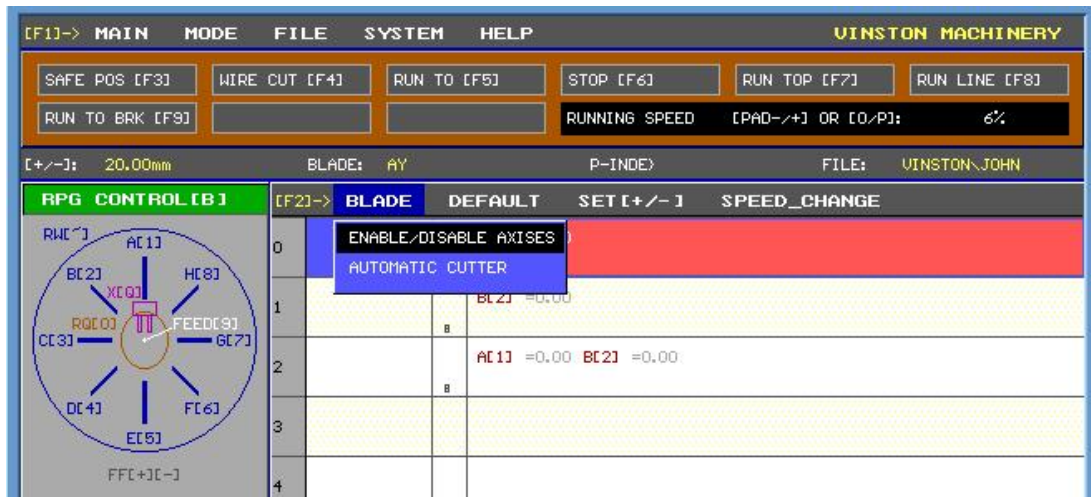


08. SETTINGS FOR THE PART PROGRAM

As indicated in Section 3, every program in SPRING has default settings for the current program and is dependent on the tooling of the machine. These settings are accessed by pressing the F2 key.



08.1 ENABLE/DISABLE AXES

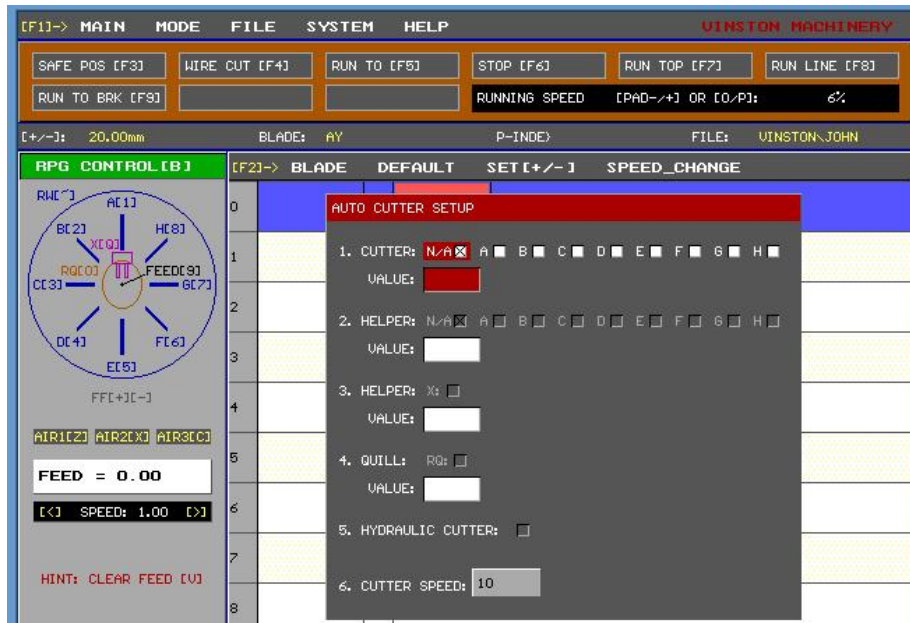
To access the menu, press F2 on your keyboard and press ENTER as the ENABLE/DISABLE AXISES option is the default selection. To exit, press the ESC key.



Use the SPACE BAR to enable/disable the highlighted axis. Press the ENTER key to exit and confirm the current settings.

08.2 AUTOMATIC CUTTER

To access the menu, press F2 on your keyboard and navigate with the arrow key. Press the ENTER key to confirm your selection. To exit, press the ESC key.



Set the following values:

- 1) Select the axis with the mounted blade designated for the wire cutter.
- 2) Designate any additional axes to help with the wire cutting process.
- 3) Designate the X-Y Blade to help with the wire cutting process.
- 4) Specify the position of the Quill when the cutter moves in on the wire.
- 6) The cutting speed.

Press ENTER to confirm the settings and exit. After setting the values for the auto cutter setup, perform a system reset.

The wire cutter function is executed by pressing the F4 key on your keyboard. The indicator at the top left hand area will change color (green background) and a confirmation window appears.



After confirming the command, the designated wire cutter blade will move to its zero (reset) position. The machine will feed 20 mm of wire (this is the default feed length) and the Quill will move into the cutting position. The slide with the mounted blade will move into the cut position and return to its previous position after the cut.

08.3 SLIDE SPEED

To access the menu, press F2 on your keyboard and navigate with the arrow key. To confirm press the ENTER key or to exit press the ESC key.

The screenshot displays the machine's control interface. At the top, a menu bar shows [F1]-> MAIN MODE FILE SYSTEM HELP and WINSTON MACHINERY. Below this are several function buttons: SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], RUN LINE [F8], RUN TO BRK [F9], and RUNNING SPEED [PAD-/+] OR [O/P]: 6%. The status bar shows [+/-]: 20.00mm, BLADE: AY, P-INDE), and FILE: WINSTON.JOHN.

The main control area is titled 'RPG CONTROL [B]' and features a circular diagram of the machine's components with labels: RWC [1], AC [1], BC [2], HC [8], XC [9], FEED [9], CC [3], RC [0], GC [7], DC [4], FC [6], and EC [5]. Below the diagram are buttons for AIR1 [Z], AIR2 [X], AIR3 [O], a FEED = 0.00 display, and a SPEED: 1.00 display with left and right arrow keys.

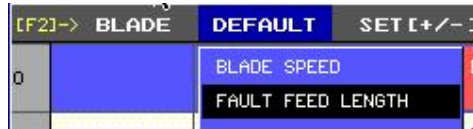
Overlaid on the interface is the 'BLADE' menu, accessed via [F2]->. The menu has a header with 'BLADE', 'DEFAULT', and 'SET [+/-]'. It contains a table with columns for blade number, blade ID, and speed. A dialog box titled 'DEFAULT BLADE SPEED SETUP' is open, showing 'BLADE SPEED: 8 (0-15)' with a text input field containing the number 8.

Blade No.	Blade ID	Speed
0	AC [1]	=0.00
1	BC [2]	
2	AC [1]	
3		
4		
5		
6		

Enter a value between 0 and 15 for the speed of all blades. It is highly recommended to initially start with a low value until the operator becomes more familiar with the machine.

FAULT FEED LENGTH

To access the menu, press F2 on your keyboard and navigate with the `←` arrow key. To confirm press the ENTER key and to exit press the ESC key. When the probe sensor cannot touch the wire at the designated time interval during normal operations, the program will do a wire feed. This will help the operator to identify possible issues within the program.



When the probe sensor triggers a fault event, the machine move the slides to their corresponding zero (reset) positions and feeds wire designated by the Fault Feed Length. At this time, a GO command can be triggered to jump to another line of code within the program. For further details, refer to the section on probe sensor settings.

08.5 SET DEFAULT WIRE FEED/DETRACT LENGTH

To access the menu, press F2 on your keyboard and navigate with the arrow key. To confirm press the ENTER key or to exit press the ESC key.



Choose a value of 20/50/100/350 mm for the default feed length using the + and - keys. One common use for these keys (+/-) is during the initial wire straightening process.

08.6 SPEED DEFAULTS

To access the menu, press F2 on your keyboard and navigate with the arrow key. To confirm press the ENTER key or to exit press the ESC key.

The screenshot displays the WINSTON MACHINERY control interface. At the top, there are menu options: [F1]-> MAIN, MODE, FILE, SYSTEM, HELP. Below this is a control bar with buttons for SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], and RUN LINE [F8]. A status bar shows RUNNING SPEED [PAD-/+] OR [O/P]: 6%. Below the status bar, there are fields for [+/-]: 20.00mm, BLADE: AY, P-INDE), and FILE: WINSTON\JOHN.

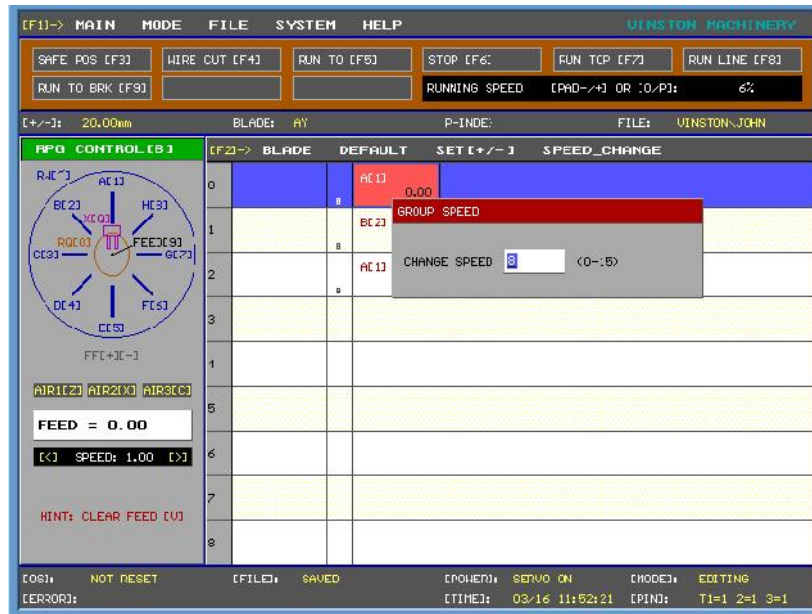
The main interface is divided into several sections. On the left is the **RPG CONTROL [B]** section, which includes a circular diagram of the machine's components (AC11, BC21, HC81, XC01, FEED[9], GC71, DC41, FC61, E[5]) and a central control knob. Below the diagram are buttons for AIR1[2], AIR2[X], and AIR3[C], a FEED = 0.00 display, and a SPEED: 1.00 display. A hint at the bottom reads: HINT: CLEAR FEED [V].

The central part of the interface is a table with columns: [F2]-> BLADE, DEFAULT, SET [+/-], and SPEED_CHANGE. The table has 9 rows (0-8). The first row (0) shows AC11 = 0.00. The second row (1) shows BC21 = 0.00. The third row (2) shows AC11 = 0.00 and BC21 = 0.00. The other rows are empty.

A context menu is open over the table, listing options: GROUP SPEED, FEED SPEED ONLY, BLADE SPEED ONLY, RW SPEED, and RQ SPEED. The top bar of the menu is highlighted in black.

At the bottom of the interface, there is a status bar with the following information: [OS]: NOT RESET, [FILE]: SAVED, [POWER]: SERVO ON, [MODE]: EDITING, [ERROR]:, [TIME]: 03/16 11:52:21, [PIN]: T1=1 2=1 3=1.

08.6.1 GROUP SPEED



GROUP SPEED: Change the speed of all axes on the selected line of code. The operator can set a value between 0 and 15.

08.6.2 FEED SPEED ONLY

The screenshot displays a CNC control interface with the following elements:

- Menu Bar:** [F1]-> MAIN MODE FILE SYSTEM HELP
- Control Panel:** SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], RUN LINE [F8], RUN TO BRK [F9], RUNNING SPEED [PAD +/-] OR [O/P]: 6%
- Status Bar:** [+/-]: 20.00mm, BLADE: AY, P-INDE), FILE: WINSTON-JOHN
- Table:** A table with columns for line number, BLADE, DEFAULT, SET [+/-], and SPEED_CHANGE. Line 1 is highlighted in red.
- Dialog Box:** A red dialog box titled "FEED SPEED ONLY" is open over line 1, showing a "CHANGE SPEED" input field with the value "8" and a range of "(0-15)".
- Control Panel (Left):** A circular diagram with various function keys (RMC, AC, BC, HC, XC, RC, DC, EC, FC, FF) and a "FEED" display showing "FEED = 0.00".
- Bottom Bar:** [POS]: NOT RESET, [FILE]: SAVED, [POWER]: SERVO ON, [MODE]: EDITING, [ERROR]:, [TIME]: 03/16 11:56:38, [PIN]: T1=1 2=1 3=1

FEED SPEED ONLY: Change the wire speed on the selected line of code. The operator can set a value between 0 and 15.

08.6.3 BLADE SPEED ONLY

The screenshot shows a CNC control interface with the following elements:

- Top Menu:** [F1]-> MAIN MODE FILE SYSTEM HELP
- Control Panel:** SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], RUN LINE [F8], RUN TO BRK [F9], RUNNING SPEED [PAD-/+] OR [O/P]: 6%
- System Info:** L+/-: 20.00mm, BLADE: #Y, P-INDE, FILE: WINSTON\JOHN
- RP6 CONTROL [B]:**
 - Diagram with buttons: RNC [], AC11, BC2], HE8], FEED [9], CC3], R2 [0], DC4], FT6], EE5], FFE+] []
 - AIR1 [2], AIR2 [4], AIR3 [0]
 - FEED = 0.00
 - [<] SPEED: 1.00 [>]
 - HINT: CLEAR FEED [V]
- Table:**

[F2]->	BLADE	DEFAULT	SET [+ / -]	SPEED_CHANGE
0	AC11	0.00		
1	BC2]			
2	AC11			
3				
4				
5				
6				
7				
8				
- Dialog Box:** CHANGE SPEED [8] (0-15)
- Status Bar:** [OS]: NOT RESET, [FILE]: SAVED, [POWER]: SERVO ON, [MODE]: EDITING, [ERROR]:, [TIME]: 03/16 11:57:44, [PIN]: T1=1 2=1 3=1

BLADE SPEED ONLY: changes the speed of the slides on the selected row. The operator can set a value between 0 and 15.

ROTARY WIRE SPEED

The screenshot shows a CNC control interface for 'WINSTON MACHINERY'. At the top, there is a menu bar with options: [F1]-> MAIN, MODE, FILE, SYSTEM, HELP. Below the menu are several function buttons: SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], RUN LINE [F8], RUN TO BRK [F9], and RUNNING SPEED [PAD +/-] OR [O/P]: 6%. The status bar shows: [+/-]: 20.00mm, BLADE: AY, P-INDE), FILE: WINSTON\JOHN.

The main control area is divided into two sections. On the left is the 'RPG CONTROL [B]' panel, which features a circular diagram of a rotary wire with 8 rows labeled AC[1] through HC[8]. The diagram also shows various control points like X[C], RQ[C], FEED[9], GL[7], DC[4], FC[6], and EC[5]. Below the diagram are buttons for AIR1[C], AIR2[X], AIR3[C], a FEED = 0.00 display, a SPEED: 1.00 display, and a HINT: CLEAR FEED [V].

On the right is a table for setting wire speed per row. The table has columns for 'BLADE', 'DEFAULT', 'SET [+/-]', and 'SPEED_CHANGE'. The rows are numbered 0 to 8. Row 0 is highlighted in blue and shows a default speed of 0.00. Row 1 is highlighted in yellow and has a red 'RW SPEED' dialog box open over it. The dialog box contains the text 'CHANGE SPEED' followed by a text input field containing the number '8' and a range '(0-15)'. Row 2 is highlighted in yellow and shows a default speed of AC[1].

At the bottom of the interface, there is a status bar with the following information: [OS]: NOT RESET, [FILE]: CHANGED, [POWER]: SERVO ON, [MODE]: EDITING, [ERROR]:, [TIME]: 03/16 11:59:38, [PIN]: T1=1 2=1 3=1.

ROTATION WIRE SPEED: change the speed of the wire rotation on the selected row. The operator can set a value between 0 and 15.

ROTARY QUILL SPEED

The screenshot shows a CNC control interface with the following elements:

- Menu Bar:** [F1]-> MAIN MODE FILE SYSTEM HELP
- Function Buttons:** SAFE POS [F3], WIRE CUT [F4], RUN TO [F5], STOP [F6], RUN TOP [F7], RUN LINE [F8], RUN TO BRK [F9]
- Status Bar:** RUNNING SPEED [PAD +/-] OR [O/P]: 6%
- Control Area:**
 - Left side: A circular diagram with labels AC[1], BC[2], HC[8], FEED[9], GC[7], FC[6], EI[5], DC[4], CC[3], RO[0], XC[0]. Below it are buttons AIR1[Z], AIR2[X], AIR3[C], a FEED = 0.00 display, and a [<] SPEED: 1.00 [>] display. A HINT: CLEAR FEED [U] is shown.
 - Right side: A table with columns [F2]-> BLADE, DEFAULT, SET [+/-], and SPEED_CHANGE. The table has 9 rows (0-8). Row 0 is highlighted in blue and contains AC[1] with a value of 0.00. Row 1 is highlighted in yellow and contains BC[2]. Row 2 is highlighted in yellow and contains AC[1]. A dialog box 'CHANGE SPEED' with a value of 8 and a range of (0-15) is overlaid on row 2.
- Bottom Bar:**
 - [OS]: NOT RESET
 - [FILE]: CHANGED
 - [POWER]: SERVO ON
 - [MODE]: EDITING
 - [ERROR]:
 - [TIME]: 03/16 12:00:51
 - [PIN]: T1=1 2=1 3=1

ROTATION QUILL SPEED: changing the speed of the quill rotation on the selected row. The operator can set a value between 0 and 15.