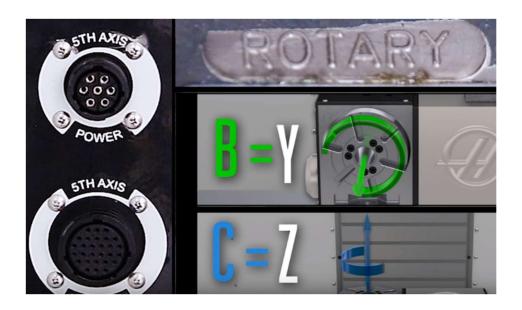
# Suggested Videos to watch and become familiar with the HAAS 5-Axis Machines

Before programming or running your new 5-Axis machine, get familiar with the Rotary Axis orientations and Rotary File Settings.



Properly Connecting a Rotary Table – Haas Automation Services

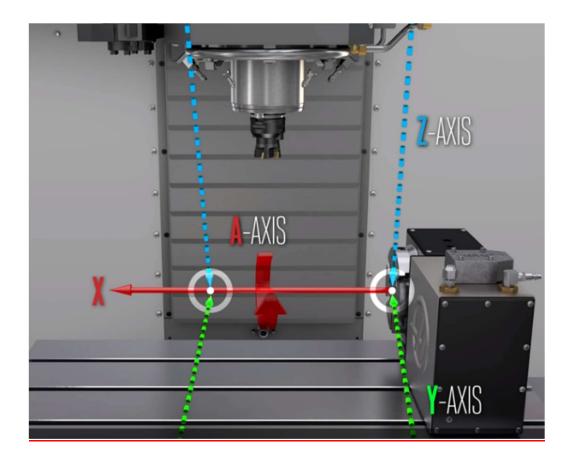
https://www.youtube.com/watch?v=YYOCbtdcRmc

Rotary – Enable and Disable - NGC Rotary (web link)

https://www.haascnc.com/service/troubleshooting-and-how-to/how-to/rotary---enable-and-disable---ngc.html

## **MRZP** – Machine Rotational Zero Point

MRZP is a Setting which records the X,Y,Z Machine position where the  $4^{th}$  and  $5^{th}$  Axis intersect. This position is used to calculate DWO/TCPC



Don't Fear 5-Axis – Episode 3 (MRZP, Rotary Files, 2<sup>nd</sup> Home Position)

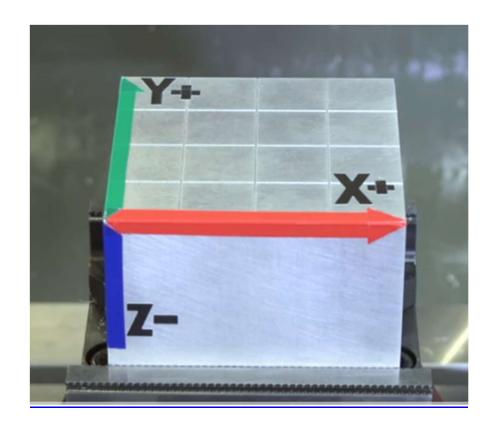
https://www.youtube.com/watch?v=NNwdXNlvuEA

MRZP web link:

https://www.haascnc.com/service/troubleshooting-and-how-to/how-to/mrzp-wips-offsets-settings---umc-750---ngc.html

#### **G234 TCPC** – Tool Center Point Control

TCPC allows the Machine to calculate actual position related to the MRZP while performing full 5-Axis simultaneous machining.



Simplify 3+2 and 5-Axis Machining with DWO/TCPC – Haas Automation TOD (TCPC Explanation)

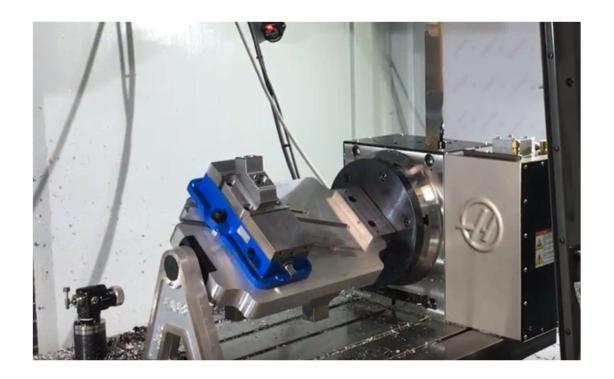
https://www.youtube.com/watch?v=HxPjH4v5iEg

## TCPC web link:

https://staging-diy.haascnc.com/g234-tool-center-point-control-tcpc-group-08-1

# **G254 DWO** – Dynamic Work Offset

DWO allows the Machine to calculate actual position related to the MRZP while performing 3+2 machining.



https://www.youtube.com/watch?v=GRrsctpgHHI (DWO Explanation & Demo)

DWO web link:

 $\underline{https://staging\text{-}diy.haascnc.com/g254\text{-}dynamic\text{-}work\text{-}offset\text{-}dwo\text{-}group\text{-}23\text{-}1}$