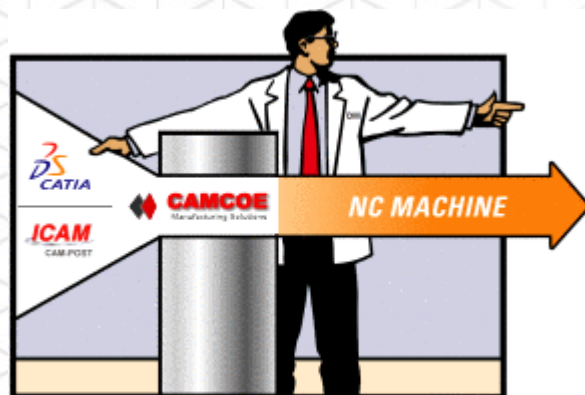




CATIA V5

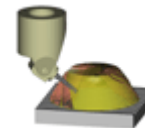
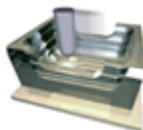
NC Manufacturing Services



NC Manufacturing Services

All CAMCOE NC Mfg services are provided through Dassault Systemes Inc

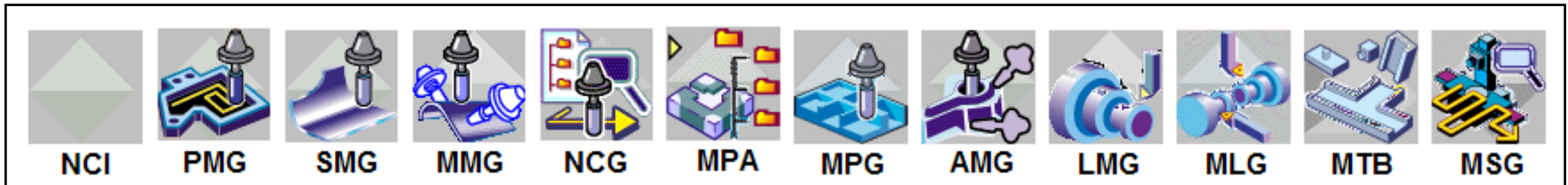
- **Standard and Custom Training on all CATIA V5 NC modules**
- **Complete implementation services on CATIA V5 NC Mfg**
- **CATIA V4 to CATIA V5 - NC transition services**
- **Legacy NC methodology mapping to CATIA V5**
- **NC Post Processor development services**
- **NC Control Emulator development services**
- **Machine tool simulation and verification services**
- **OEM Services for NC machine manufacturers**
- **NC Auditing Services**
- **NC Technical Support Packages**



CATIA V5 NC Training - Standard

Providing standard CATIA V5 NC Training on

- NCI – NC Manufacturing Infrastructure
- NCG – NC Manufacturing Review
- PMG – Prismatic Machining
- SMG – 3 Axis Surface Machining
- MMG – Multi-Axis Surface Machining
- MPG – Multi Pocket Machining
- AMG – Advanced Machining
- NVG – NC Manufacturing Verification
- MPA - Prismatic Preparation Assistant
- MBG – NC Machine Tool Builder
- MSG – NC Machine Tool Simulation



CATIA V5 NC Training - Custom

Providing Customized NC Training on

CATIA V5 - NC Manufacturing Courses

- Standard Milling Course
- Advanced Milling Course
- Standard Lathe Course
- Advanced Lathe Course

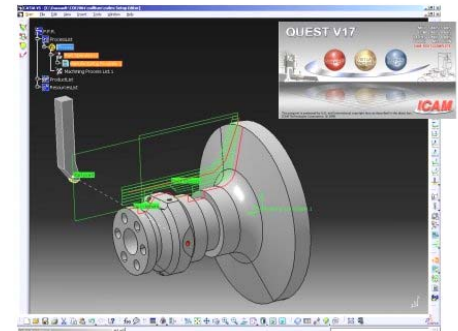


CATIA V5 / CAMPOST- Implementation Courses

- Milling Implementation Course
- Advanced Implementation Course
- Lathe Implementation Course
- Mill / Turn Implementation Course

CATIA V5 - Primary Courses

- Design for NC Course
- Visual Basic for NC Course
- Mold Tooling Design for NC Course
- Automation for NC Course



NC Manufacturing Setup Services

Providing NC Setup services for CATIA V5 NC Mfg

For New CATIA V5 Clients



- CATIA V5 NC Module selection based on requirements
- Setup of CATIA NC setup files based on company standards
- Configuration of CATIA V5 Machining Environment and CATSettings
- Setting up CATIA V5 to work with upstream and downstream programs
- Data files management under the PPR Structure
- Creation and management of NC data (Part, NC Geometry etc)
- Creation and management of Fixtures
- Methodology for creating and managing the NC CATProduct master assembly
- NC data output settings management (PPTables, APT format, NC data output)
- Complete development and integration of Post Processors for CATIA V5
- Design and development of machine tool model for simulation
- Development and integration of Control Emulator for NC data simulation

NC Implementation Services

Providing complete implementation services for CATIA V5 NC Mfg

- Setup of CATIA V5 Machining Environment and CATSettings
- Data files management under the PPR Structure
- NC Data (Part, NC geometry etc) - Creation and management methodology
- Techniques for Creation and management of Fixtures
- Methodology for creating and managing the NC CATProduct master assembly
- Creation and management of CATProcess template seed models
- Customer specific NC Programming methodology
- NC programming corporate knowledge capture and reuse
- Methods for creating and maintaining Tool catalogs
- Techniques for creating preplans and NC shop floor documentation
- Management and propagation of design changes in NC Programming environment
- NC data output settings management (PPTables, APT format, NC data output)
- Custom development of NC Post Processors for all types of NC machines
- Installation, testing of custom posts and generation of NC data for machines
- Creation of validation and certification scenarios for CATIA V5 release level image



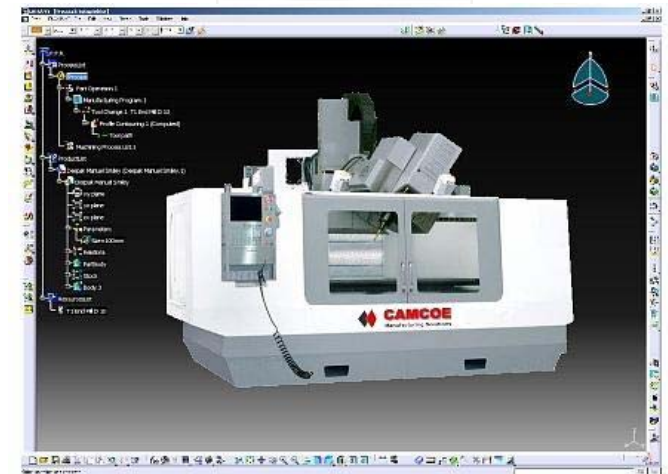
NC Post Processing Services

NC Post Processing Services

Facilities using CATIA V5 for manufacturing will require NC post processors to generate NC programs from the NC workbenches.

We provide custom NC post processor development, consulting and implementation services for the following types of NC machines

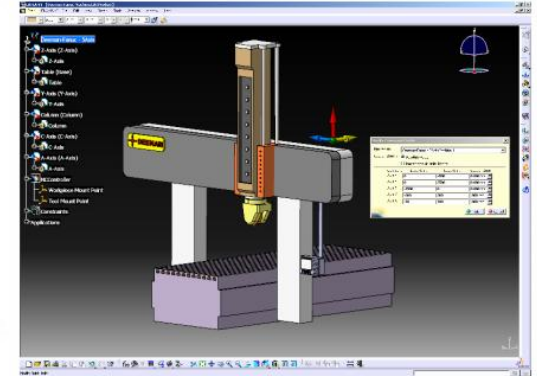
- Multi-Axis Milling Machines
- Lathes, Merging Lathes
- Multi-Axis Mill/Turn Centres
- Wire EDM
- Punch press
- Laser/Plasma/Flame cutters
- Multi-Axis Waterjet Machines
- Hybrid and Special Application NC Machines



Additional Services – NC Simulation, NC Auditing

Providing NC Simulation Services for CATIA V5 NC Mfg

- Training and Support on MTB, MSG
- Complete Modeling of NC Machine Tool
- Development of Control Emulator for NC Simulation
- Implementation services for NC Simulation



Providing NC Auditing Services for CATIA V5 NC Mfg

- Review of NC setup and structure
- Analysis of current procedures and bottlenecks
- Detailed reports for improvement and implementation



NC Technical Support Plans – Monthly, Annual

Benefits of the NC Technical Support Packages

- Direct support of Dassault Systemes (software developer)
- Constant, consistent and reliable technical support
- Highly qualified and experienced NC Resources
- North America based NC Resources and hotline support
- Dedicated NC Resource for Technical Support
- Have a direct link to the CATIA NC development team
- Customized Support Plans for Client Requirements (monthly, annual)
- Constant improvement and updating of existing methodologies
- Receive immediate attention to any critical NC issues
- Expedited follow up, testing and validation of bugs and issues
- Provide insight into forthcoming NC Mfg features and modules
- Stay abreast with new enhancements features and functions
- Awareness of user techniques of other CATIA V5 NC users



Contact Information

Dassault Systèmes Inc

215, St-Jacques St. West, Suite 500
Montreal, Quebec,
CANADA H2Y 1M6
Tel: (514) 940-2949
Fax: (514) 940-1399

<http://www.3dplm.com/services>

CAMCOE Manufacturing Solutions Inc

5181 Dauville Ave,
Pierrefonds, Quebec,
CANADA H9K1E8
Tel: (514) 626 0506
Fax: (514) 626 0506

<http://www.camcoe.com>

Business & Management Enquiries

Isaac Benzaquen
Director, Americas Industry Solutions
Phone: (514) 448 7741
Fax: (514) 940 1399
E-Mail: Isaac.BENZAQUEN@3ds.com

Business & Technical Enquiries

Deepak Manuel
Senior CATIA V5 NC Specialist
Phone: (514) 626 0506
Fax: (514) 626-0506
E-Mail: deepak@camcoe.com