

YNotchStartGap Parameter

Definition and use of the yNotchStartGap parameter

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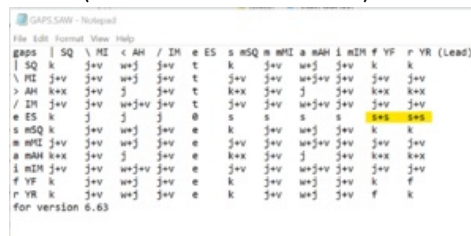
Problem

Applies to machines with V notching on the ring - worse if the blade size is 200mm

If a Y notch is at the very start of the bar, there is a combination of the gripper location inside the ring with the Y and Z axes in an extreme position. This leads to a clash between the gripper and the ring.

Solution

Original solution was to build a big "minable" into the gaps.saw file to force a big waste cut at the beginning of the bar. This was done by specifying a gap of "s+s" (minable+minable) or "s+s+s" (minable+minable+minable).

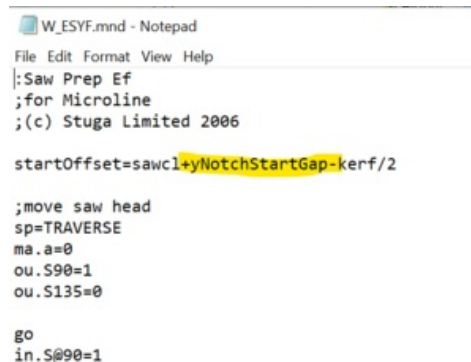


```
gaps | SQ \ NI < AH / IH e ES s nSQ m mHI a mAH i mIH f YF r YR (Lead)
| SQ k j+v w+j j+v t k j+v w+j j+v k k
\ NI j+v j+v w+j j+v t j+v j+v w+j j+v j+v j+v
> AH k+k j+v j j+v t k+k j+v j j+v k+k k+k
/ IH j+v j+v w+j j+v t j+v j+v w+j j+v j+v j+v
e ES k j j j 0 s s s s s+s+s
s nSQ k j+v w+j j+v e k j+v w+j j+v k k
m mHI j+v j+v w+j j+v e j+v j+v w+j j+v j+v j+v
a mAH k+k j+v j j+v e k+k j+v j j+v k+k k+k
i mIH j+v j+v w+j j+v e j+v j+v w+j j+v j+v j+v
f YF k j+v w+j j+v e k j+v w+j j+v k f
r YR k j+v w+j j+v e k j+v w+j j+v f k
for version 6.63
```

This is a bit cumbersome, and there are downsides to it when using it on a Microline because this amount needs to be reflected in the mnd files used to control the saw blade - W_ESYF.mnd and W_ESYR.mnd

From software version 4.65.0.0 a new parameter was introduced, specifically for this purpose - YNotchStartGap. This is normally set at a value of 270 for a Microline or ZX3

This allows the variable to be used in the mnd files



```
W_ESYF.mnd - Notepad
File Edit Format View Help
;Saw Prep Ef
;for Microline
;(c) Stuga Limited 2006

startOffset=sawcl+yNotchStartGap-kerf/2

;move saw head
sp=TRAVERSE
ma.a=0
ou.S90=1
ou.S135=0

go
in.S@90=1
```

The gaps file calls on this with the variable "y"

```

GAPSSAW - Notepad
File Edit Format View Help
gaps | SQ \ MI c AM / IM e ES s mSQ m mMI a mMI i mIM f YF r YR (Lead)
| SQ k j+v w+j j+v t k j+v w+j j+v k k
\ MI k+k j+v w+j j+v t k+k j+v w+j+v j+v k+k k+k
> AM k+k j+v j j+v t k+k j+v j j+v k+k k+k
/ IM k+k j+v w+j+v j+v t k+k j+v w+j+v j+v k+k k+k
e ES k j j j 0 e e e e e e
s mSQ k j+v w+j j+v s k j+v w+j j+v k k
m mMI j+v j+v w+j j+v s j+v j+v w+j+v j+v j+v j+v
a mMI k+k j+v j j+v s k+k j+v j j+v k+k k+k
i mIM j+v j+v w+j+v j+v s j+v j+v w+j+v j+v j+v j+v
f YF k j+v w+j j+v y k j+v w+j j+v k f
r YR k j+v w+j j+v y k j+v w+j j+v f k
winPMI Microline version 2013
reduced gap for \ to k+k (was j+v)
y=hotchstartGap parameter

```

i ...This gaps file looks different to the one above because it is from a later version of software and is not handed