

DNCwin User Manual

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1. Introduction

Our thanks to you and your company have chosen the "DNCwin" software to assist in the management and control of CNC's programs used to manufacture its products and services.

The "DNCwin" software was developed to assist in the management and transfer of these programs cnc cnc programs for their machines previously registered in the system avoiding the use of portable media.

The transfer cnc program can be via serial communication, FTP communication, local directory or network directory. Through the "DNCwin" program you can send cnc programs for the machines as receive cnc programs to store them.

The "DNCwin" software has a module for editing cnc programs which makes it very fast and easy editing of cnc programs when necessary.



2. System Requirements

2.1. Software Requirements

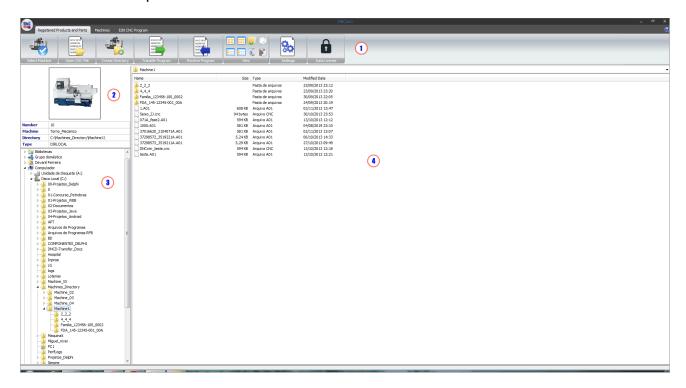
Operating System Windows XP, Windows Vista, Windows 7, Windows 8 or Windows 10. Internet Browser Microsoft Internet Explorer 8, 9 or 10; Mozilla Firefox 10.x or later; Google Chrome 17.x or later.

Component	Requirement
Memory	Minimum: 512MB Recommended: 1 GB
Hard Disk Space	30 MB (Megabytes)
Processor Speed	Minimum: Processor x86: 1,0 GHz Processor x64: 1,4 GHz Recommended: 2,0 GHz or faster
Processor	Processor x64: AMD Opteron, AMD Athlon 64, Intel Xeon com suporte Intel EM64T, Intel Pentium IV with EM64T support Processor x86: Pentium III compatible processor or faster
Communication	NIC Serial RS232 COM port or USB RS232 Serial Converter



3. Management Screen of CNC Programs

Main screen of the "DNCwin" System which directories, files cnc programs and other files stored on the computer.





Item Description

Toolbar Management CNC Programs

The toolbar contains tools for management to issue, transfer and control of CNC programs:



Function <u>Select Machine</u> - executes the form to machine selection for viewing, editing and transfer of CNC programs for the registered machine.



Function Open CNC Program File - opens the selected CNC program in the editing program module of the "DNCwin" System.



Function <u>Create CNC Program Directory</u> - runs the form for creating directories of CNC programs.





Function <u>Transfer CNC Program</u> - runs the form to transfer CNC programs to machine.



Function <u>Receive CNC Program</u> - performs the form to receive CNC programs of the machine.



<u>Visualization</u> Tools - defines the type of visualization of CNC programs and directories, copy, paste and delete files and directories.



Function <u>Data License</u> - displays for viewing and editing the data for license and maintenance of the "DNCwin" System.



Data Machine Selected

Area where they are shown the image, name and number of CNC machine selected for management and control of CNC programs.



Directories and Drives

Area where they are displayed directories and drives from your computer.





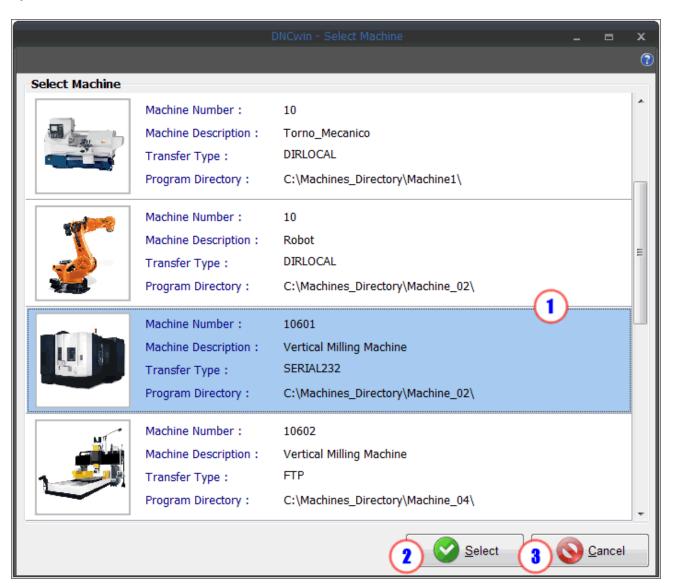
Directories and Files

Area where they are displayed the directories and files from your computer.



3.1. Select Machine

Function Select Machine running form to machine selection for viewing, editing and transfer of registered CNC programs for previously registered machines in "DNCwin" System.





Item	Description
1	List of Database Machines Area where they are displayed all machines registered in the "DNCwin" System and their settings as Number Machine, Machine Description, Type Transfer and Program Directory machine.
2	Select Button Click the "Select" button to execute the selection of the machine previously chosen from the list of registered machines in "DNCwin" System.
3	Cancel Button Click the "Cancel" button to close the form Machine Selection.



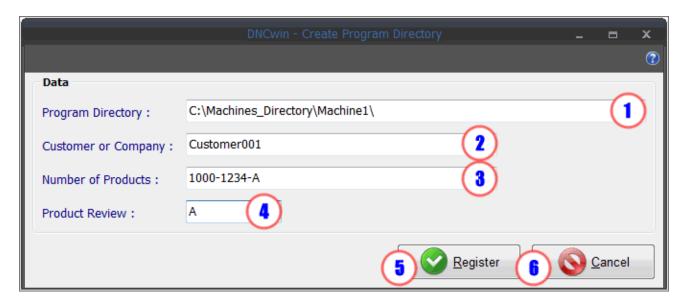
3.2. Open CNC Program File

Function "Open CNC Program File " opens the file selected in the area "Directories and Files" of the "Management of CNC Programs" module in the "Editing CNC Programs" module for viewing and editing CNC programs files.



3.3. Create CNC Program Directory

Function "Create CNC Program Directory" runs the form for creating directory with standard name by "Company or Customer", "Product Number" and " Product Review " in the root directory of the selected machine.





Item	Description
1	Program Directory Field Root directory of the machine configured in the registry of the machine, this field can not be edited in the form of creating directories.
2	Company or Customer Field Field to enter the name of the Company or the Customer to which the CNC program refers.
3	Product Number Field Field to enter the number of product or part to which CNC program refers.
4	Review Product Field Field to enter the review of product or part to which CNC program refers.
5	Register Button Click the "Register" button to execute the creation of the directory in the root directory of the selected machine.
6	Cancel Button Click the "Cancel" button to close the form "Create Directories".



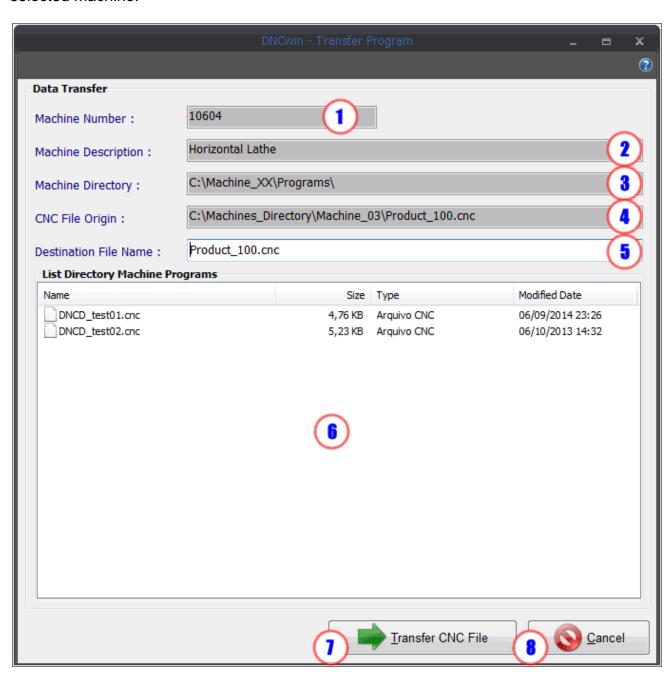
3.4. Transfer CNC Program

Function "Transfer CNC Program" runs the form Transfer CNC Program that can be transferred to local directory or network, FTP transfer or transfer SERIAL according to the configuration of the selected machine.



3.4.1. Transfer CNC Program - Local Directory or Network Directory

Function "Transfer CNC Program - Local Directory or Network Directory" runs the form to transfer CNC program to the local directory or network configured for the selected machine.



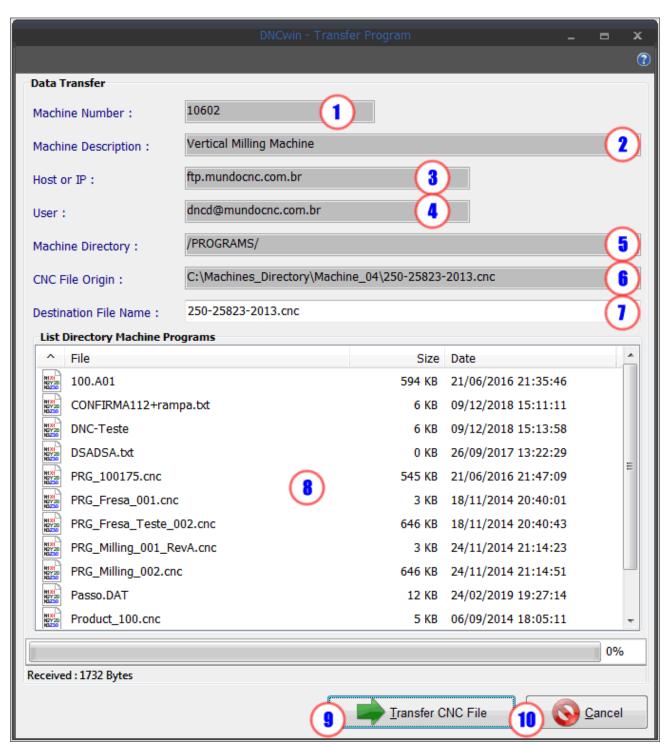


Item	Description
1	Machine Number Field Reports the number of the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
2	Machine Description Field Reports the name of the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
3	Machine Directory Field Reports the directory of the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
4	CNC Program Origin Name Field Reports the directory name and the name of the CNC program origin to be transferred to the machine, this field can not be edited in the form of Transfer CNC Program.
5	CNC Program Destination Name Field Field to enter the destination name of the CNC program to be transferred to the machine.
6	List of CNC Programs in the Machine Directory Area that informs the CNC programs that are on the machine directory.
7	Transfer CNC Program Button Click the "Transfer CNC Program" button to execute the transfer of the CNC program to the directory of selected machine.
8	Cancel Button Click the "Cancel" button to close the form "Transfer CNC Program - Local Directory or Network Directory".



3.4.2. Transfer CNC Program FTP

Function "Transfer CNC Program FTP" runs the form to transfer CNC program to the directory of the FTP server configured for the selected machine.





Item	Description
1	Machine Number Field Reports the number of the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
2	Machine Description Field Reports the name of the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
3	Host or IP of the FTP Server Field Reports the Host name or IP address of the FTP server for the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer of CNC Program.
4	FTP User Name Field Reports the user name (login) of the FTP server for the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
5	FTP Machine Directory Field Reports the directory of the FTP server for the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
6	CNC Program Origin Name Field Reports the directory name and the name of the CNC program origin to be transferred to the machine, this field can not be edited in the form of Transfer CNC Program.
1	CNC Program Destination Name Field Field to enter the destination name of the CNC program to be transferred to the machine.
8	List of CNC Programs in the FTP Machine Directory Area that informs the CNC programs that are on the FTP server machine directory.
9	Transfer CNC Program Button





Cancel Button

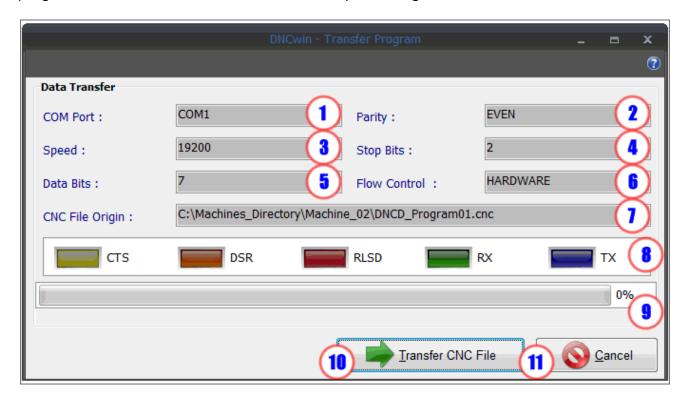
Click the "Cancel" button to close the form "Transfer CNC

Program FTP".



3.4.3. Transfer CNC Program Serial RS232

Function "Transfer CNC Program Serial RS232" form to run the CNC program transfer via RS232 SERIAL for COM port configured for the selected machine.





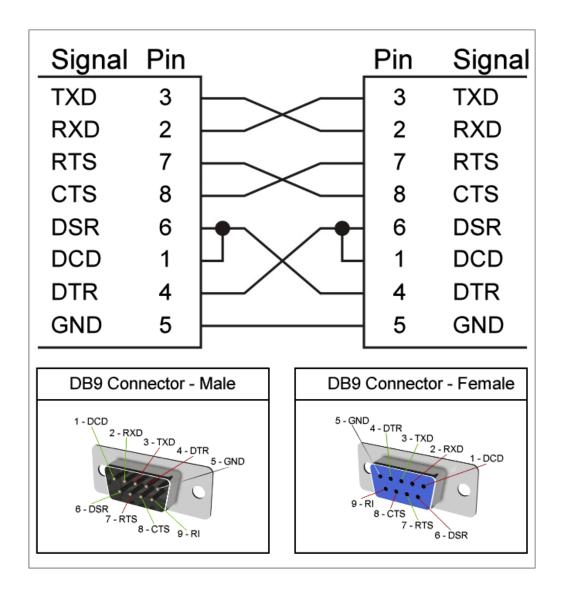
Item	Description
1	COM Port Number Field of the Serial interface Reports the COM port number of the serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
2	Parity Bit Serial Interface Field Reports the value of the parity bit of the serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
3	Rate Speed Serial Interface Field Reports the rate of speed of the serial communication interface, in bits per second, set the machine to where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
4	Stop Bits Serial Interface Field Reports the Stop Bits of communication serial interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC program.
5	Data Bits Serial Interface Field Reports the Data Bits of communication serial interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC program.
6	Flow Control Serial Interface Field Reports the Flow Control serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
1	CNC Program Origin Name Field Reports the directory name and the name of the CNC program origin to be transferred to the machine, this field can not be edited in the form of Transfer CNC Program.
8	Leds Status panel of the Serial Communication Interface Reports the status of the serial communication interface for the transfer of the CNC program to machine.
9	Transfer CNC Program Progress Bar Reports the percentage transferred from CNC program through the serial interface to selected machine.



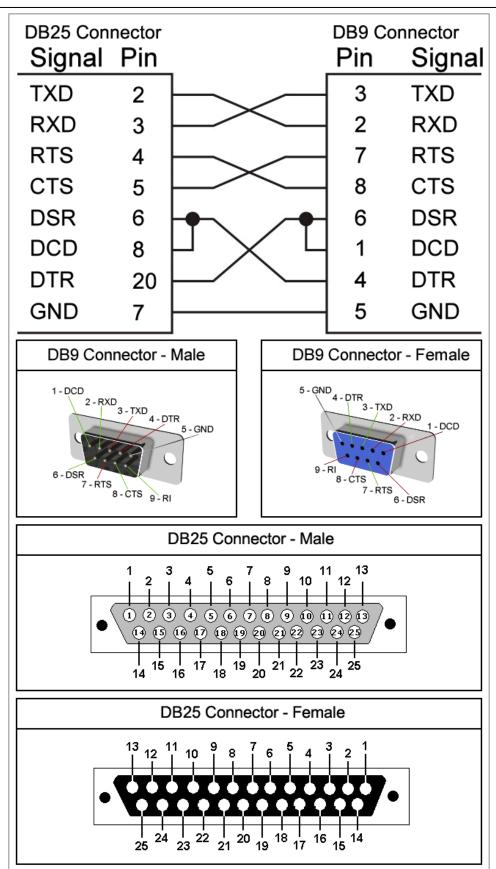
Transfer CNC Program Button Click the "Transfer CNC Program" button to execute the transfer of the CNC program for selected machine. Cancel Button Click the "Cancel" button to close the form "Transfer CNC Program Serial RS232".



3.4.3.1. RS232 Serial Cable









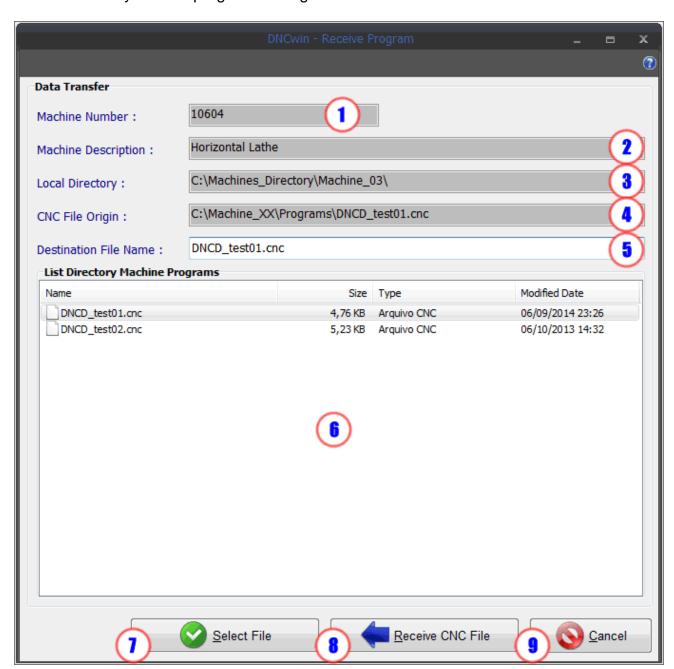
3.5. Receive CNC Program

Function "Receive CNC Program" runs the form of receiving CNC program that can transfer from local directory, network directory, FTP transfer or SERIAL transfer according to the configuration of the selected machine.



3.5.1. Receive CNC Program - Local Directory or Network Directory

Function "Receive CNC Program - Local Directory or Network Directory" runs the form to transfer the program from the local directory or CNC machine network to the root directory of CNC programs configured for the selected machine.



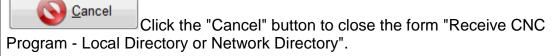


Item	Description
1	Machine Number Field Reports the number of CNC machine where the program is received, this field can not be edited in the form of Transfer CNC Program.
2	Machine Description Field Reports the name of the machine where the CNC program will be received, this field can not be edited in the form of Transfer CNC Program.
3	Local Directory Field Reports the configured root directory of CNC programs for CNC machine where the program is received, this field can not be edited in the form of Transfer CNC Program.
4	CNC Program Origin Name Field Reports the directory name and the name of the origin program in the CNC machine that will be received in the local directory configured for the machine, this field can not be edited in the form of Transfer CNC Program.
5	CNC Program Destination Name Field Field to enter the destination name of the CNC program that will be received in the local directory configured for the machine.
6	List of CNC Programs in the Machine Directory Area that informs the CNC programs that are on the machine directory.
	CNC Program Select Button
1	Click the "CNC Program Select" button to select the file to be transferred from the machine directory to the root directory of CNC programs configured for the selected machine.
	Receive CNC Program Button
8	Receive CNC File Click the "Receive CNC Program" button to execute the transfer of the program from the CNC machine directory to the root directory of CNC programs configured for the selected machine.





Cancel Button

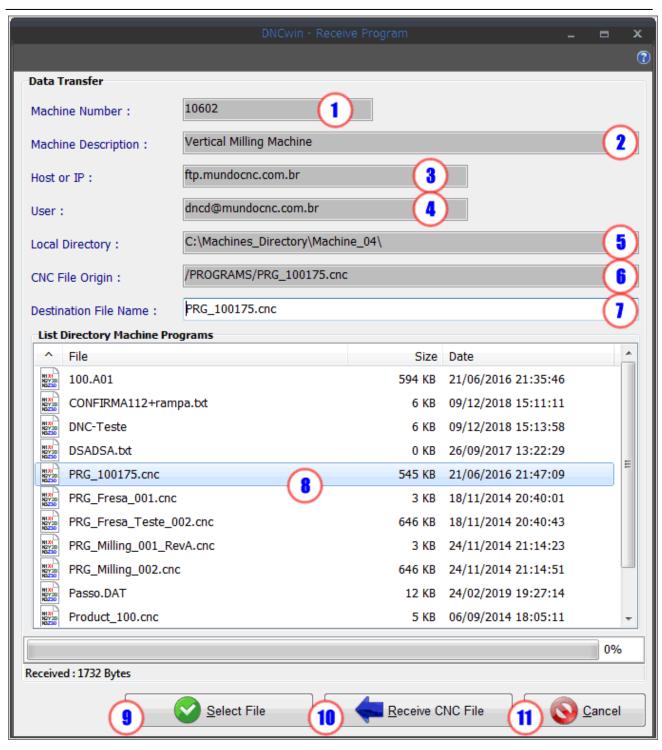


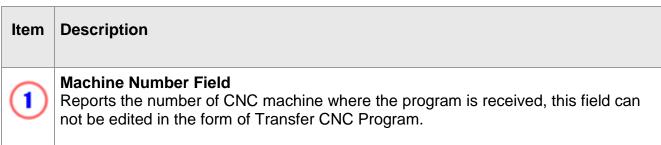


3.5.2. Receive CNC Program FTP

Function "Receive CNC Program FTP" runs the form to transfer CNC program the FTP server machine directory to the root directory of CNC programs configured for the selected machine.









2

Machine Description Field

Reports the name of the machine where the CNC program will be received, this field can not be edited in the form of Transfer CNC Program.



Host or IP of the FTP Server Field

Reports the Host name or IP address of the FTP server machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.



FTP User Name Field

Reports the user name (login) of the FTP server machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.



Local Directory Field

Reports the configured root directory of CNC programs for CNC machine where the program is received, this field can not be edited in the form of Transfer CNC Program.



CNC Program Origin Name Field

Reports the name of the FTP server directory and the name of the CNC program origin to be downloaded to the root directory of CNC programs, this field can not be edited in the form of Transfer CNC program.



CNC Program Destination Name Field

Field to enter the destination name of the CNC program to be downloaded to the root directory CNC program configured for machine.



List of CNC Programs in the FTP Machine Directory

Area that informs the CNC programs that are on the FTP server machine directory.

CNC Program Select Button



Select File Click the "CNC Program Select" button to select the file

to be downloaded from the FTP server machine directory to the root directory of CNC programs configured for the selected machine.

Receive CNC Program Button



Receive CNC File Click the "Receive CNC Program" button to execute the transfer of the CNC program from the FTP server machine directory to the root directory of CNC programs configured for the selected machine.





Cancel Button

Click the "Cancel" button to close the form "Receive CNC

Program FTP".



3.5.3. Receive CNC Program Serial RS232

Function "Receive Program CNC Serial RS232" runs the form to transfer CNC program via Serial RS232 interface to the root directory of CNC programs configured for the selected machine.





Item	Description
1	COM Port Number Field of the Serial interface Reports the COM port number of the serial communication interface configured in the program where the CNC machine will be transferred, this field can not be edited in the form of Transfer CNC Program.
2	Parity Bit Serial Interface Field Reports the value of the parity bit of the serial communication interface configured in the program where the CNC machine will be transferred, this field can not be edited in the form of Transfer CNC Program.
3	Rate Speed Serial Interface Field Informs the rate of speed of the serial communication interface, in bits per second, set the machine to where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
4	Stop Bits Serial Interface Field Reports the Stop Bits serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
5	Data Bits Serial Interface Field Reports the Data Bits of serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
6	Flow Control Serial Interface Field Reports the Flow Control serial communication interface configured on the machine where the CNC program will be transferred, this field can not be edited in the form of Transfer CNC Program.
1	Local Directory Reports the configured root directory of CNC programs for CNC machine where the program is received, this field can not be edited in the form of Transfer CNC Program.
8	CNC Program Destination Name Field Field to enter the destination name of the CNC program to be downloaded to the root directory configured programs for CNC machine.
9	CNC Program data received by the Serial Interface Area displays data received from the CNC program via Serial interface of the selected machine.





Leds Status panel of the Serial Communication Interface

Reports the status of the serial communication interface for the transfer of CNC machine program.

Save CNC Program Button



Clique no botão "Salvar Arquivo CNC" para salvar o programa CNC transferido via interface Serial no diretório raiz de programas CNC configurado para a máquina selecionada.

Receive CNC Program Button



Click the "Receive CNC Program" button to save the CNC program transferred via serial interface in the root CNC programs directory configured for the selected machine.

Cancel Button



Click the "Cancel" button to close the form "Receive Program CNC Serial RS232".



3.6. Visualization Tools

Functions type preview the files and directories in the area of "Directories and Files" form of "Management of CNC programs" also has tools to copy, paste, delete, create files and directories in the selected "Directories and drives".





Item	Descrição
	Large Icons Button
(I)	Click the "Large Icons" button to view the files and directories in the area of "Directories and Files" in large icon format.
Small Icons Button	
2	Click the "Small Icons" button to view the files and directories in the area of "Directories and Files" on small icons format.
	Create Directory Button
3	Click the "Create Directory" button to create a new directory in the directory selected in the area of "Directories and Drives."
	Copy Button
4	Click the "Copy" button to copy to clipboard the selected file or directory in the area of "Directories and Files".
	Icons List Button
(5)	Click the "Icons List" button to view the files and directories in the area of "Directories and Files" on small icons in list format.
	Icons Details Button
(6)	Click the "Icons Details" button to view the files and directories in the area of "Directories and Files" on small icons in detail format.
	Delete Button
U	Click the "Delete" button to delete the selected file or directory in the area of "Directories and Files".
	Paste Button
8	Click the "Paste" button to copy the clipboard the file or directory to the selected area in the "Directories and Files" directory.



3.7. Data License "DNCwin" System

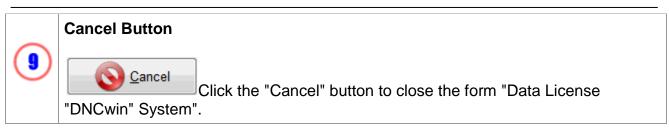
Function "Data License" runs the form to display and edit the Serial ID, License Agreement and License Maintenance about "DNCwin" System.





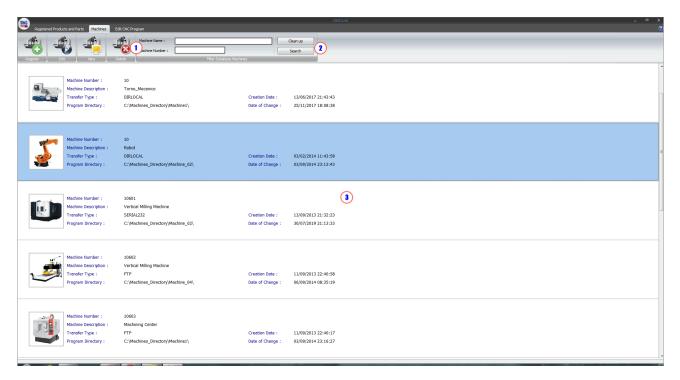
Item	Description
1	License Status Field Reports the status of the license "DNCwin" System, referring to the expiration date of the software maintenance and rest when the license is temporary license period.
2	Field Information for the purchase of License Reports the procedure to acquire license "DNCwin" System.
3	Contacts Field Reports the e-mail and website for contact and acquisition license "DNCwin" System.
4	Program ID Field Reports the program ID that must be provided to acquire license "DNCwin" System, this field can not be edited in the form of "Data License".
5	Serial ID Field Field to insert the "Serial ID" that will be sent after the acquisition of the license "DNCwin" System.
6	License Agreement Field Field for entering the "License Agreement" which will be sent after the acquisition of the license "DNCwin" System.
1	Maintenance License Field Field for entering the "License Maintenance" which will be sent after the acquisition of the license "DNCwin" System acquisition and maintenance of annual leave.
	Register Button
8	Click the "Register" button to enter or change information related to license "DNCwin" System.





4. Form Management Machines

Form for management of the machines in the "DNCwin" system where data of registered machines is presented and allows the registration, editing data, displaying the data and deleting machines.





Item Description

Toolbar Management Machines

The toolbar contains tools for managing registration, editing, viewing and deleting machines registered in "DNCwin" system.



Function Register Machine - executes the form to register a new Machine and their respective settings.





Function <u>Edit Machine</u> - executes the form for editing the settings of the selected machine in the area of "Data of Database Machines".



Function <u>View Machine</u> - executes the form to display the settings of the selected machine in the area of "Data of Database Machines".



Function <u>Delete Machine</u> - deletes the selected machine in the area of "Data of Database Machines" and their respective settings on the "DNCwin" system.

Toolbar Search Machines



Machine Name : Clean up

Machine Number : Search

Filter Database Machines

Tools to perform a

search in the register machine, fill in the fields "Machine Name" and "Machine Number" and click the "Search" button to produce the research that appears in the area of "Data of Database Machines".

Data of Database Machines

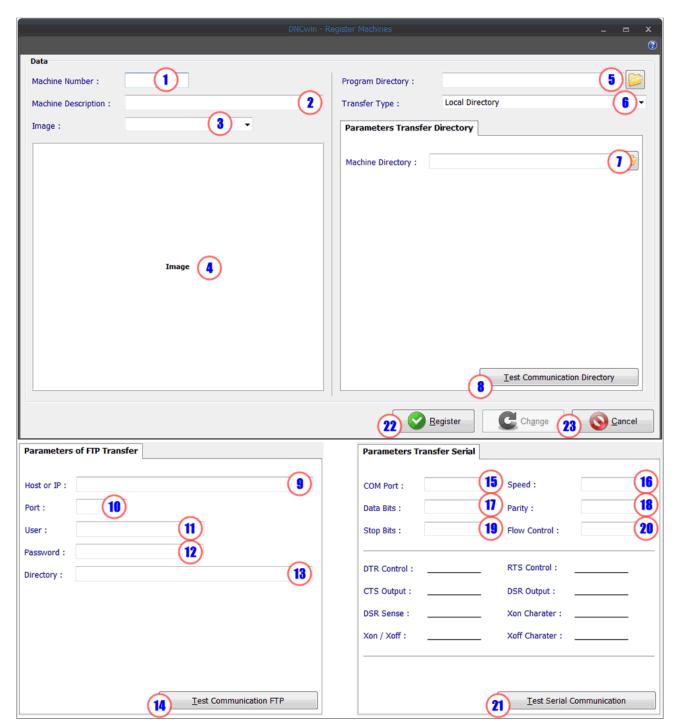


Area where the machines are displayed registered in the "DNCwin" system and its main configuration data as Number Machine, Machine Description, Type and Transfer CNC programs directory.



4.1. Register Machines

Function "Register Machines" runs the form to register a new machine in the "DNCwin" System.





Item	Description
1	Machine Number Field Field to enter the number of the machine parameter, this field accepts alphanumeric characters.
2	Machine Description Field Field to enter the name of the machine or the machine description, this field accepts alpha-numeric caractres.
3	Image Field Field to select the illustrative parameter to represent register machine.
4	Illustrative Image Area where you will see the selection as illustrative image in "Image Field".
5	Program Directory Field Field to enter the address of the CNC programs directory of the microcomputer referring to machine.
6	Transfer Type Field Field to select the type parameter of communication to transfer the machine may choose to "Local Directory", "Network Directory", "FTP" or "RS232".
1	Machine Directory Field - Local Transfer or Network Transfer Field to enter the address parameter of the machine CNC programs directory.
8	Test Communication Button with Local Directory or Network Directory Click the button to run the communication test with the directory entered in the "Machine Directory Field - Local Transfer or Network Transfer".
9	Host or IP Field FTP Server Field to enter the name of the parameter Host or IP address of the FTP server machine.
10	FTP Server Port Field Field to enter the port of the FTP server machine number parameter is used as the default port 21.



11)	FTP User Name Field Field to enter the user name (login) of the FTP server machine.
12	FTP User Password Field Field to enter the password of the user name (login) of the FTP server machine.
13	FTP Directory of Machine Field Field to enter the address of the FTP server directory of the machine.
14	Test Communication Button with FTP Server Click the button to run the test communication with the FTP server using the values entered in the fields settings "FTP Transfer".
15	COM Port Number Field of the Serial interface Field to select the COM port number of communication "Transfer Serial RS232" interface.
16	Rate Speed Serial Interface Field Field to select the rate of communication speed of the "Transfer Serial RS232" interface.
17)	Data Bits Serial Interface Field Field to select the value of Bit Data Communication "Transfer Serial RS232" interface.
18	Parity Bit Serial Interface Field Field to select the Parity Bit of communication "Transfer Serial RS232" interface.
19	Stop Bits Serial Interface Field Field to select the value of Stop Bits of communication "Transfer Serial RS232" interface.
20	Flow Control Serial Interface Field Field to select the type of flow control communication "Transfer Serial RS232"

interface.





Test Communication Button with Serial RS232

Click the button to run the communication test with the serial port using the values entered in the fields settings "Transfer Serial RS232".

22

Register Machine Button



Cancel Button



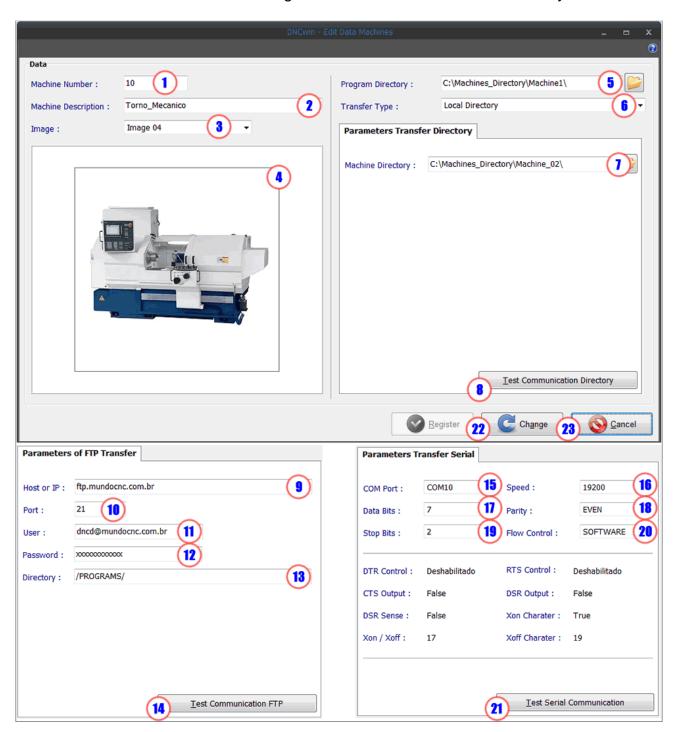


Click the "Cancel" button to close the form "Register Machines".



4.2. Edit Machines

Function "Edit Machines" runs the form to edit the configuration machine data of the selected in the area of "Data of Registered Machines" on the "DNCwin" System.





Item	Description
1	Machine Number Field Field to edit the number of the machine parameter, this field accepts alpha-numeric characters.
2	Machine Description Field Field to edit the name of the machine or the machine description, this field accepts alpha-numeric caractres.
3	Image Field Field to select the illustrative parameter to represent register machine.
4	Illustrative Image Area where you will see the selection as illustrative image in "Image Field".
5	Program Directory Field Field to edit the address of the CNC programs directory of the microcomputer referring to machine.
6	Transfer Type Field Field to select the type parameter of communication to transfer the machine may choose to "Local Directory", "Network Directory", "FTP" or "RS232".
1	Machine Directory Field - Local Transfer or Network Transfer Field to edit the address parameter of the machine CNC programs directory.
8	Test Communication Button with Local Directory or Network Directory Click the button to run the communication test with the directory entered in the "Machine Directory Field - Local Transfer or Network Transfer".
9	Host or IP Field FTP Server Field to edit the name of the parameter Host or IP address of the FTP server machine.
10	FTP Server Port Field Field to edit the port of the FTP server machine number parameter is used as the default port 21.



	FTP User N
(11)	Field to edit

FTP User Name Field

Field to edit the user name (login) of the FTP server machine.

12

FTP User Password Field

Field to edit the password of the user name (login) of the FTP server machine.



FTP Directory of Machine Field

Field to edit the address of the FTP server directory of the machine.



Test Communication Button with FTP Server

Click the button to run the test communication with the FTP server using the values entered in the fields settings "FTP Transfer".



COM Port Number Field of the Serial interface

Field to select the COM port number of communication "Transfer Serial RS232" interface.



Rate Speed Serial Interface Field

Field to select the rate of communication speed of the "Transfer Serial RS232" interface.



Data Bits Serial Interface Field

Field to select the value of Bit Data Communication "Transfer Serial RS232" interface.



Parity Bit Serial Interface Field

Field to select the value of Bit Data Communication "Transfer Serial RS232" interface.



Stop Bits Serial Interface Field

Field to select the value of Stop Bits of communication "Transfer Serial RS232" interface.



Flow Control Serial Interface Field

Field to select the type of flow control communication "Transfer Serial RS232" interface.





Test Communication Button with Serial RS232

Click the button to run the communication test with the serial port using the values entered in the fields settings "Transfer Serial RS232".

22

Change Data Machine Button

Click the "Change" button to execute the changes of the parameters of machine selected for editing in the "DNCwin" System.

Cancel Button



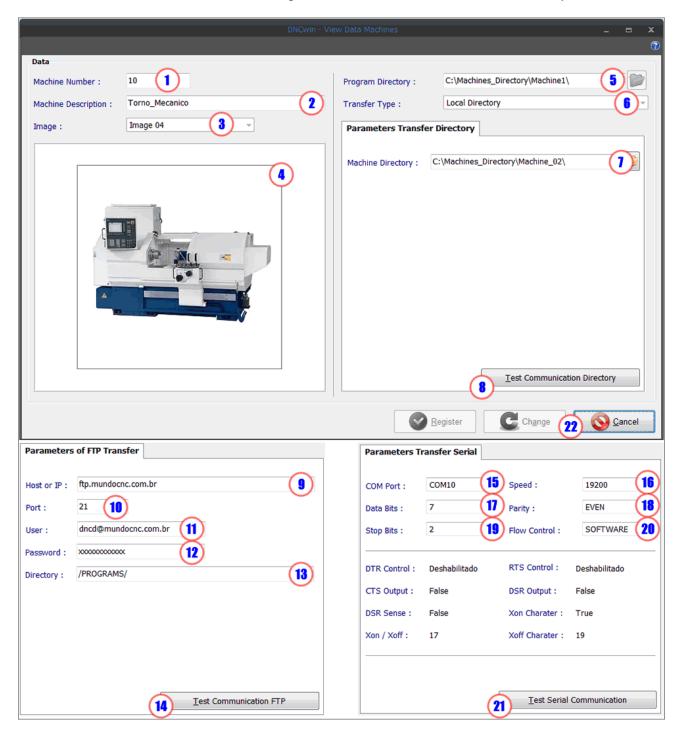


Click the "Cancel" button to close the form "Edit Machines".



4.3. View Machines

Function "View Machines" runs the form to view the configuration data machine of the selected in the area of "Data of Registered Machines" on the "DNCwin" System.





Item	Description
1	Machine Number Field Field to view the parameter number of the machine.
2	Machine Description Field Field to view the parameter name of the machine or the machine description.
3	Image Field Field to view the parameter illustrative image to represent register machine.
4	Illustrative Image Area where you will see the selection as illustrative image in "Image Field".
5	Program Directory Field Field to view the parameter address of the CNC programs directory referring to machine .
6	Transfer Type Field Field to view the parameter type of communication to transfer the machine may choose to "Local Directory", "Network Directory", "FTP" or "RS232".
1	Machine Directory Field - Local Transfer or Network Transfer Field to view the parameter address of the of the CNC programs directory machine.
8	Test Communication Button with Local Directory or Network Directory Click the button to run the communication test with the directory entered in the "Machine Directory Field - Local Transfer or Network Transfer".
9	Host or IP Field FTP Server Field to view the name of the parameter Host or IP address of the FTP server machine.
10	FTP Server Port Field Field to view the port of the FTP server machine number parameter is used as the default port 21.



(11)
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FTP User Name Field

Field to view the user name (login) of the FTP server machine.



FTP User Password Field

Field to view the password of the user name (login) of the FTP server machine.



FTP Directory of Machine Field

Field to view the address of the FTP server directory of the machine.



Test Communication Button with FTP Server

Click the button to run the test communication with the FTP server using the values entered in the fields settings "FTP Transfer".



COM Port Number Field of the Serial interface

Field to view the COM port number of communication "Transfer Serial RS232" interface.



Rate Speed Serial Interface Field

Field to view the rate of communication speed of the "Transfer Serial RS232" interface.



Data Bits Serial Interface Field

Field to view the value of Bit Data Communication "Transfer Serial RS232" interface.



Parity Bit Serial Interface Field

Field to view the value of Bit Data Communication "Transfer Serial RS232" interface.



Stop Bits Serial Interface Field

Field to view the value of Stop Bits of communication "Transfer Serial RS232" interface.



Flow Control Serial Interface Field

Field to view the type of flow control communication "Transfer Serial RS232" interface.





Test Communication Button with Serial RS232

Click the button to run the communication test with the serial port using the values entered in the fields settings "Transfer Serial RS232".



Cancel Button



Click the "Cancel" button to close the form "View Machines".



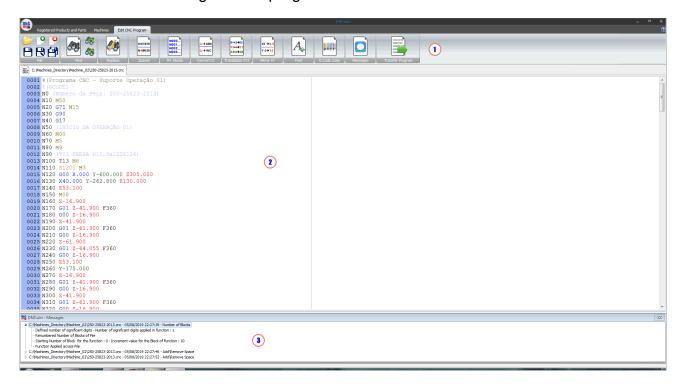
4.4. Delete Machines

Function "Delete Machines" deletes the machine selected in the area of "Data of Registered Machines" on the "DNCwin" System.



5. Edit CNC Programs Module

Form for editing CNC programs file in the "DNCwin" system, this screen has its countless features to facilitate editing of CNC programs.





Item Description

Toolbar Editing CNC Programs

The bar of "Edit CNC Programs" contains tools for editing CNC programs files.

Bar <u>Default Buttons for CNC Program Files</u> - displays buttons for standard file manipulation operations.

Function Find Text - executes the form to find text in the CNC program that is in focus in the preview area of CNC programs files.

Function Replace Text - performs the form to find and replace text in the CNC program that is in focus in the preview area of CNC programs files.



N10X10

Function Add or Remove Blank Spaces - run the form to add or remove blank spaces between the instructions of the CNC program that is in focus in the preview area of CNC programs files.

Function <u>Edit Numbers of Blocks</u> - running form to renumbering and sorting the "N" number of instruction blocks in the CNC program that is in focus in the preview area of CNC programs files.

Function Convert Coordinates I and J to Absolute or Incremental - run the form to convert the coordinates of instructions I and J for incremental and absolute vise-versa in the CNC program that is in focus in the preview area of CNC programs files.



Z4+4+Z8

Function <u>Translate Coordinates of X, Y and Z Axes</u> - run the form to translate the coordinates of the instructions X, Y and Z in the CNC program that is in focus in the preview area of CNC programs files.

Function Mirror Coordinates of X and Y Axes - run the form to convert the coordinates of the X and Y intructions to their respective mirrored value in the CNC program that is in focus in the preview area of CNC programs files.

Function Setting Font Type and Font Size - runs the configuration form for the type and size of the source files of CNC programs that are displayed in the preview area of CNC programs files.

Function <u>Setting G Code Colors</u> - runs the form to color setting of the instructions of the "G Code" of the CNC program files that are displayed in the preview area of CNC programs files.



3

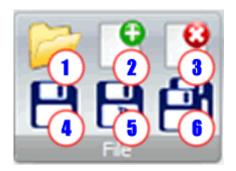
Area where they are shown the CNC programs that are open on Edit CNC Programs module.

Messages
Area where is displayed in the form of display functions that were applied in the archives of CNC programs that were opened in the Edit CNC Programs module.



5.1. Default Buttons for CNC Program Files

Functions for standard manipulation CNC programs files to open, create, save, and close files for CNC programs "DNCwin" system.



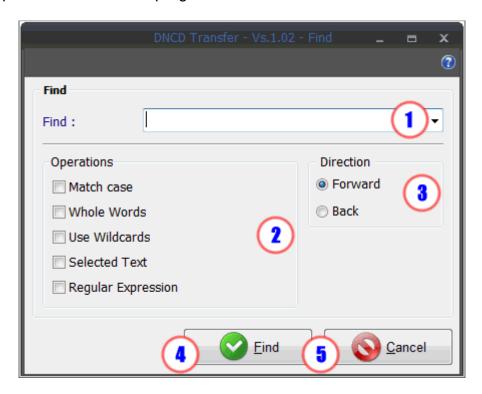


Item	Description
	Open CNC Program File Button
1	Click the "Open CNC Program File" button to browse the directory of microcomputer and locate the files of CNC programs that will be opened in the "Edit CNC Programs" module in the "DNCwin" system.
	Create New CNC Program File Button
2	Click the "Create New CNC Program File" button to create a new file in the "Edit CNC Programs" module in the "DNCwin" system.
	Close CNC Program File Button
3	Click the "Close CNC Program File" button to close the file that is in focus in the preview area of the file "Edit CNC Programs" module in the "DNCwin" system.
	Save CNC Program File Button
4	Click the "Save CNC Program File" button to save the file that is in focus in the preview area of the file "Edit CNC Programs" module in the "DNCwin" system.
	Save As CNC Program File Button
5	Click the "Save As CNC Program File" button to save the file with a new name that is in focus in the preview area of the file "Edit CNC Programs" module in the "DNCwin" system.
	Save All Programs CNC Files Button
(6)	Click the "Save All CNC Programs Files" button to save all files that are open in the preview area of the file "Edit CNC Programs" module in the "DNCwin" system.



5.2. Find Text

Function "Find Text" running form to find text in the CNC program that is in focus in the preview area of CNC programs files.



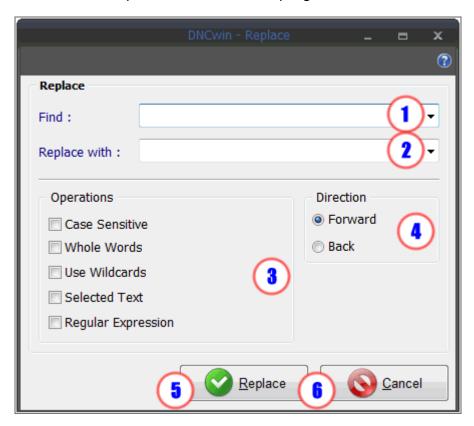


Item	Description
1	Find Field Field to enter or select the text that should be located in the CNC program that is in focus in the preview area of CNC programs files.
2	Area of Location Options Field to select the advanced options to assist in the location of the text in the CNC program that is in focus in the preview area of CNC programs files.
3	Area Direction Location Field to choose the direction of the location of the text in the CNC program that is in focus in the preview area of CNC programs files.
4	Find Button Click the "Find" button to start the location of the text in the CNC program that is in focus in the preview area of CNC programs files.
5	Cancel Button Click the "Cancel" button to close the form "Find Text" from the "Edit CNC programs" module in the "DNCwin" system.



5.3. Replace Text

Function "Replace Text" runs the form to find and replace text in the CNC program that is in focus in the preview area of CNC programs files.





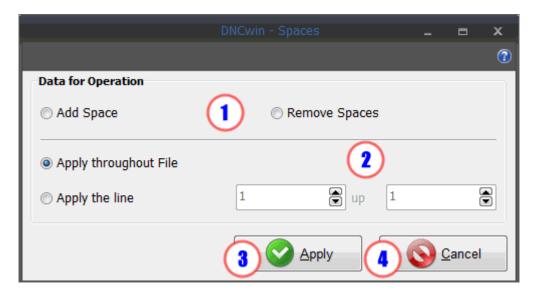
Item	Description
1	Find Field Field to enter or select the text that should be located and replaced in the CNC program that is in focus in the preview area of CNC programs files.
2	Replace With Field Field to enter or select the text that will replace the text found in the CNC program that is in focus in the preview area of CNC programs files.
3	Area of Location Options Field to select the advanced options to assist in finding and replacing text in the CNC program that is in focus in the preview area of CNC programs files.
4	Area Direction Location Field to choose the direction of finding and replacing text in the CNC program that is in focus in the preview area of CNC programs files.
5	Replace Button Click the "Replace" button to start the search and replace text in the CNC program that is in focus in the preview area of CNC programs files.
6	Cancel Button Click the "Cancel" button to close the form "Replace Text" from the "Edit CNC programs" module in the "DNCwin" system.



N10X10 N10Y20

5.4. Add or Remove Blank Spaces

Function "Add or Remove Blank Spaces" runs the form to add or remove blank spaces between the instructions of G code in the CNC program that is in focus in the preview area of CNC programs files.



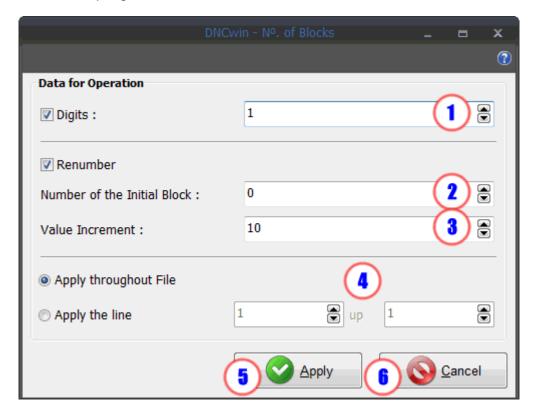


Item	Description
1	Select Add or Remove Functionality Area to select the option to "Add Spaces" or "Remove Spaces" blank between the instructions of G code in the CNC program that is in focus in the preview area of CNC programs files.
2	Selecting Lines Application Area to select the lines where the function to add or remove blank spaces between the instructions of G code in the CNC program that is in focus in the preview area of CNC programs files will be applied.
3	Apply Button Apply
	Click the "Apply" button to execute the "Add or Remove Blank Spaces" function in the CNC program that is in focus in the preview area of CNC programs files.
	Cancel Button
4	Click the "Cancel" button to close the form "Add or Remove Blank Spaces" of the "Edit CNC Programs" module in the "DNCwin" system.



5.5. Edit Numbers of Blocks

Function "Edit Numbers of Blocks" running form for renumbering and sorting the "N" instruction G code of the number of blocks of the CNC program that is in focus in the preview area of CNC programs files.





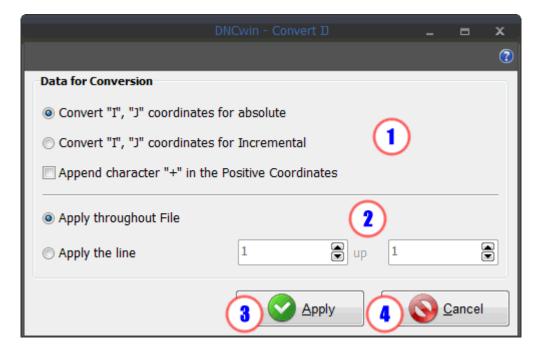
Item	Description
1	Number of Digits Field Field to select the function and application of inserting the minimum number of significant digits for the "N" instruction G code of the number of blocks of the CNC program that is in focus in the preview area of CNC programs files.
2	Number of the Initial Block Field Field to enter the starting block number for "N" G code instruction that the first line of the CNC program that is in focus in the preview area of CNC programs files will be applied.
3	Value Increment Field Field to enter the value to be incremented between one block and another for the "N" instruction G code to be applied in the CNC program that is in focus in the preview area of CNC programs files.
4	Selecting Lines Application Area to select the lines where the "Edit Numbers of Blocks " function will be applied in the CNC program that is in focus in the preview area of CNC programs files.
5	Apply Button Click the "Apply" button to execute the "Edit Numbers of Block" function in the CNC program that is in focus in the preview area of CNC programs files.
6	Cancel Button Click the "Cancel" button to close the form "Edit Numbers of Blocks" of the "Edit CNC Programs" module in the "DNCwin" system.



U+INC

5.6. Convert Coordinates I and J to Absolute or Incremental

Function "Convert Coordinates I and J to Absolute or Incremental" runs the form to convert the coordinates of instructions "I" and "J" incremental to absolute or vise-versa in the CNC program that is in focus in the preview area of CNC programs files.





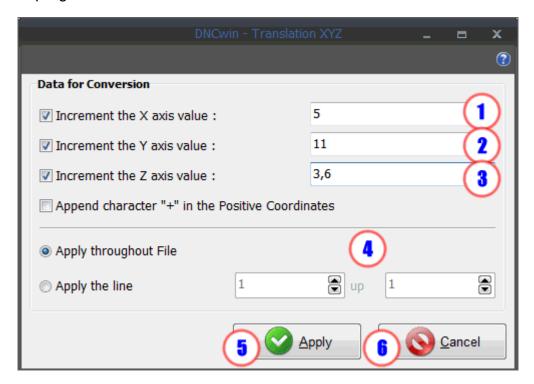
Item	Description
1	Selection Functionality Convert to Absolute or Incremental Area to select the option to "Convert to Absolute Coordinates" or "Convert Coordinates for Incremental" the coordinates values of the instructions "I" and "J" G code in the CNC program that is in focus in the preview area of CNC programs files.
2	Selecting Lines Application Area to select the lines where the "Convert coordinates I and J to Absolute or Incremental" function will be applied in the CNC program that is in focus in the preview area of CNC programs files.
3	Apply Button Click the "Apply" button to execute the "Convert coordinates I and J to Absolute or Incremental" function in the CNC program that is in focus in the preview area of CNC programs files.
4	Cancel Button Click the "Cancel" button to close the form "Convert coordinates I and J to Absolute or Incremental" of the "Edit CNC Programs" module in the "DNCwin" system.



Z4+4+Z8

5.7. Translate Coordinates of the X, Y and Z Axes

Function "Translate Coordinates X, Y and Z Axes" running form to translate the coordinates of the directions X, Y and Z in the CNC program that is in focus in the preview area of CNC programs files.



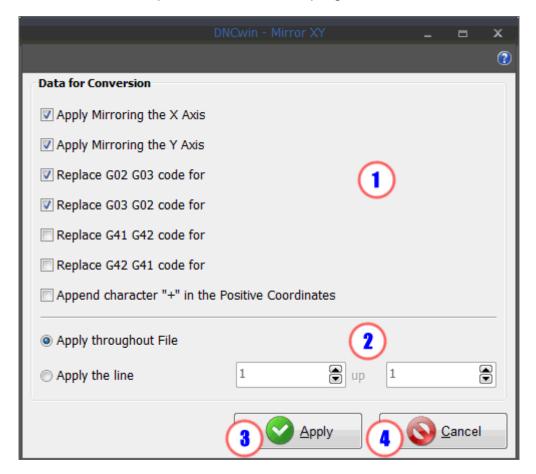


Item	Description
1	Increment Value X Axis Field Field to select the application function and insert the value to be incremented coordinated the "X" instruction G code of the X axis in the CNC program that is in focus in the preview area of CNC programs files.
2	Increment Value Y Axis Field Field to select the application function and insert the value to be incremented coordinated the "Y" instruction G code of the Y axis in the CNC program that is in focus in the preview area of CNC programs files.
3	Increment Value Z Axis Field Field to select the application function and insert the value to be incremented coordinated the "Z" instruction G code of the Z axis in the CNC program that is in focus in the preview area of CNC programs files.
4	Selecting Lines Application Area to select the lines where the "Translate coordinates of the Xs, Y and Z Axes" function will be applied in the CNC program that is in focus in the preview area of CNC programs files.
	Apply Button
5	Click the "Apply" button to execute the "Translate coordinates of the X, Y and Z Axes" function in the CNC program that is in focus in the preview area of CNC programs files.
	Cancel Button
6	Click the "Cancel" button to close the form "Translate coordinates of the X, Y and Z Axes" of the "Edit CNC programs" module in the "DNCwin" system.



5.8. Mirror Coordinates of X and Y Axes

Function "Mirror Coordinates of X and Y Axes" runs the form to convert the coordinates of the X and Y instructions to their respective mirrored value in the CNC program that is in focus in the preview area of CNC programs files.



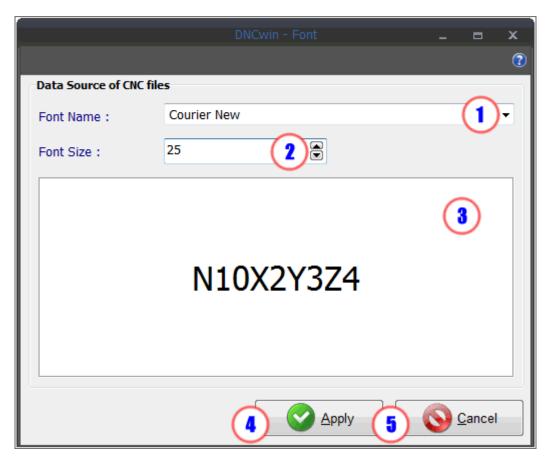


Item	Description
1	Area Conversion Options Mirroring Field to select the options mirroring instructions X and Y related to X and Y axes and inversion of G code in the CNC program that is in focus in the preview area of CNC programs files.
2	Selecting Lines Application Area to select the lines where the "Mirror of the coordinates X and Y axes" function will be applied in the CNC program that is in focus in the preview area of CNC programs files.
	Apply Button
3	Click the "Apply" button to execute the "Mirror of the coordinates X and Y Axes" function in the CNC program that is in focus in the preview area of CNC programs files.
	Cancel Button
4	Click the "Cancel" button to close the form "Mirror of the coordinates X and Y Axes" of the "Edit CNC Programs" module in the "DNCwin" system.



5.9. Setting Font Type and Font Size

Function "Setting Font Type and Font Size" running form to the type and size of font configuration files to CNC programs that are displayed in the preview area of CNC programs files.



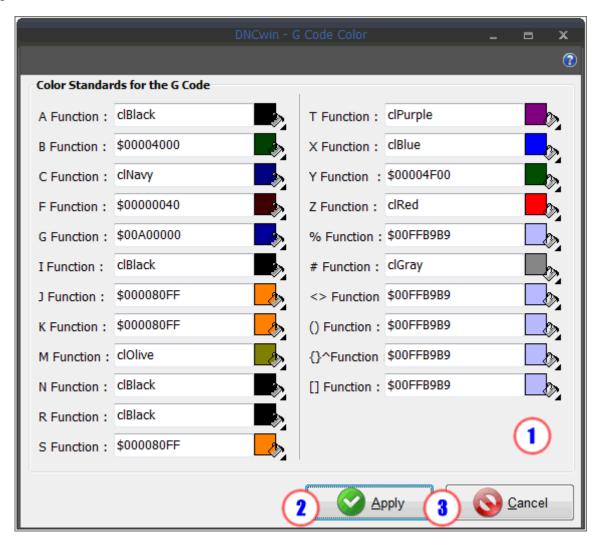


ltem	Description
1	Font Name Field Field to select the type of Font Name of text to be applied to CNC programs that are displayed in the preview area of CNC programs files.
2	Font Size Field Field to select the Font Size of text to be applied to CNC programs that are displayed in the preview area of CNC programs files.
3	Area Sample Font Type and Font Size Field to display formatted with options selected type and size of font that will be applied in CNC programs that are displayed in the preview area of text of CNC programs files.
	Apply Button
4	Click the "Apply" button to execute the "Setting Font Type and Font Size" function in the archives of CNC programs that are displayed in the preview area of CNC programs files.
	Cancel Button
5	Click the "Cancel" button to close the form "Setup Type and Font Size" of the "Edit CNC programs" module in the "DNCwin" system.



5.10. Setting G Code Colors

Function "Setting G Code Colors" runs the form to color setting of the instructions of the "G Code" of the CNC program files that are displayed in the preview area of CNC programs files.





Item	Description
1	Color Standards for the G Code Field Field to select the corresponding color instruction G code that will be applied in CNC programs that are displayed in the preview area of CNC programs files.
2	Apply Button Click the "Apply" button to execute the "Setting G Code Colors" function in the archives of CNC programs that are displayed in the preview area of CNC programs files.
3	Cancel Button Click the "Cancel" button to close the form "Setting G Code Colors" of the "Edit CNC programs" module in the "DNCwin" system.



5.11. Enable and Disable Messages

Function "Enable and Disable Messages" performs function to enable and disable the form to display the functions that were applied in the archives of CNC programs that were opened in the "Editing CNC Programs" module in the "DNCwin" system.