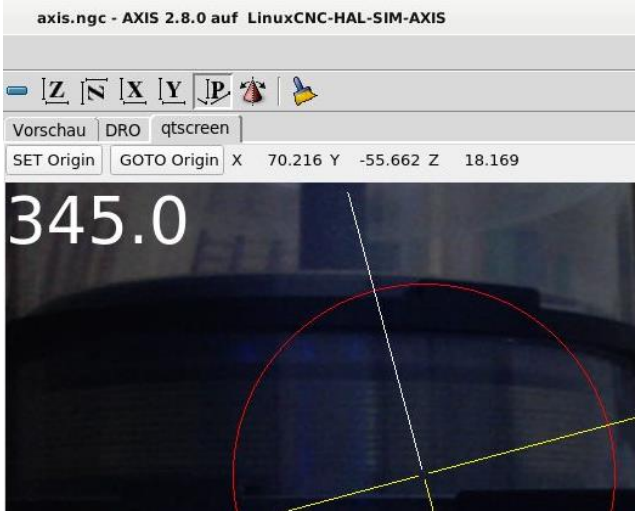
contained in LinuxCNC 2.8.0 buster iso

/usr/share/qtvcp/panels/cam_align/cam_align_handler.py
/usr/share/qtvcp/panels/cam_align/cam_align.ui



how to scale image size to camera resolution to make the circle fit horizontally and vertically to a round contour

how to store and recall
last settings of widget element values

circle diameter
zoom value
rotation value

INI file entries

[DISPLAY]
EMBED_TAB_NAME= qtscreen
EMBED_TAB_COMMAND= halcmd loadusr -Wn qtvcp_embed qtvcp -d -c qtvcp_embed -x {XID} cam_align

[HALUI]

MDI_COMMAND = (00)
MDI_COMMAND = (01)

how are buttons corresponding to MDI monnad entry numbers
may it be freely numbered

customized example
[HALUI]

MDI_COMMAND= o<spindle_to_cam>call	(00)	how to customize button text	Spindle to Cam
MDI_COMMAND= o<cam_to_spindle>call	(01)		Cam to Spindle
MDI_COMMAND= o<camstore>call	(02)	how to add button	Store Cam Pos
MDI_COMMAND=	(03)		(reserved)

```
o<cam_to_spindle> sub

(variables should be precalculated)
g43 h99 g91 g0 x[-#<_CamOfsX>] y-[#<_CamOfsY>]
g90 g49

(cam offset off - old way with fixed offset)
(g43 h99 g91 g0 x-1.75 y-63.531)
(g90 g49)
o<cam_to_spindle> endsub
M2
```

```
o<spindle_to_cam> sub

(save current coordinate)
g92 x0 y0 z0
g92.2
#<_CamOfsX> = #5211
#<_CamOfsY> = #5212
g92.1

(introduce CAM offset)
g43 h99

(calculate offset as don't know how to read it directly)
g92 x0 y0 z0
g92.2
#<_CamOfsX> = [#<_CamOfsX> - #5211]
#<_CamOfsY> = [#<_CamOfsY> - #5212]
g92.1

(PRINT, CAMoffset is X=#<_CamOfsX>, Y=#<_CamOfsY>)

(move cam for offset)
g91 g0 x#<_CamOfsX> y #<_CamOfsY>
g90

(move for CAM offset - old way with fixed offset)
(g43 h99 g91 g0 x 1.75 y 63.531)
(g90)
o<spindle_to_cam> endsub
M2
```