Factory Floor Specialists Since 1983
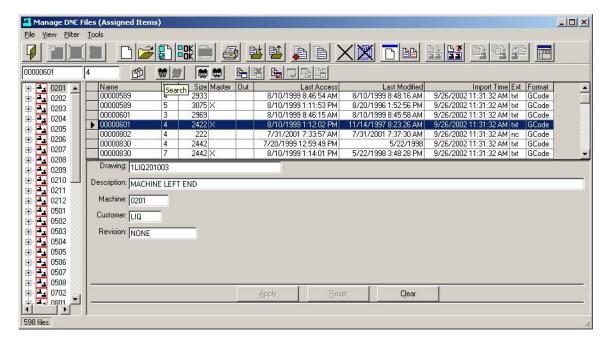
CCI

SuiteFactory™ White Paper

Search Criteria

Features discussed: Search Criteria, the Search Engine, Automatic File Name Generation, CCL (CCI's Command Language for requesting DNC file transfers at the CNC console.)
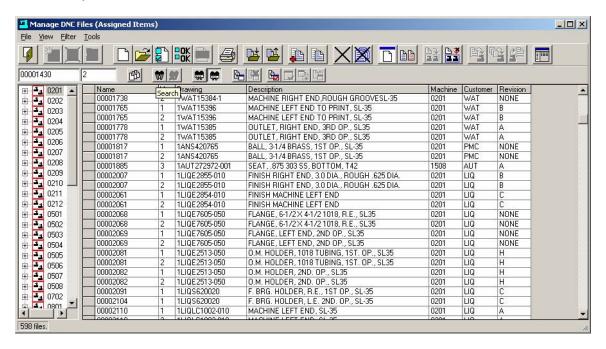
What is the Search Criteria feature and why use it?

SuiteFactory includes a powerful feature called Search Criteria. Search Criteria gives you, the end user, the ability to add your own custom fields to the DNC file, document, and packet tables. Rather than depend upon descriptive file names to find what you need, you now can search and sort by any subject significant to your operation. Examples are drawing number, job number or ID, customer, product type, programmer, order-dates, key words . . .

The following figure shows a typical customized view. This view shows all of the files assigned to Resource Collection 0201 (Note 0201 is highlighted.) Across the top of the file list are the standard, built in, file field descriptions. Beneath the list are the search criteria for the highlighted file. This is also the search criteria data-entry form.
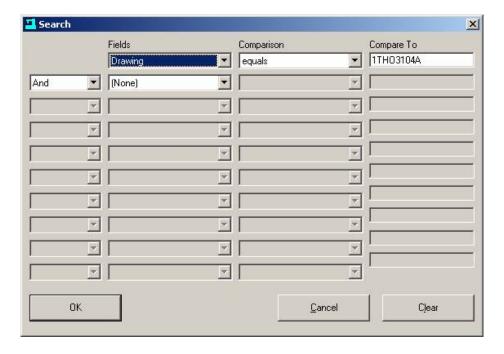
Below, a different view was selected showing the search criteria fields instead of the standard ones without the data-entry form.
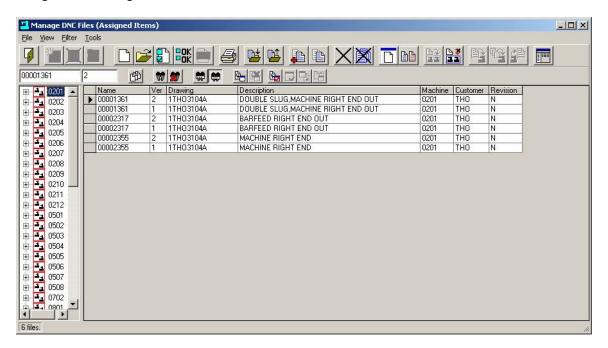

The Search Engine

Suppose you want to find all part programs associated with drawing 1THO3104A. Click on the Search button. Select the Field,"Drawing". The Comparison is "equals". Enter 1THO3104A in the Compare To box. Click OK.

You get the following filtered list.

Clicking on the Clear Search button (the small one with the red X) will return you to the unfiltered file list. You can also click on any of the file list heading to sort by that heading. The default is sort by Name.

Automatic File Name Generation

SuiteFactory includes a feature whereby the system automatically assigns a new unique name (actually a number) to any new DNC files imported manually, created using the editor or copied from another file. Shops that use this feature use Search Criteria. When the new file is imported into the database or created within the application, the user then fills in the Search Criteria fields. These fields give real descriptions as to the nature and use of the new file.

Why not just use a "real" file name?

One reason is that we don't care what the file name is so long as it is unique. The Search Criteria fields amply describe the file and provide a powerful and easy way to find them in the future. So, let SuiteFactory generate the unique name for you.

CCI's Command Language (CCL) and Automatically Generated DNC File Names
A really important reason to use Automatic File Name Generation is that the automatically generated, purely numerical names make even the oldest CNC's, the ones without full keyboards, capable of using the CCL method of requesting file transfers at the CNC console. To use the CCL method the CNC operator creates a command file using the CNC's editor. In this command file the operator must enter the name of the DNC file to be transferred. If your shop uses long file names or names with alphabetic characters some older CNC's will not have the capability to enter those names in a part program file. SuiteFactory's automatically generated name will be compatible with almost any CNC's editor.

A final word –Search Criteria vs. Long File Names

Bear with me here! I'm trying to sell you on this concept. Please read on.

Before Windows with its 255 character file naming ability there was DOS with 8.3 and UNIX with 14 character abilities and others. In order to be able to identify amongst thousands of files, what they contain, what is their use, what job is it for, what operation, what drawing, product, customer . . . various schemes have been developed over the years. For example, using cascading directories or folders, flat file database description files various relational database methods, all of which were separate or loosely coupled to the DNC application.

But today (hooray) we have the ability to use up to 255 characters to describe each file. The Windows operating system gives us that ability, and SuiteFactory provides that ability through its built in database. Our problem is solved – thank you, end of the story.

But nooo!!!

We've come up with these wonderful long, descriptive names. Each of them is a story in its own right. Now try to type in that name without making a mistake. Try to read down a list of them without getting cross-eyed. Try to display the name on a screen without having to scroll horizontally and moving other important information off the screen such as size, date, time etc. Try to explain the system to your engineering, programming and shop floor personnel. You probably need a document that describes how to interpret the file name.

Try to use SuiteFactory's command language to fetch or save part programs from the CNC console which requires you to enter the name of the program you want to get or save. You either run into the problem that the operator has trouble entering the name without mistakes or worse, your older CNC's don't even have complete alpha-numeric keyboards with which to enter the data or even if they do, their editor do not allow the format of your long name to be entered in their effort from saving you from entering an illegal X,Y or Z value. Can you find those parens on your Fanuc 6?

With the introduction of customer configurable "Search Criteria" fields we can now go to a scheme where the file name is arbitrary. In fact, it can simply be the next number in a list and automatically assigned during import or creation by means of the editor or a copy of an existing file. (You do not have to use the arbitrary file name method with search criteria. You can keep your long file names and have search criteria fields).

I already have a system with thousands of files with long names. It would take forever to switch over.

Don't worry! We'll do it for you.
CCI provides a service to convert your existing SuiteFactory database or exiting folders based system and import it into SuiteFactory with all the appropriate Search Criteria fields created and filled in. Call for a quote!