

Edgecam Multi-Axis Machining

This intermediate Edgecam training course provides insight into effectively using the software for multi-axis CNC machining. This applies to both Mill/Turn and Milling applications, where rotary axis expand the movement capability of a CNC turning or milling center. The course is geared to users who want to gain a deeper understanding of creating toolpath for rotary axis and multiple part machining applications.

By learning through hands-on exercises guided by an experienced instructor, students will learn software functions for changing work coordinate systems within a program, 4th and 5th axis indexing, using multiple setups within a single part, and machining multiple parts. The course provides the Edgecam user with the software knowledge needed for multi-plane rotary axis and multiple part milling applications.

After completing the course, students should be able to:

- Understand how CPLs are used to handle rotary axis control and machining multiple parts.
- Include rotary axis indexing and multiple work coordinate systems in part programs. Mill/Turn, VMC and HMC applications are explained.

Duration

1 days

Typical Schedule

The class runs from 9:00 AM to 4:00 PM, with an hour break from lunch. Please note that lunch is not included, in order to reduce cost to our customers.

Prerequisites

- Complete the Edgecam Workflow course, or have similar essential software knowledge.
- Experience using Edgecam, with at least 6 completed programs that have run in CNC machines recommended.
- Knowledge of multi-axis CNC milling applications.
- Proficient with Microsoft Windows. Unless otherwise specified, workstations currently run on Windows 7 operating system.

License Requirements

This course is applicable to the following Edgecam licenses:

- Edgecam Standard Milling and higher
- Edgecam Standard Turning and higher
- Edgecam Standard Production and higher

Topics Covered

Understanding CPLs

- Creating / Editing CPLs
- Multiple Sequences
- Multiple Parts
- Work Coordinate Systems (G54, G55, etc.)
- Rotary Axis Movement

- 5th axis Indexing
- Dynamic Offset (G54.2) (Mill)
- Programming from Pivot Point (Mill)
- Wrapped Rotary Milling
- Angled Heads (Mill)
- Programmable Quills (Mill)

Multi-Axis Machining Applications

- C-axis Indexing (Mill/Turn)
- B-axis tilting head Indexing (Mill/Turn)
- Part Orientation for Milling (both VMC and HMC)
- 4th axis Indexing

Tombstone Machining Applications

- Insert Component command
- Merge Sequences command
- Rationalize command
- Tips for quickly assembly production runs