



Computer based training! 3 CD-ROM disks: 9.5 hours!

Parametric Programming For CNC Machining & Turning Centers

3 versions: custom macro B, user task 2, macro

Learn the best kept secret of CNC!

While parametric programming is becoming more commonplace, there are still many in the industry that don't even know what it is, let alone how to take advantage of its many features. Given the five application categories (part families, user created canned cycles, utilities, complex motions, and driving accessories), almost all CNC using companies have many applications for this very powerful programming tool. Here's your chance to learn parametric programming -- with a proven, self-paced approach.

Three popular versions

Different control manufacturers call their version of parametric programming by different names. While we place the heaviest emphasis on Fanuc's **custom macro B**, Okuma's **user task 2** and Fadal's **macro** are also covered in great detail. The unique nature of this computer based training courseware will allow you to view just the presentations related to the version/s you're interested in learning.

Two popular machine types

Though parametric programming can be applied to just about any kind of CNC machine tool, this course stresses the two most popular kinds - the CNC machining center and the CNC turning center (since Fadal only makes machining centers, the presentations related to Fadal's macro will only be shown for machining centers). We show countless examples and assign plenty of practice exercises to ensure that you'll know how to apply the features of parametric programming to either machine type.

Easy navigation

If you've been on the Internet, you'll find the series of hypertext links that help you navigate the course are very similar to the links you find on any web page. Once you click on an underlined text link, you'll be taken to the presentation related to that link.



A "home" button will always be displayed on the outline page to take you back to the list of lessons contained on the disk.



A return button will always bring you back to the most recent page. And like any web page, any link you've already viewed will be shown in a different color.

Microsoft PowerPoint Viewer

All presentations include narrations & colorful graphics and have been prepared in Microsoft PowerPoint. Microsoft PowerPoint viewer is included to show presentations.

Eight tutorial lessons

The course is presented in tutorial format (compare this to your control manufacturer's descriptions of parametric programming). While we do assume you understand G-code level manual programming, we assume you know nothing about parametric programming. Using a building blocks approach, we constantly add to previously presented information. After each lesson, there's an exercise to do.

- 1: Intro to parametric programming (00:31:00)
- 2: Variable techniques (02:36:10)
- 3: Arithmetic techniques (01:04:00)
- 4: Logic & program flow control (01:32:50)
- 5: Looping (00:48:00)
- 6: System variables (02:08:00)
- 7: Special features of custom macro (00:28:20)
- 8: Approaching and verifying (00:20:14)

What you get!

This courseware comes with everything you need to learn parametric programming - and it can be used over and over again to teach others in your company about this important programming function.

- Three CD-ROM disks totaling 9.5 hours of presentation
- One student manual (240 pages)
- One workbook (8 exercises & 16 programming activities)
- Answer book
- One year subscription to *The Optional Stop* newsletter
- Free phone/email assistance

System requirements:

Multimedia computer with sound system & CD-ROM drive
Pentium processor
Windows 95 or Windows 98 operating system
16 MB RAM
Minimum 4 MB free hard drive space

The price for unlimited training? ... \$399.00

Extra student manuals: \$60.00 - extra workbooks: \$19.95



CNC Concepts, Inc., 44 Little Cahill Road, Cary, IL 60013, Ph: 847-639-8847, Fax: 847-639-8857
Internet: <http://www.cncci.com> email: lynch@cncci.com