



SuiteFactory Technote

Using CCL to Upload and Download from your CNC Console Mazatrol Plus and Fusion CNC's – Mazatrol type Program

The concept

When SuiteFactory is setup for CCL for a Mazatrol CNC, the administrator must specify a work number that will be used as a response file with coded information for the machine operator. (For example, 2222.) This work number must never be used as a real program work number.

At the CNC console, the operator creates a "CCL Command Program" work number, such as, 1111 to be used to communicate with SuiteFactory. Work number 1111 must never be used as a real program work number. (1111 and 2222 are only suggestions. The administrator can choose any pair of work numbers he or she wants.

The "CCL Command Program" file is used to command SuiteFactory to either retrieve a file from the database and queue up to send to the CNC, or to queue a file as specified in the "CCL Command Program" file to be received from the CNC.

Requesting a DNC file from SuiteFactory

1. If you do not already have a "CCL Command Program" program, create a new (empty) program whose work number is one that your are unlikely to use for a program such as 1111:
Press: Program Work No. Mazatrol Program
Enter the Work Program number (1111 for example) and press Input Program Program File. You should see the program directory on the CNC screen.
2. Cursor to the "CCL Command Program" work number (1111, for example).
Press: Name Input.
Enter: Xname_of_DNC_file Input.
For example, if the file in the SuiteFactory database is named M68423 enter XM68423 in the Program Name field.
3. Send this file to the DNC computer.
Press: DATA I/O CMT I/O NC >CMT.
Enter the number of this program. **Press** START. This program is now sent to the DNC computer.
4. **Wait** for about 15 seconds.
5. **Press** DATA I/O CMT I/O CMT > NC CMT CONTENTS. **Press** START.
The work number of the program you requested should appear on your CNC screen. **Press** CMT > NC START. Your work number should now appear on the received screen on you CNC.
6. If your request was successful, then the program name you expected should appear in the *Program Name* field of the Program File listing.
If there was a problem, instead of the expected work number, you will receive a response file instead, for example, work number 2222. A code number followed by a brief explanation appears in the *Program Name* field instead. See list of Response Codes below. For example, if you entered the file name incorrectly you will see 6 – No File meaning that the requested file cannot be found in the SuiteFactory database. Check your spelling. You could get 12 – unassigned meaning that the file that you requested is in the SuiteFactory database but is not assigned to your machine's Resource Collection.
7. If you received a response file **delete** it before proceeding.

Saving a DNC file to SuiteFactory

1. If you do not already have a "CCL Command Program" program, create a new (empty) program whose work number is one that your are unlikely to use for a program such as 1111:
Press: Program Work No. Mazatrol Program
Enter the Work Program number, for example, 1111, and press Input Program Program File. You should see the program directory on the CNC screen.
2. Cursor to the "CCL Command Program" work number (1111, for example).
Press: Name Input.
Enter: Yname_of_DNC_file Input. Where name_of DNC_file is the name of the file you want to save in the SuiteFactory database.
If your database is set up for single version only, then this file name must not match any name already in the database.
If your database is set up to allow multiple versions, then if this name matches a name already in the database it will be saved as the next version of that file.
For example, if you want to save a file in the SuiteFactory database and name it M780983 enter YM780983 in the Program Name field.
3. Send this file to the DNC computer.
Press: DATA I/O CMT I/O NC >CMT.
Enter the number of this program, 1111, for example.
Press START. This program is now sent to the DNC computer.
4. **Wait** for about 15 seconds.
5. Get the CCL Response File from the DNC computer.
Press DATA I/O CMT I/O CMT > NC CMT CONTENTS.
Press START.
The work number of the response file should appear on your CNC screen. 2222, for example. **Press** CMT > NC START. work number 2222 should now appear on the received screen on you CNC. In the program list the program name for that work number will contain a Response Code. If a job has been successfully queued up to be received then the code will be "1 – Receiving," if not, there will be a different code. See the list below.
6. **Delete** the response file, 2222, for example.
7. Send the file you want to save to the SuiteFactory database.
Press DATA I/O CMT I/O Save NC > CMT. Enter the work number(s) of the program you want to save.
Press START. The program is sent to the SuiteFactory database.
8. Get the final CCL Response File from the DNC computer. This is to let you know the transmission was successful.
Press DATA I/O CMT I/O CMT > NC CMT CONTENTS.
Press START.
The work number of the response file, 2222, for example, should appear on your CNC screen. This is the same work number as your CCL command file, above.
Press CMT > NC START. Your work number should now appear on the received screen on you CNC. In the program list the program name for that work number will contain a Response Code. If a job has been successfully queued up to be received then the code will be "2-Received," if not, there will be a different code. See the list below.

CCL Response Codes for Mazatrol CNC's

Certain functions of the CCI Command Language feature of SuiteFactory generate "Response Files" that are sent to the CNC with a short message that appears in the Program Name column of the response file's work number.

Response Message in "Program Name" Column	Description
1 = "Receiving"	The DNC system is ready to receive your program. Send it now.
2 = "Received"	The DNC system received your program successfully.
3 = "Aborted"	Your command to abort the last receive request has been executed.
4 = "Recv Fail"	The file you sent was not received correctly. Try again.
5 = "No Command"	Your command file did not contain a recognized command.
6 = "No File"	The DNC file you requested does not exist
7 = "Name Used"	Unable to create new file probably because your file name is not unique.
8 = "Bad Command"	Command not valid: missing expected argument?
9 = "Bad Version"	Your command specifies sending specific version, but that version does not exist.
*10 = "Empty File"	Your command file is empty [0 bytes]
11 = "What is *?"	Your command file contains an illegal character.
12 = "Unassigned"	The file you requested is not assigned to your machine.
13 = "Prep Fail"	Some preparation operation for the requested file failed
14 = (no text)	The CCL command file is a valid CMT file, but its format is not supported (such as T1 or M1)
*15 = (no text)	The CCL command file appears to be a Mazak CMT file but is not valid. (Points to a software problem: CMT signature is listed as supported but the embedded CCL command cannot be located.)
16 = "Zero Length"	The specified DNC file exists but it is empty. (It might be queued up for receiving data from a CNC.)
17 = "Checked out"	The requested file is Checked Out.
18 = "In use"	The requested file is currently being used exclusively by someone else (being uploaded or edited.)
19="Unapproved"	The requested file is assigned to your machine, however, it is not approved for production.

* These response codes should never occur. Getting them indicates a software problem. Please contact CAD/CAM Integration, Inc.

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