

Common Issue - V Notching Too Close To End Of Bar

Problems generated if V notch is too close to end of bar

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Start Of Bar (Gripper End)

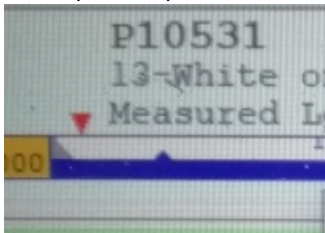
End of Bar

mrdummy Command


Comments

Start Of Bar (Gripper End)

If the optimiser places a bar with a V notch close to the end at the gripper end of the bar, it can have detrimental effects



Modifications can be made to persuade the optimiser to move this piece to a different point on the bar

| Machine | Limit | Photo | Effect | Solution |
|--------------------------------------|--------|---|--|--|
| ZX3 / Microline / Flowline Mk3 | <300mm |  | Gripper can hit ring when carrying out the reverse move on V notch cutting | <p>Add</p> <pre>mrdummy.x=-300</pre> <p>to V notch mnd files</p> <p>This will ensure a "minable" gap is always left at the gripper end to clear</p> |
| ZX5 | <250mm | | V Notch could cut into gripper or X axis beam | <p>The xholdpos will stop the V notch coming on if the x axis position is too low</p> <pre>4,-10000,820,OuB_VCut,True,X 8,-10000,1000,OuB_CLV,True,X</pre> <p>An extra precaution, the mnd file can contain a wait to ensure the Beam is in its home position (out of the machine)</p> <pre>;Ensure the beam is out of the way in.InC_BmPosH=1</pre> |

End of Bar

| Machine | Limit | Effect | Solution |
|---------|-------|--|--|
| ZX5 | | Depth will be inaccurate because the backfence is not particularly good in this area | <p>Add</p> <pre> mrdummy.x=-300 </pre> <p>to V notch mnd files</p> <p>This will ensure a "maxable" gap is always left at the end of the bar and the V notch will be formed with a good backfence to reference and the V notch will be clamped securely from both sides</p> |

mrdummy Command

The same mrdummy.x command can be used for any operation that needs to be moved away from the ring. It works by increasing the virtual or "dummy" footprint of the operation

```

;Dummy Movement to Ensure Minable used
mrdummy.x=-200
mrdummy.x=200

```

The code should be placed at the beginning of the file, after the ? entries

```

;Full Vee Notch
;(c) Stuga Limited 2004
;USING frontYLpos and frontYRpos FROM PARAMS.MUL
;v2.0 Use Separate Y pos - requires v3.70
;v2.1 (GMG) Bar shuffle not required on tool 5 (always positive)
; Streamlined bar shuffle and 0.5mm offset processes
;v2.2 (GF) Traverse back up

;DESC1=FRONT V NOTCH
;YP1=VF
;ZP1=100
;ANG1=90
;PL1=0
;TL1=0
;BW1=0
;BH1=0

;DESC2=No Op

?Depth of Notch,d,F

mrdummy.x=-200

;Select Blade \
sp=TRAVERSE
ma.z=100
tl.5=90
go

```