming.  
 Parametric programming.  
 Creating simple machine cycling programs using labels.  
 Tool Def.  
 Tool Call.  
 Label Call.  
 Cycle Def.  
 Polar Commands.  
 Description of M codes relative to type of machine.  
 Optional & Program Stop, M00 & M01.  
 Editing Programs.  
 Programming Examples.

9:00 AM

5:00 PM

[Continued overleaf](#)

## H2 Heidenhain iTNC 530 Vertical & Horizontal 4 Axes Machining Centres

<b>Day 3</b>	<b>Start Time</b>	<b>Finish Time</b>
CODE NUMBER access for MP's, PLC etc. Machine Parameter overview. Machine parameter file selection and handling. Entry values in decimal, binary or Hexadecimal. Data communications. RS232 data interface. Ethernet connection and CIMCO software. TNCremo data communications software. Backup/Restore with TNCremo. Logbook. Accessing and interpreting.	9:00 AM	4:00 PM
<b>Day 4</b>	<b>Start Time</b>	<b>Finish Time</b>
To Be Advised	9:00 AM	4:00 PM

NB 1: Machine availability for use on examples will vary and will be advised upon on the day.

NB 2: H2 course is for 4 Axes Vertical & Horizontal Machining Centres H1 & H3 Courses may also be required.