

# The Professional Choice for CNC Program Management



When reliability matters

Management of part programs and associated production documents is often a time consuming task for CNC programmers and operators. NC-Base takes care of that job and goes one step further. By providing an integrated and highly flexible management, search and editing environment, programmers and operators are guaranteed to work more effectively.

When combined with DNC-Max the job is even easier. DNC-Max can automatically import data into NC-Base, including defining characteristics such as part number, description, operation, etc., making the programmer's job of reviewing and managing uploaded data less of a chore. For operators on the shop floor, a view only version of the NC-Base Client makes easy work of retrieving part programs and viewing production documents in a paperless environment.

## Information Management

Achieving product and quality goals today requires that the correct information and data get to the right individuals and equipment as efficiently as possible. NC-Base is the CNC program management tool that allows you to organize and manage your CNC programs and related production documents most effectively through the use of a reliable and fast SQL relational database.

NC-Base is production centric, designed to be used by people in the programming department and on the shop floor. With NC-Base CNC programmers and production staff can assemble virtual folders containing all the necessary data used by machinists, operators, quality staff, and others who are responsible for finished parts.

Why just send CNC programs to the shop floor when you can also provide setup sheets, tool lists, images, and other vital information required to manufacture parts? This information may be accessed from PCs running the NC-Base Client or printed out for manual distribution. Either way, NC-Base helps ensure the right part gets made right every time.

CNC operators can access and update the database directly from the CNC control, or any PC on the shop floor. NC-Base provides a highly flexible management, search and editing environment.

## Improved look and feel

Improved look and feel, including Windows theme support. In addition, the layout of dialogs, menus, and toolbars has been simplified.

The screenshot shows the NC-Base software interface. At the top is a menu bar with options: File, Database, Editor, NC Functions, Backplot, File Compare, Transmission, and CNC-... Below the menu is a toolbar with icons for Explorer, Logoff, Queue, Last 24 Hours, Find Deleted, Program Info, Open, Add Program, Copy Program, Associate File(s), Delete, and Accept. The main window is titled 'NC-Base' and contains a 'Find programs' search panel on the left and a results table on the right. The search panel has fields for Program (456), DESC., Drawing #, Issue No, Cycle Time, Part No., Op No., Job No., Handling Time, Machine, Customer, and Status, along with a Search button and an 'Advanced search' checkbox. The results table has columns for Program, Issue No, Drawing #, and DESC. The selected row is 456-1213, Issue No 1, Drawing # 23761456-1213, and DESC JET NOZZLE. Below the table is a detailed view of the selected program, showing a list of files and a description: O0001 (456-1213) (JET NOZZLE) (DRG NO23761456-1213) (OP5) (ISS 1) (PART RP456-1213) (JOB 55443) (CUST CNC AEROSPACE) (CYCLE TIME 5M) (13) (PUMA MX2500LST) (UPPER B-AXIS PROGRAM) G0 G40 G99 G18 G80 G21. At the bottom, it says 'Found 10 programs.'

## User management

The new NC-Base user management system includes a number of improvements. Users are now organized in groups, making it easier to administer installations with a large number of users

Additional information like name, employee ID etc. can be specified for each user

New search facility allows the administrator to search through the user database

Unique groups can be created for a specific PC or Client

The login dialog now supports listing all users allowed to login

This collage shows three screenshots from the NC-Base software. The left screenshot is the 'Find programs' dialog with fields for Program (R1005), Part number (PNO1-1005), and Drawing number. The middle screenshot shows a file explorer view of a folder containing files like R1015.NC, R1015.txt, 15-1-630.i..., and 15-2-631.i... The right screenshot shows a 'User groups' list with columns for Group name and Me, listing groups like Administrators, Fanuc Users, Haas Users, and Supervisor.

Manage programs, their associated document and more

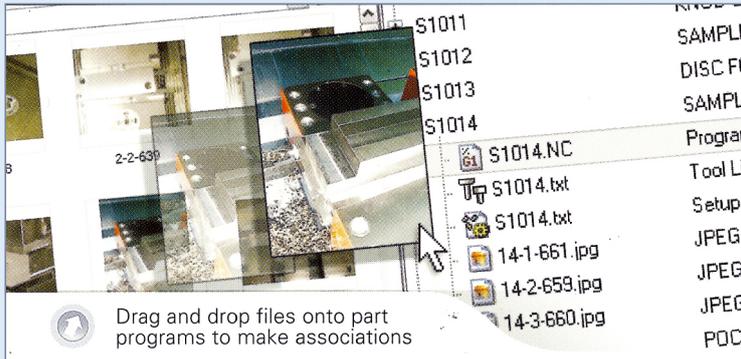


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## Storage and Retrieval

Effective storage requires an organized framework for managing and accessing vital production information. Using industry standard relational SQL databases like Microsoft SQL and MySQL NC-Base provides a fast, flexible, and reliable system for all your production information.



## Documentation and Quality Assurance

Associate all types of production data with your CNC programs to minimize mistakes and scrap. You may associate files created outside Cimco Edit such as tool lists, setup sheets inspection notes, etc. or have them created automatically from data contained in your CNC program. You may also launch external applications for viewing or editing of all file types.

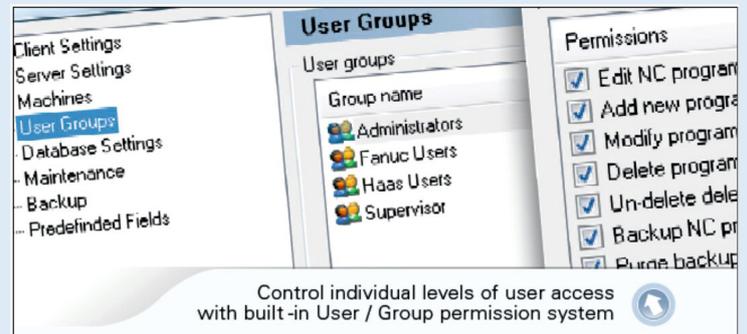
## Version Control and Audit

NC-Base features a comprehensive, yet easy to use, version control system that automatically tracks any changes made, not only to the CNC programs, but also to associated production documentation. Every version of a file is stored in the system, along with information about when the change was made, who made it and why it was made.

Supervisors can create a new version or restore an older version and produce audit history reports. Using the integrated compare function, different versions, including Mazak programs, can be quickly compared side by side.

User	Time	Version	Event
		4	Current Version
ADMIN	14:49:59	3	Part Ready
ADMIN	14:49:59	3	Backup created
ADMIN	14:49:59	2	Program file edited
ADMIN	14:49:46	2	Tool change / Rea
ALICE	14:49:23	2	Backup created
ALICE	14:49:23	1	Program file edited
ALICE	14:49:05	1	New program auto

Automatically track changes made to programs and associated documentation



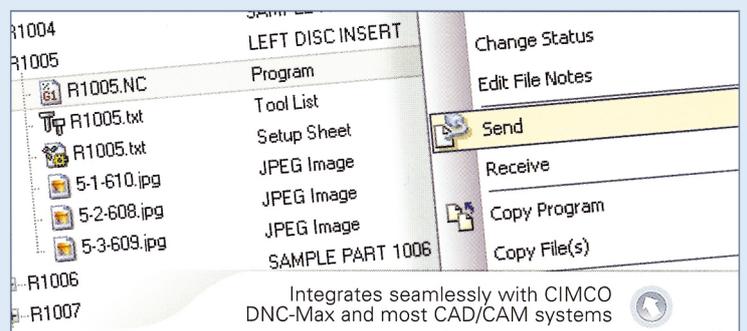
## User Management

Controlling who can access and modify information is a critical component in any information management system. NC-Base achieves this by using a highly flexible user/group permission system that allows the administrator to specify who is allowed to view, modify, approve files etc.

## System Integration

NC-Base is fully integrated with the DNC-Max, allowing operators to request and retrieve CNC programs or save CNC programs directly from the CNC control or by using the NC-Base client. Programs returned from the machines are quarantined for approval and supervisors can compare these before approval.

NC-Base integrates seamlessly with most CAD/CAM applications. Using the auto import function, programs generated in the programming department are automatically imported into the database. Program information can also be exported to text files, MS Excel spreadsheets, etc.



## Automated backup

Using the NC-Base backup server, a complete backup of all the information in the database, including part programs, associated production documentation etc. is automatically performed every day. In case of a backup failure, system administrators are automatically notified by e-mail.



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