



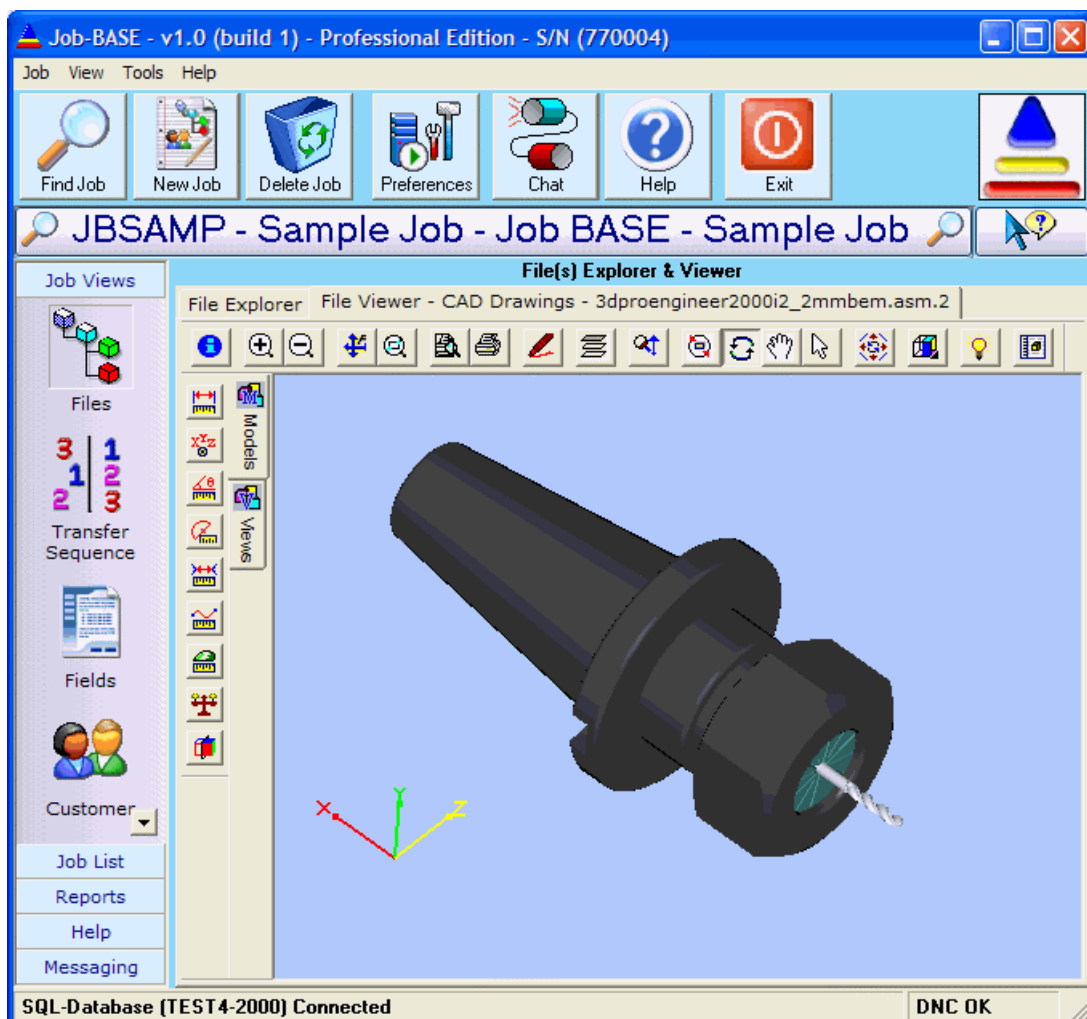
Job BASE

by Spectrum CNC Technologies

Job BASE is a Production Document Management system. CNC Programs, Offset Files, CAD Drawings, Wire frame, 3D Solid Models, Setup Sheets, Tool Lists and other production documents can all be **associated** under a Job name and description which then becomes a “**Job**”. Once jobs have been created and released to production they can be loaded at any **Job BASE** workstation.

For example a CNC machine operator can pull up any previously created job in **Job BASE's** easy to use graphical interface, therefore totally eliminating all paper documentation. Any production problems can quickly be communicated back to the design engineers using **Job BASE's** document collaboration features.

Job BASE is designed to fully integrate with **Multi-DNC**, but will also run standalone. **Job BASE** uses an industry standard MS SQL server for its database, taking full advantage of powerful features like server-side processing to maximize workstation performance. This also allows multiple **Job BASE** workstations to simultaneously access the SQL database across your company network. **Job BASE** is available with support for 2D or full 3D solids, with both products having markup/redlining as an option.

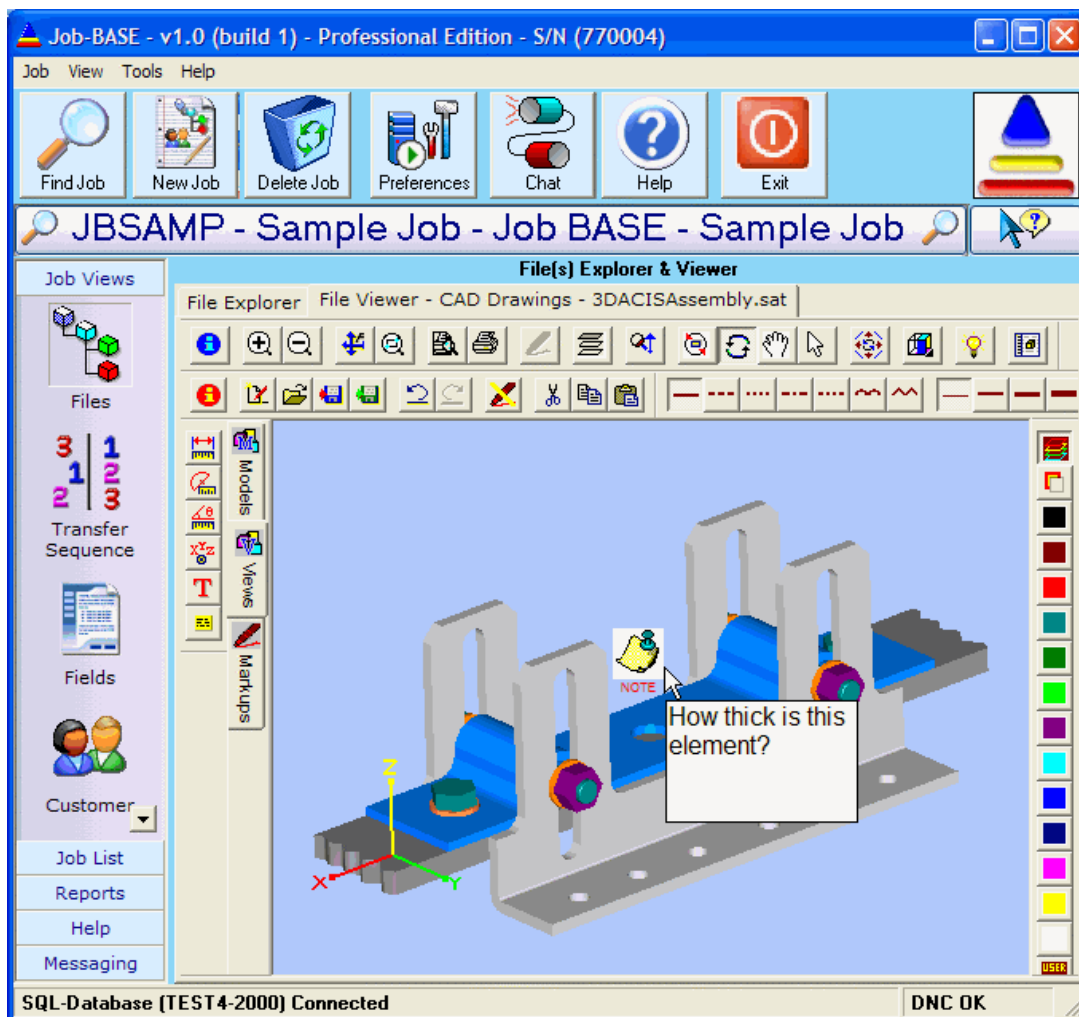


Job BASE integrates **AutoVue**, an industry standard document viewing system that supports 200+ file formats. All AutoCAD drawing formats are supported as well as many other CAD systems, plus optional 3D Solid Model viewing, Word documents, Excel spreadsheets, PDF documents, plus Digital Pictures of machining setups (bitmaps) can be viewed without needing those applications to be installed on the **Job BASE** computer. Digital Movies in MPG or SWF (Flash) format can also be linked to Jobs. These types of files are often created by Solid Model Verification programs that show all of the steps to cut a part in a movie format.

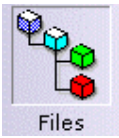
In addition to the formats mentioned above **Job BASE** is intranet & Internet ready with full support for HTML documents, email and collaboration (chat).

Markup Example

Markup also known as Redlining is available as an option so that either the shop floor user or the manufacturing manager can highlight problem areas or make notes etc on any document and pass it back and forth for review.



The Six Views of a Job

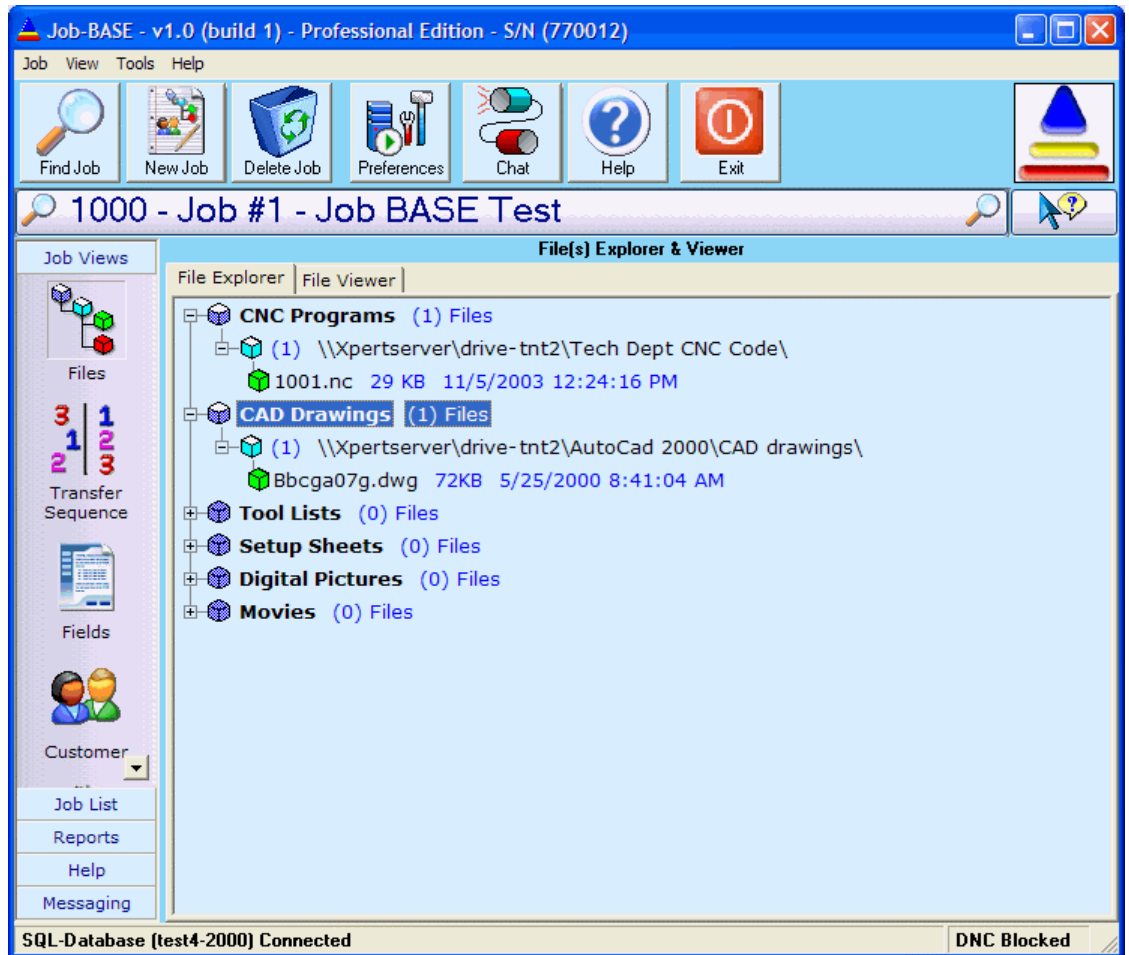


Files View

The Files View of a Job shows the file explorer and viewer. The File Explorer shows the graphic "tree" of the Job Categories with all the associated Folders and Files within the job.

The floating Job Tools menu enables the adding and deleting of files, the editing of Categories, and the ability to change the look of the Display.

Files can be viewed by "double-clicking" them or choosing the file "view" button in the floating tool bar.



Transfer Sequence View

The Transfer Sequence View enables you to arrange the order of multiple files in a Job that are going to be sent to a CNC controller through **Multi-DNC**. When you add multiple CNC programs to a Job, the default order in which they will send is the order in which they were added to the Job. For Drip Feed (Direct DNC) type of Jobs, the order in which the files Send to the CNC Machine can be critically important. The Transfer Sequence View also enables you to start any of the CNC program files linked to a Job at any point in the file or to send it multiple times.



Fields View

The Fields View allows the user to input job related information, such as Part Numbers and Descriptions, Operation numbers and Descriptions and Fixture numbers and Descriptions. There are also fields for the type of Material used in the Job. You can use any or all of these fields to describe the current Job. (4) user configurable fields allow for additional information such as custom report filtering or a unique part reference.





Customer

Customer View

The Customer View is a simple contact database. It contains the Customers Company name, Contact person(s), addresses, phone numbers, e-mail and Web site addresses, etc. All pertinent contact data for the Customer you are doing the Job for is at your fingertips. You can send e-mail from within the Customer view. You can import your existing windows Address Book which is also used by MS Outlook Express.



Machines

Machines View

Job BASE connects to **Multi-DNC** through the SQL database and it knows what machines are set up for all of the connected **Multi-DNC** systems as shown by their computer names and DNC License numbers.

When a Job is created, the Machines View lets you choose which Machines are **NOT** allowed to use this Job. All Machines that are checked cannot use the CNC programs in this Job, and **Multi-DNC** will not allow those files to be sent.

The screenshot shows the Job BASE software interface. The title bar reads "Job BASE - v1.0 (build 1) - Professional Edition - S/N (770004)". The menu bar includes "Job", "View", "Tools", and "Help". The toolbar contains icons for "Find Job", "New Job", "Delete Job", "Preferences", "Chat", "Help", and "Exit". The main window title is "JBSAMP - Sample Job - Job BASE - Sample Job".

The "Job Views" pane on the left shows a tree structure with "Files", "Transfer Sequence", "Fields", and "Customer". The "Fields" pane shows "new-tech-1 (99..." and "new-tech-1 (991000)-16-8-8 \ Group (1) \ Mazak Fusion 640M CMT".

The main area displays a table titled "Machine(s) NOT allowed to use this Job":

Machine	Server	Group
Mazak Fusion 640M CMT	new-tech-1 (991000)	Group (1)
Okuma 5020-M Control	new-tech-1 (991000)	Group (1)
Sample Machine	new-tech-1 (991000)	Group (1)

Below the table, there are checkboxes for various machine models: "Sample Machine" (checked), "Okuma 5020-M Control" (checked), "Mazak Fusion 640M CMT" (checked), "Haas VF-6 Mill" (unchecked), "Fadal VMC-4020" (unchecked), and "Fanuc Series 0-M Control" (unchecked).

The status bar at the bottom indicates "SQL-Database (NEW-TECH-1) Connected" and "DNC OK".



Notes

Notes View

The Notes View is a "free form" text only notes editor like an electronic notepad. A good use for the Notes View is for CNC Operators to make notes about a particular Job to pass them onto the CNC Operator on the next shift. Each Note is Date and Time stamped and also has the name of the user who is logged into the computer when the note was created. Notes are a permanent part of the Job data.

Searching for a Job

As you use **Job BASE**, you can build a large library of Jobs. The SQL Server can handle very large databases; you can easily manage 5000 plus Jobs. But it can become an issue to find a particular Job when you have a very large



number of Jobs in the database. **Job BASE** implements searching tools within the Job List window to help you find a Job by using any of the fields that are part of the Job.



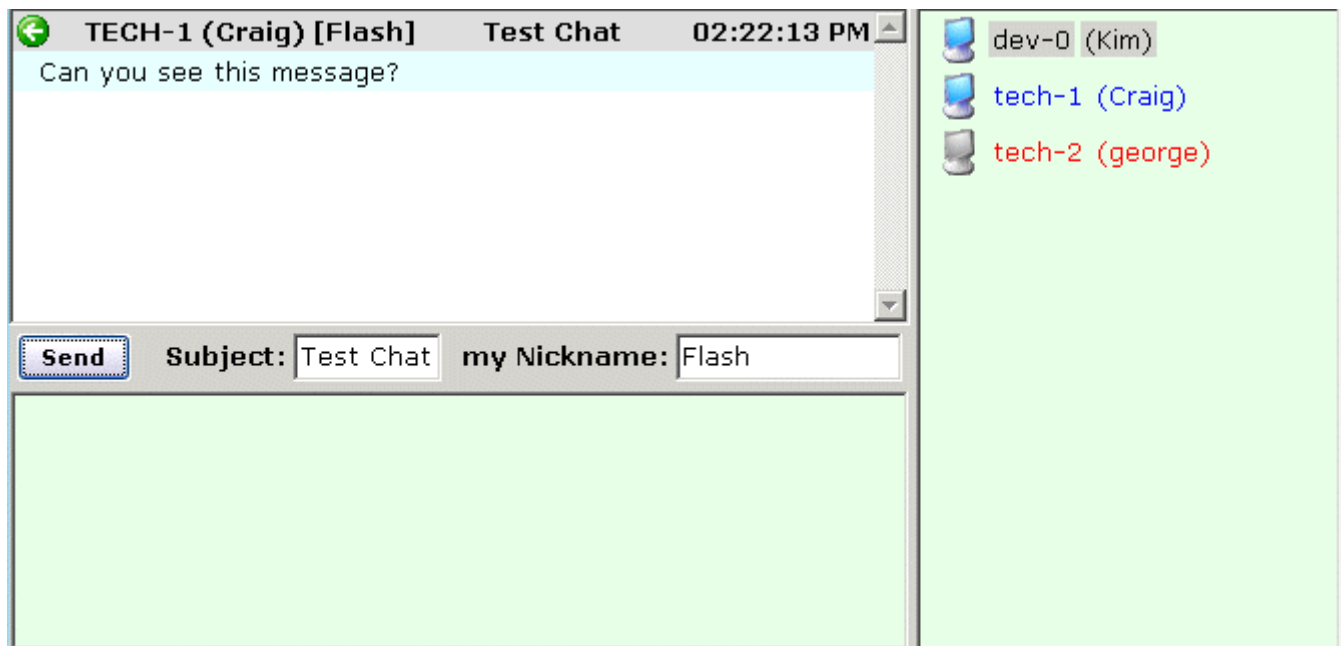
Pick the **Find** icon and this window will appear:

Find: 1002		Search By: Remote Call ID		
Name	Remote Call ID	Part No.	Description	
4643-1	4643	200-4643-1	Northrop project	
4653-1	4653	200-4653-1	Northrop project	
4663-1	4663	200-4663-1	Northrop project	
4673-1	4673	200-4673-1	Northrop project	
Fixture for 43xx jobs	1001	1000-4300-15	Northrop project	
▶ Fixture for 46xx jobs	1002	1000-4600-15	Northrop project	
Job #1	1000	8879645	Job BASE Test Job	

You can search by Name, Remote Call ID, Part Number, and Description of a Job. The Remote Call ID must be unique for every Job. With these searching tools it becomes easy to find an individual Job within a database of 1000's of Jobs.

Document Collaboration (Chat and Chat-Link)

A very useful feature of **Job BASE** is the ability to carry on a "live" Chat session between **Job BASE** workstations.



The right side window shows a list of available (blue) or unavailable (red) **Job BASE** workstations with the computer name and logged in user to Chat with. The bottom window is for composing your Chat message. The top window



shows the current Chat session. Each Chat message is also date and time stamped. Besides the computer name and logged in user, you can also use a "Nickname" to further identify yourself to other **Job BASE** users.

The Chat-Link feature allows a link to a specific file within a job to be included in a message. When the recipient of the message clicks on this "link" the job is automatically loaded and the specific file is automatically displayed in the file viewer along with any markup that may have been done.

Job BASE Reports

Job BASE includes Reports that show the number of Active Users in multiple **Job BASE** systems connected to the same SQL database, as well as a Report on the historical Usage of the current Job.

The screenshot displays the Job-BASE Professional Edition v1.0 interface. The main window title is "Job-BASE - v1.0 (build 1) - Professional Edition - S/N (770004)". The menu bar includes Job, View, Tools, and Help. A toolbar contains icons for Find Job, New Job, Delete Job, Preferences, Chat, Help, and Exit. The current job is identified as "JBSAMP - Sample Job - Job BASE - Sample Job".

The "Reports" section is active, showing the "JOB 'SAMPLE JOB' USAGE REPORT". The report includes the Job BASE logo and a table with the following data:

1			
Machine	Maho CNC 432 (Phillips) Control	Last File Sent	
CNC Operator	Unknown	Filename	c:\Multi-DNC\Send\mill-sample.nc
Start Transfer	3/17/2005 9:31:36 PM	Lines Sent	
End Transfer		Bytes Sent	
Status		% Sent	
Send Type	Manual	Filesize	28129
Send Mode	Send Each		

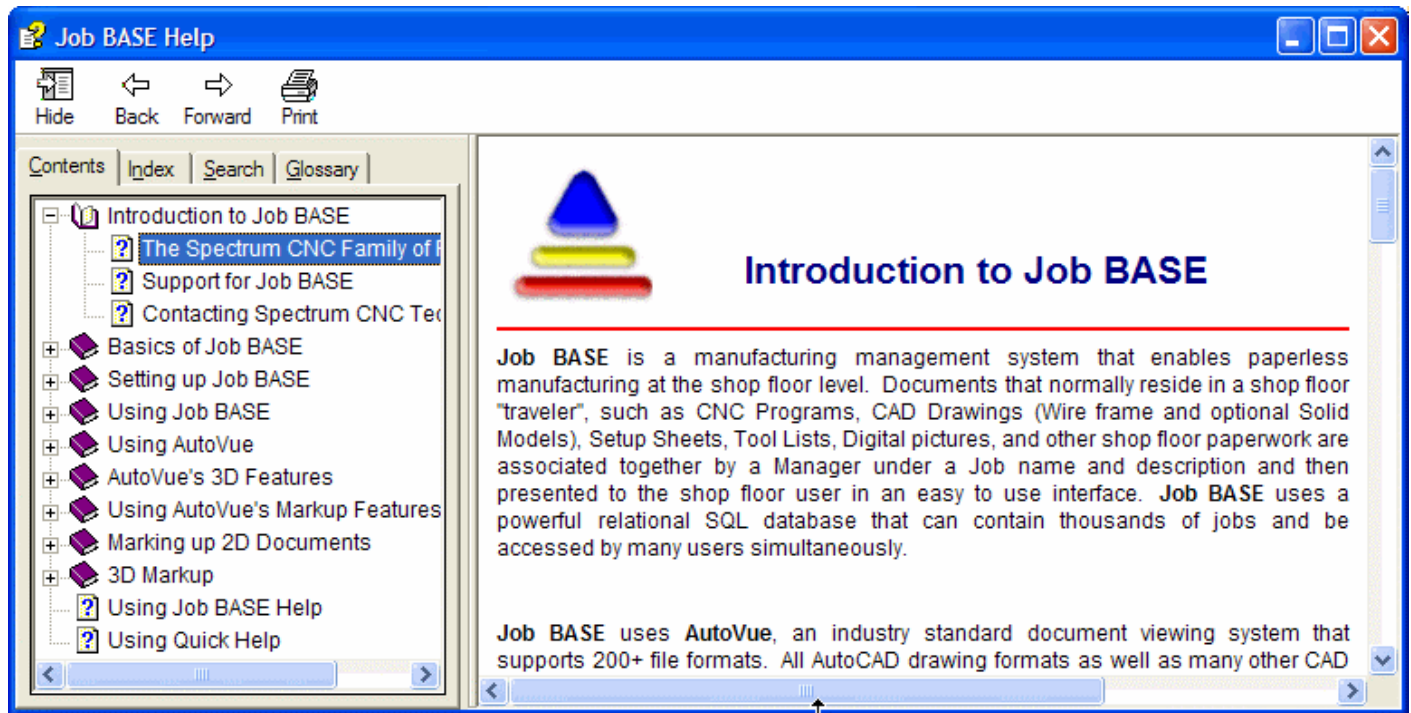
Report Generated at: 3/17/2005 9:32:32 PM


The interface also shows a sidebar with "Job Views" (Job List, Reports), "Active User(s)", and "Job Usage" sections. The status bar at the bottom indicates "SQL-Database [TEST4-2000] Connected" and "DNC OK".



Job BASE Help

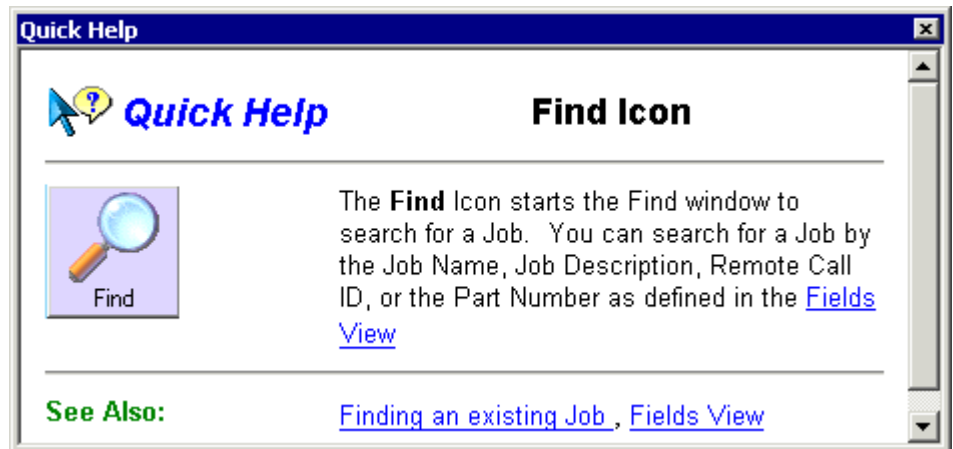
An excellent Help system is essential when learning or using an application like **Job BASE**. Finding the help you need is easy. **Job BASE** uses **standard HTML** style Help, so it is like using an Internet browser. Everything you need is only a click away.



Job BASE has an additional help system called "Quick Help". When this icon is clicked , the normal cursor changes to a question mark. Dropping the cursor anywhere in **Job BASE** brings up a quick help window with an explanation of that function.

The **Quick Help** window, besides containing an explanation of the feature you clicked on, also includes hyperlinks into the main **Job BASE** Help. Clicking a hyper-link displays the main help opened at the right place providing more detailed help.

Job BASE's Quick Help makes it easy to get the help you need fast!



Thank you for taking the time to look at **Job BASE**.

If you have questions about **Job BASE** or **any** of our other products please call us !

Spectrum CNC Technologies
1-951-549-0755

