

# Skills Development Programme



# Manual Centre Lathe (Turning)



TDR Training are a leading training provider in the region, offering bespoke skills development programmes to enhance, upskill and retrain to meet future business demands.







### Overview

Turning is a material removal process which is used to manufacture components. The turning process requires a lathe, workpiece, workholding, tool holding and cutting tools. The material is held in the workholding; either a chuck, mandrel or other fixture, and the cutting tools are set along with appropriate speeds (RPM) and feeds. The cutting tools are moved in the Z and X axis to remove metal and therefore produce the component needed.



## **Training & Content**

**Duration 4 Days** 

Advantages... • Time - Faster in small batch machining than CNC • Understanding - 'Feel' the control of the machine opposed to CNC machining • Costs - Decrease maintenance costs by repairing rather than replacing

#### Introduction to Manual Machining

- Health and Safety
- Hazard identification
- PPE requirements

#### Centre Lathe Setup/Shutdown

- Parts of a lathe
- Lathe controls
- RPM and feed rates
- Correct work and tool holding

#### Turning

- Planning the operations
- Using different turning operations
- Turning components
- Tips and techniques
- Using measuring equipment

#### Troubleshooting

Recognise and rectify specification defects

#### **Practical Competence Tests**

• Practical tests to confirm learning

# Certification either a -

- Nationally recognised Certificate of competence
- TDR Certificate of competence upon completion of training

#### **TDR Training**

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