

CAPSturn post configuration for linear tooling machines

On a typical lathe with a turret type tool changer, there is a single turret that is at the rear or in front. On a linear tooling lathe, some of the tools will be used at the rear and some in front. Rear and front refer to the upper and lower part of the axis, looking from the operator's position. The signs of the X coordinate are different for these cases. Also, CAPSturn checks for tool numbers being beyond the machine's range, so the range of tool numbers for the front and rear turret must be specified.

You need to make changes in these areas to configure for lathes linear tooling:

- ⌚ Machine mechanical data
- ⌚ Tool numbers
- ⌚ Signs of X coordinate for front and rear turret
- ⌚ Circular interpolation commands

1. Click on [Machine data](#) and select [Turret position](#) as [Both](#).
2. Click on [General program format](#) → [Tool and offsets](#) and enter the values as shown below.

Tool numbers for front turret		Tool numbers for rear turret	
Start	<input type="text" value="5"/>	Start	<input type="text" value="1"/>
End	<input type="text" value="8"/>	End	<input type="text" value="4"/>

3. Click on [Tool motions](#) tab and enter the multiplication factors for the X coordinate. Default signs of X coordinate are + for rear turret and - for front turret. Enter -1 if you want a sign to be reversed.

Multiplication factor for X coordinate			
Front turret	<input type="text" value="1"/>	Rear turret	<input type="text" value="1"/>
Multiplication factor for incremental X coordinate			
Front turret	<input type="text" value="-1"/>	Rear turret	<input type="text" value="1"/>
Multiplication factor for center X coordinate			
Front turret	<input type="text" value="-1"/>	Rear turret	<input type="text" value="0.5"/>

4. Click on [G codes](#) and specify the codes for CW and CCW motions for the front and rear turrets.

Threading motion	
CW circular interpolation (Front turret)	<input type="text" value="G01"/>
CW circular interpolation (Rear turret)	
CCW circular interpolation (Front turret)	
CCW circular interpolation (Rear turret)	