

# SYSTEM COMMUNICATION

## 1.1 Serial communication

The serial communication software of this GSK218M system uses Windows interface, which is used to send and receive files, or execute DNC machining from PC terminal to CNC terminal. This software can be run in Win98, WinMe, WinXP or Win2K operation systems.

### 1.1.1 Program start

Run the Comm. GSK218M.exe program directly. The interface of it is as following:

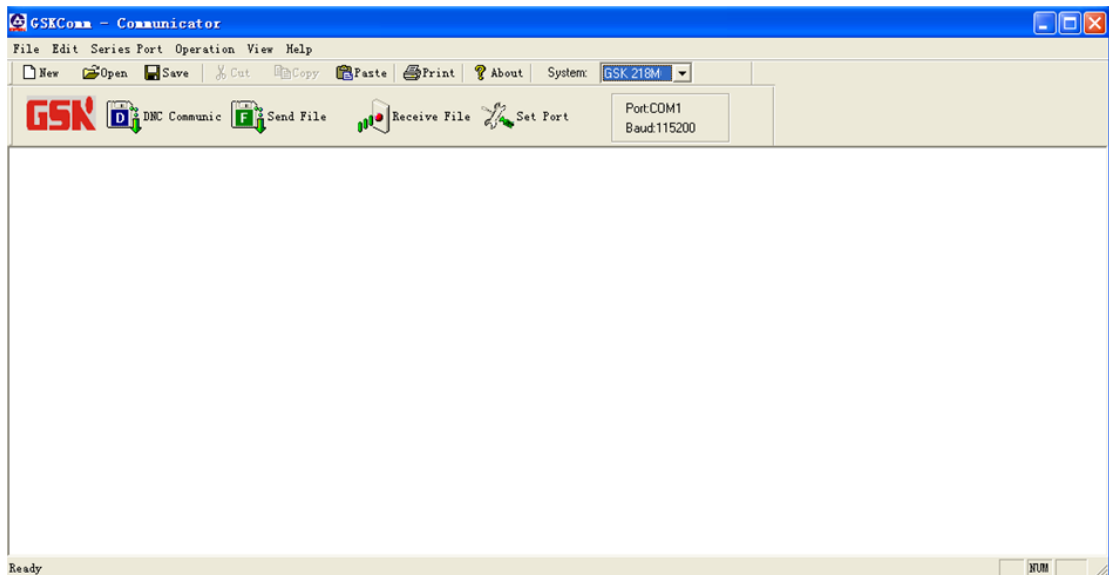


Fig.1-1-1-1

### 1.1.2 Function introduction

#### 1 File menu

The file menu involves the functions of New, Open, Save, Print and Print setting and the latest file list etc.

#### 2 Edit menu

The edit menu involves the function such as Cut, Copy, Paste, Undo, Find and Replace.

#### 3 Serial menu

It is mainly used for the opening and setting the serial ports.

#### 4 Transfer menu

It consists of three transmission types: DNC, file sending and file receiving.

#### 5 View menu

It is used for hiding and displaying the tool bar and status bar


#### 6 Help menu


It is used to view the software version.

### 1.1.3 Software usage

#### 1 DNC transfer


**Note:** It need to set system I/O channel to be 0.

- 1) Open the program file by the “OPEN” button in File menu or the  button in tool column, do a further editing by this software if necessary;
- 2) Open and set the serial port, as fig.1-1-1-1 shown, select GSK218 system, the default DNC baudrate is 38400, which can be reset by the parameter (refer to GSK218M Operation Manual). The data bit has 8, stop bit has 0, and there is no parity check.
- 3) The sequence of the 1<sup>st</sup> and 2<sup>nd</sup> step can be exchanged which doesn't affect the following transfer and machining; but the following steps must be operated by sequence, or the transfer and machining will be affected.

- 4) As the CNC system and machine are ready, press the  key on panel;
- 5) Open the “DNC” item in Transfer type menu or press the DNC transfer button



in tool column to transfer data;

- 6) As “Sent Bytes” stops, press the  key on panel to receive data,



then press  key to start running;

- 7) Then operate by normal machining pattern;
- 8) During the transmission, the transfer information involving the file names, bytes, lines transferred and the transmission time and speed (bytes/s) will be displayed, which is shown as following:



- 4) Select “Add file “button, the dialogue block “Partition Selection “will appear:

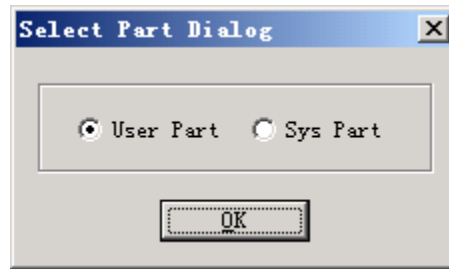


Fig.1-1-3-3

The program files can only be sent to “user part”, while the system configuration and backup files can only be sent to system partition, or they won't be identified by system.. To send system configuration and backup files requires the machine builder or dealer level authority, you can enter the relevant password in CNC “password” setting page.

- 5) “Open file” dialogue block will appear after partition selection, press and hold SHIFT or CTRL key to select multiple files, the maximum 100 files can be selected;
- 6) Click “Open” button to return to “Send file” dialogue block after the file is selected;
- 7) The name of the program file sent to user partition should be headed with letter “O”, followed with a number within 5 digits (including 5). Or the following dialogue block will pop up to prompt you to alter the program name:

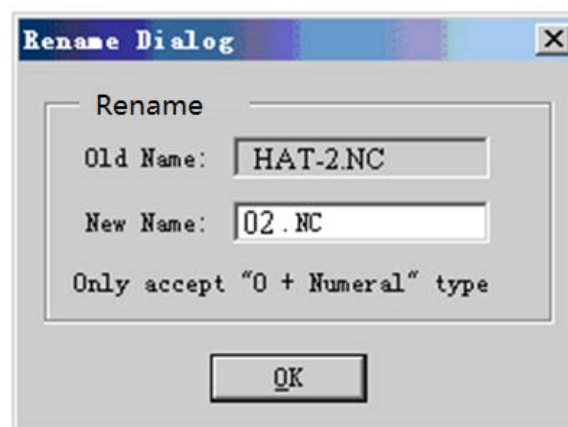


Fig.1-1-3-4

- 8) After returning to “Send file” dialogue block, click “Send” button, the file sending will be on, and the following dialogue block will be popped up:

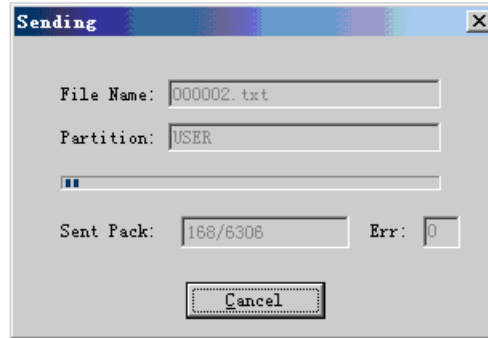


Fig.1-1-3-5

9) Transmission is over.

**Note: M99 is taken as M30 in DNC mode.**

### 3 Transfer type for receiving files

- 1) Enter into data interface in setting page, and move red sign to corresponding box under the “DATA OUTPUT” according to the transmissive content, and then press ENTER.
- 2) Open and set the serial port with a fixed baudrate 115200, the data bits, stop bit and parity check are identical with that in DNC transmission and it can't be changed.
- 3) Open the “Receive file” item of transfer type menu or press the



button in tool column, the following dialogue block will

pop up:

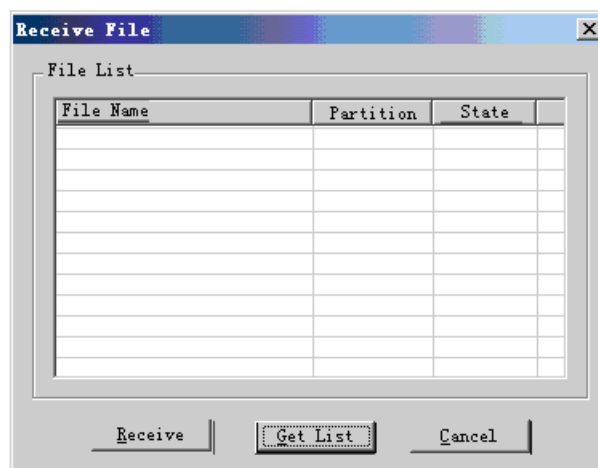


Fig.1-1-3-6

- 4) Click "Obtain directory" button, the files in CNC system will be listed;

- 5) Select the files to be transferred, multiple files can be selected by pressing and holding SHIFT or CTRL key;
- 6) Click “Start receiving” button for receiving, and the following dialogue block will be popped up;

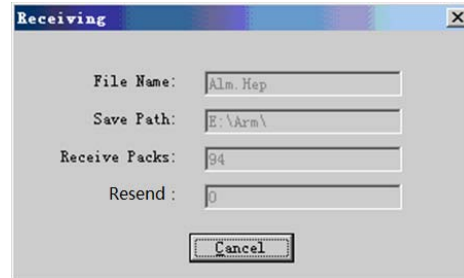


Fig.1-1-3-7

- 7) Transmission is over.

**Note 1: The system can't receive files in DNC mode.**

**Note 2: The system current job will be affected if execute program transmission in working state.**