

# CAM Turning with spectraCAM Turning (M)

<b>Catalogue Number</b>	77-3007-0002
<b>Category</b>	Design
<b>Duration</b>	15 Hours

## **Activity 1: Getting Started**

- CAD CAM CNC
- The Lathe
- spectraCAM Functions
- Lathe Operations

## **Activity 2: Using spectraCAM**

- spectraCAM Turning Overview
- Accessing On-Line Help
- Task: Starting spectraCAM
- Task: Exploring the spectraCAM Turning Screen
- Cursor Appearance
- Task: Displaying Optional Toolbars
- Task: Making Menu Selections
- Task: Keyword Searching for a Help Topic
- Task: Exiting spectraCAM

## **Activity 3: Starting a Project**

- Beginning the Top Project
- Task: Opening a New Session
- Task: Setting the Grid Spacing
- Task: Setting Up the Stock
- Task: Saving the Session
- Task: Defining the Tool
- Task: Selecting the Post Processor File

#### **Activity 4: Creating the CAD Drawing**

Drawing the Top

Task: Opening a Previously Created Session

Task: Defining the First Layer

Task: Drawing the Base

Task: Adding the Second Layer

Task: Drawing the First Arc

Task: Drawing the Top Body Geometry

Task: The Cutoff Layer and Geometry

#### **Activity 5: Geometry Duplication and Rough Tool Path Generation**

Creating Tool Paths

Task: Opening a Previously Created Session

Task: Copying a Geometry

Task: Hiding a Geometry

Task: Performing the First Roughing Operation

Task: Creating the Second Roughing Tool Path

Task: Hiding the Tool Paths

#### **Activity 6: Finish Tool Path and NC File Generation**

Creating the NC Code

Task: Opening Your Saved Session

Task: Generating a Finish Tool Path

Task: Generating a Parting Tool Path

Task: Generating the NC Code

Task: Verifying the NC File

#### **Activity 7: Advanced Project Setup**

Introduction

Task: Setting the Grid Spacing

Task: Specifying the Stock

Task: Selecting the Post Processor File

Task: Defining the Tool

Task: Defining the First Layer

Task: Saving your Session

### **Activity 8: Creating the Part Drawing**

Overview

Task: Loading the Session

Task: Drawing the Geometry

Task: Drawing the Arc

Task: Completing the Geometry

Task: Creating the Layers

Task: Creating the Finish Layer

Task: Creating the Thread Layer

### **Activity 9: Final Geometry and Tool Paths**

Overview

Task: Loading the Session

Task: Creating the Cutoff Layer

Task: Generating the Rough Tool Path

Task: Generating the Finish Tool Path

Deleting Duplicated Geometry

### **Activity 10: Tool Paths and NC Code**

Project Overview

Threading Types

Task: Loading the Session

Task: Generating the Threading Tool Path

Task: Generating the Cutoff Tool Path

Task: Generating NC Code

Task: Verifying the NC File

Task: Reviewing the NC File

### **Activity 11: Starting the Final Project**

Introduction to a New Project

Task: Setting the Grid Spacing

Task: Specifying the Stock

Task: Selecting the Post Processor File

Task: Defining a Facing Tool

Task: Naming and Saving your Session

Task: Creating the Layers

### **Activity 12: Creating the Lighter Geometry**

Drawing Arcs

Task: Loading the Session

Task: Drawing the First Arc

Task: Drawing the First Line

Task: Drawing the Second Arc

Task: Drawing Linear Geometry

Task: Drawing Two Arcs and a Line

Task: Changing Layers and Drawing the Cutoff Geometry

### **Activity 13: Final Geometry and Tool Paths**

Activity Overview

Grooving Operations

Task: Loading the Session

Task: Creating the Finish Geometry

Task: Moving and Hiding the Finish Geometry

Task: Generating the Rough Tool Path

Task: Generating the Finish Tool Path

Task: Verifying the Rough and Finish Tool Paths

Task: Generating the Groove Geometry

Task: Generating the Groove Tool Path

Task: Verifying the Rough and Finish Tool Paths

## **Activity 14: Final Tool Paths and NC Code**

Overview

Facing Operations

Task: Loading the Session

Task: Generating the Face Tool Path

Task: Generating the Cutoff Tool Path

Task: Generating NC Code

Task: Verifying the NC File

The Setup Tool Paths Dialog Box

Task: Using the Setup Tool Paths Dialog Box

## **Activity 15: Conclusion**