Setup Reduction
For CNC Machining & Turning Centers

Help students get the most from their CNCs!

During any CNC machine's usage, there are really only two activities. Either machines are in setup or they are running production. Setup time is the total time the machine is down between production runs. Cycle time is the time it takes to complete a production run divided by the number of good workpieces produced.

When machines are in setup, they are not producing. Anything that can be done to reduce setup time will improve the productivity of CNC machines.

Traditionally, CNC users have not had to run CNC machines at peak potential. The sheer productivity of CNC machines (compared to their manual counterparts) has thrilled many a CNC user. However, things have been changing in the manufacturing environment. Lot sizes are shrinking. Lead times are shorter. Quality expectations are higher. And of course, operating expenses must be reduced.

All of this requires CNC users to provide faster turn-around for the workpieces they produce – and a big part of faster turn-around is related to reducing the amount of time a CNC machine is down during a production run, which of course is the very definition of setup.

All CNC users should have a strong interest in setup reduction. Even people with years of experience should be interested in finding new ways to minimize setup time, meaning you should be able to draw from an entirely new student base, dramatically increasing the number of potential students for your CNC courses.

This course will allow you to relate the setup reduction from the ground up. The objective of this course curriculum is to help instructors relate concepts, techniques, and ideas that will help students go back to their companies and implement a successful setup reduction program.

Free with initial textbook order!

Not only will you be teaching with the best state-of-the-art CNC curriculums in the industry, you'll be doing so free of charge! All we ask is that your school bookstore buys the student manuals from us! With an initial order of just 20 manuals, we'll ship the instructor's materials free of charge! All instructor materials (slide shows, PowerPoint Viewer, instructors manual, and Adobe Acrobat Reader) come on one CD-rom disk.

Our net price to your school (or bookstore) for manuals is $40.00 each. Suggested retail price is $50.00 each. Future orders can be in any quantity. This cost will be recovered, of course, as students enroll in your classes and buy the manuals. In essence, your first 20 students will be paying for the curriculum!

Four presentations!

Basic premises (58 slides) – This presentation sets the stage for material to follow. You'll present CNC benefits, address machine utilization versus personnel utilization, discuss corporate identities, and value added principles

Preliminaries (26 slides) **–** Before digging in to setup reduction principles and techniques, you'll get students primed with discussions on the importance of setup reduction, justification issues, and available resources.

Setup reduction principles (53 slides) – Here you'll discuss principles of setup reduction that can be applied to just about any kind of production equipment, including the two tasks types related to setup, the three ways to reduce cycle time, and four steps to setup reduction.

Setup reduction techniques (334 slides) – Here, you'll show specific setup reduction techniques in the approximate order that setups are made – including preparation and organization, workholding setup, cutting tools, program zero assignment, program development, program transfer, program verification, and program optimizing. In each major topic, you'll show ways to eliminate tasks, move tasks off line, and facilitate tasks.

Instructor materials:

PowerPoint slide shows with and without guidance – One set of slide shows includes audio guidance to help you know what to do throughout the course. Since slide shows with guidance are quite large (taking a long time to load), we also provide a set of slide shows without guidance.

Instructions – This twelve page document provides detailed directions about teaching the course, including several suggestions for student activities.

Microsoft PowerPoint Viewer – While we encourage you to purchase the full version of PowerPoint (it allows full editing of slide shows), PowerPoint Viewer is included to let you view and display the slide shows.

Student materials:

135 page manual – that follows your presentations. This manual will make an excellent reference when students finish with the course and begin to apply the techniques you've shown

Download free samples!

Our internet site (www.cncci.com) includes the complete set of instructions, samples of the slide shows, instructor manual, student manual, and the recommended presentation time you should allow for each presentation. Log on and see just how comprehensive this course truly is!

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