WinMulti - Advanced Bar Data

This page is a more in depth explanation of the Bar Data Tab

Bar Queue Comments 🖷 frmService П Х Clear Blockages Bar Data Tests IO IO-Infeed Spindle IO Accuracy Drives Profiles And Operations Programming Information Output Timings Alarm Log Estimate Visualiser Saw Feed Machine Feed Machine Type Bar Queue Direction Direction O Right To Left Right To Left O Sawing Module <u>-</u>.00008083 5990.0 7006 2722.0 ^ - Pie Left To Right O Left To Right O Autoflow-2 01 | 0922.0 | No:001 Id:R3-J000001/006 1 Outer Right O Mk3 -02 | 0922.0 | No:002 Id:R3-J000001/006 Left 1 Outer Saw Gripper Machine Gripper -03 s 0696.0 s No:003 Id:R3-J000001/006 1 Outer Bottom Mode Mode O ZX3 --- 0007.0 MPIN Unknown Mnd:Unknown ** No Operation in StdOps ** Push O Push () ZX4 Pull O Pull + 0035.0 MPIN Null Mnd:Unknown ** Use=0 ** O Microline . 0060.0 DRB Drain Rear Bead Mnd:DRAIND_SWC . 0110.0 DFB Drain Front Bead Mnd:DRAINUDA_SWC Blade C/I Offset 0.00 🖨 . 0590.0 DFB Drain Front Bead Mnd:DRAINUDA_SWC ReflectOptim . 0640.0 DRB Drain Rear Bead Mnd:DRAIND_SWC Optimiser 2016 Features Interface Timers . 0661.0 MPIN Null Mnd:Unknown ** Use=0 . ⊕. 0677.0 MPOUT Null Mnd:Unknown ** Use=0 ** Visual Out Optimise 0 . ⊕.0689.0 MPIN Null Mnd:Unknown ** Use=0 ** Interpret 0 Win Dump Compile 0 ± 04 | 0696.0 | No:004 Id:R3-J000001/006 1 Outer Top Deep Log Download1 0 Optimisation Download2 0 Bar Ops Overall 0 < 6000.0 f Cycle Timer Diagnostics On Test Printer Fxit off Increase this timer to cycle any 0.0 ≑ selected outputs on and off

This tab is split into 3 sections

- 1. The Bar Queue
- 2. Bar Drawing
- 3. Machine Variables

Contents

The machine variables should not be adjusted as they are set to describe the type of machine this relates to.

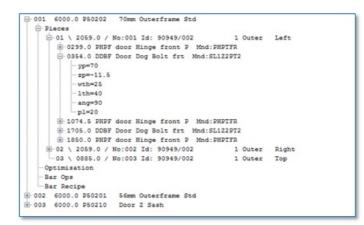
The Bar Drawing shows a rough graphical representation of the operations and cuts on the bar.

Bar Queue

The Bar Queue displays a list of the bars in the batch. This can be expanded by clicking on the + next to the bar to show 4 further options

a. Pieces

Expanding this area shows the individual pieces on the bar, this can then be further expanded to show the routing operations on that piece along with the position from the left hand side of the piece, and then further expanded to show the variables relevant to that routing operation (e.g. Slot Length)



b. Optimisation

This area shows the optimisation detail including gaps between the pieces etc.

c. Bar Ops

This area shows the operations and cuts as positions on the bar rather than positions on the piece as shown below.

-001 6000.0 P50202 70mm Ou	uterframe Std
- Pieces	
- Optimisation	
- Bar Ops	
-0.0 (Offset: 0) SAW510	
- 932.9 (Offset: 0) SAN2	10
- 962.0 (Offset: 0) SAN1	00
-1823.5 (Offset: 0) SAM	210
-1883.5 (Offset: 0) SAM	400
-2104.8 (Offset: 0) KPF	110
-2820.8 (Offset: 0) KPF	46
- 3592.8 (Offset: 0) KPF	110
- 3888.2 (Offset: 0) SAM	210
-3948.2 (Offset: 0) SAM	400
-4220.0 (Offset: 0) PHP	T
-4275.0 (Offset: 0) DDS	5
-4995.5 (Offset: 0) PHP	T
-5626.0 (Offset: 0) DDB	2
- 5771.0 (Offset: 0) PHP	Ŧ
-5985.0 (Offset: 0) LAS	ERHL
- 6012.8 (Offset: 0) SAM	400
-Bar Recipe	
€-002 6000.0 ₽50201 56mm Ou	uterframe Std
€-003 6000.0 P50210 Deer Z	Sash

d. Bar Recipe

The bar recipe shows each action that will be taken on the bar, along with the action number which is shown on error reports. A list of recipe actions is shown below

- 001 6000.0 P50202 70mm Outerframe Std
- Pieces
- Optimisation
Bar Ops
🖻 Bar Recipe
0001 SP 00,-1.0,00,0.0,0.0,0.0,0.0
0002 MA 00,2104.8,00,0.0,0.0,0.0,0.0 KPF110: SL1Z2PT2
0003 MA 01,69.0,00,0.0,0.0,0.0,0.0
0004 MA 02,7.5,00,0.0,0.0,0.0,0.0
0005 TL 02,90.0,00,0.0,0.0,0.0,0.0
0006 GO 00,0.0,00,0.0,0.0,0.0,0.0
0008 MR 00,40.0,00,0.0,0.0,0.0,0.0
0009 GO 00,0.0,00,0.0,0.0,0.0,0.0
0011 SP 01,44.0,00,0.0,0.0,0.0,0.0
0012 SP 02,44.0,00,0.0,0.0,0.0,0.0
0013 VT 01,30.0,02,0.0,0.0,0.0,0.0
0014 GO 00,0.0,00,0.0,0.0,0.0,0.0
0015 WI -01,0.0,00,0.0,0.0,0.0,0.0

Please note, at the end of each of these lines may be 2 codes separated by a colon

This denotes the start of an operation, the code before the colon is the code sent by the office to denote the routing operation, the code after the colon is the program or macro used to determine the tool/axis movements needed to produce the machining operation.

SP Speed Setting

This command sets the speed for an axis or group of axes.

- Format
 - SP Axis,Speed,00,0.0,0.0,0.0,0.0
- Speeds

• -1.0 Traverse (fast) speed for all axes

- Axes
 - 00 X Axis
 - 01 Y Axis
 - 02 Z Axis

```
• e.g
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- SP 00,-1.0,00,0.0,0.0,0.0,0.0 Set Traverse Speed for all axes
- SP 01,44,0,00,0.0,0.0,0.0,0.0 Set Y axis Speed to 44

MA Move Absolute

This command moves to an absolute position for the specified axis.

• Format

• MA Axis, Position, 00, 0.0, 0.0, 0.0, 0.0

- Axes
 - 00 X Axis01 Y Axis
 - 02 Z Axis
- e.g.

• MA 01,69.0,00,0.0,0.0,0.0,0.0 Move Y Axis to an absolute pos of 69m

MR Move Relative

This command moves to relative distance from the current position.

- Format
 - MR Axis, Position, 00, 0.0, 0.0, 0.0, 0.0
- Axes
 - 00 X Axis
 - 01 Y Axis
 - 02 Z Axis

• e.g.

• MA 01,69.0,00,0.0,0.0,0.0,0.0 Move Y Axis a further 69mm

TL Tool activation

This command sends the closest of a selected tool type to a chosen angle around the bar and activates it.

Format TL Tool,Angle,00,0.0,0.0,0.0,0.0

Tool The tool Ids are determined in the settings area described previously, a sample setting is shown below.

	TINo	Description	Cut	Pce	Dia	xOff
•	1	3mm Drill	90	90	3	0
	2	10mm Router	50	44	10	0
	3	5mm Router	180	90	5	0
	4	12.7mm Router	50	45	12.6	0
	5	V Blade / SP2	60	90	4	32.5
	6	V Blade \ SP1	60	90	4	-69.4
	-1	<empty></empty>	0	0	0	0
0 D	Datum	3	3	1	0	

e.g. TL 03,90.0,00,0.0,0.0,0.0 Send the closest 5mm tool to 90 degrees.

GO Go Command

This command activates the previous commands, which in effect wait in a queue until the go command is activated. This command has no sub variables.

e.g. GO 00,0.0,00,0.0,0.0,0.0,0.0

WI Wait for Idle

This command instructs the machine to wait until the axes are idle i.e. the positions previously specified are reached.e.g.WI -01,0.0,00,0.0,0.0,0.0,0.0

WA Wait for a specified time

This command tells the machine to wait for an allotted amount of time before the next command is executed.

SC Saw Cut

This command activates a saw cut.

ToolOff Turn Tool Off

Turns the specified tool off.

HL Hole

Performs a Hole operation.

VT Vector Move

Moves 2 axis in conjunction with each other.

OP Output

Checks a specified output signal is made.

LB Label

Prints a Label

WaitOnLoad Wait for load operation

Waits for the bar to load

ToolH Tool Half Plunge

Retracts the Double plunge cylinders (Plunge Half) between slots on a double plunge operation.

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