

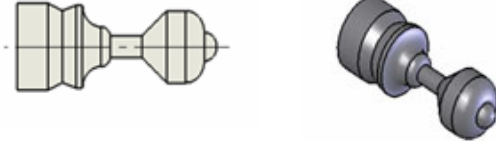


 Leonardo da Vinci
PARTNERSHIPS

CNC and Robotics Partnerships, CaRPs

Partners from Germany, Lithuania, Norway, Slovenia, Sweden

Exercise : **CNC Turning**

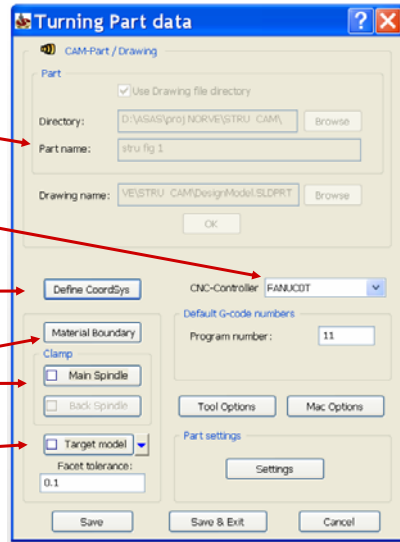
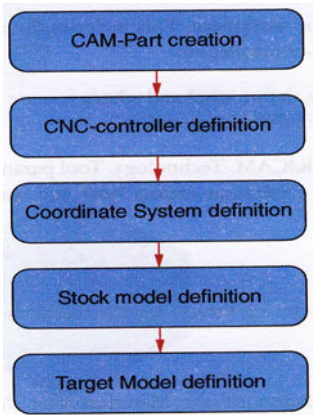


by Andrej Starman
TŠC Kranj

CAM-Part Definition

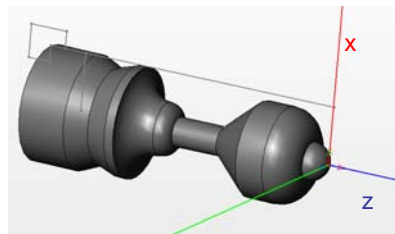


The stages of the definition process:



A S

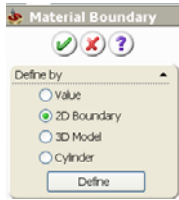
Coordinat System Definition



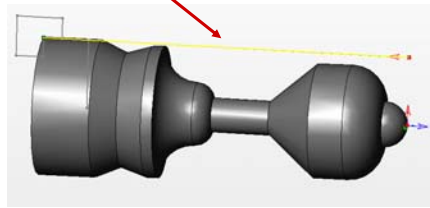
Pick Point

A S

Material Boundary Definition

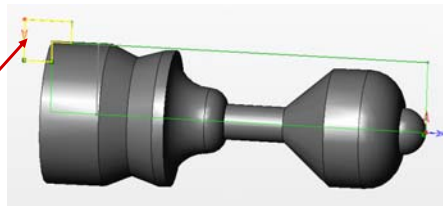


Select line:



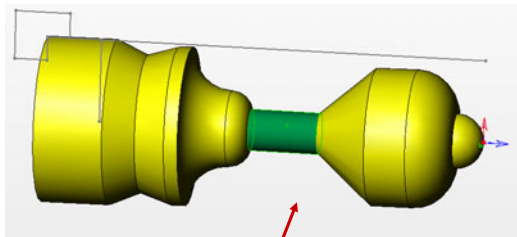
Define Clamp

Select line:

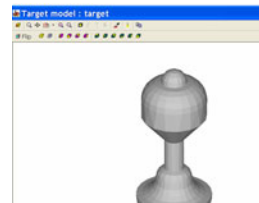


A S

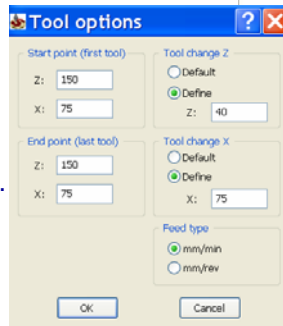
Define the Target model



Click on the solid body:



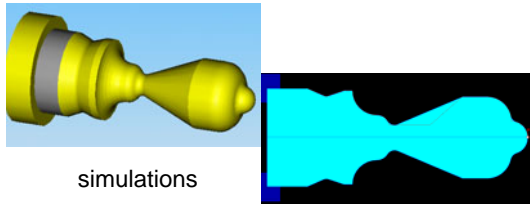
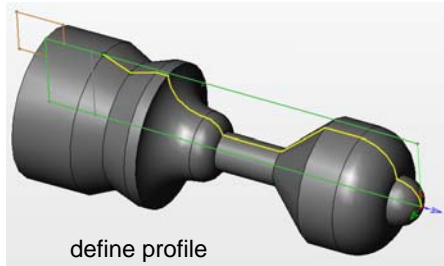
Define the Tool start point ...



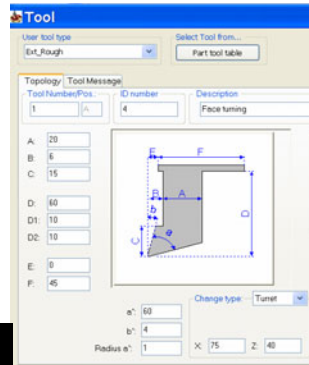
A S

Define the Turning Operations

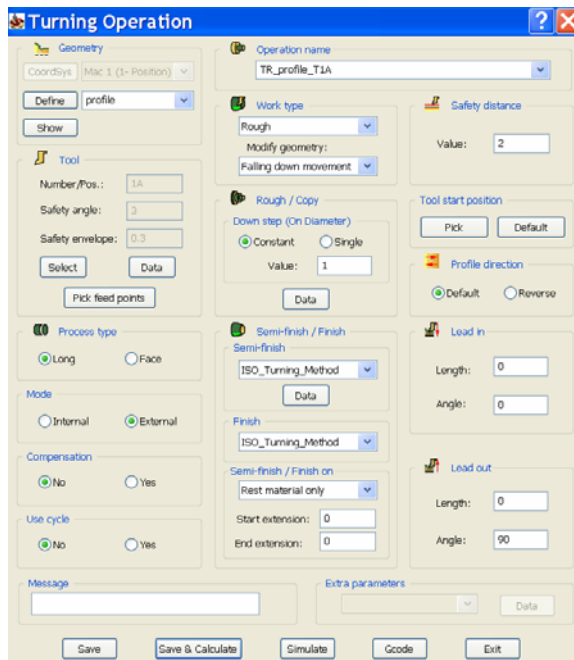
1. Operation: rough turning



define the Tool



AS

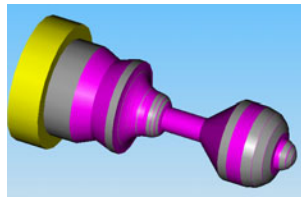
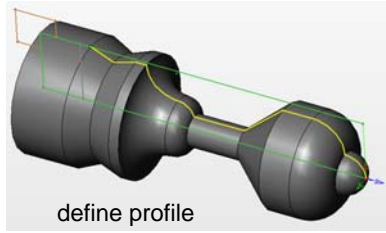


Dialog box

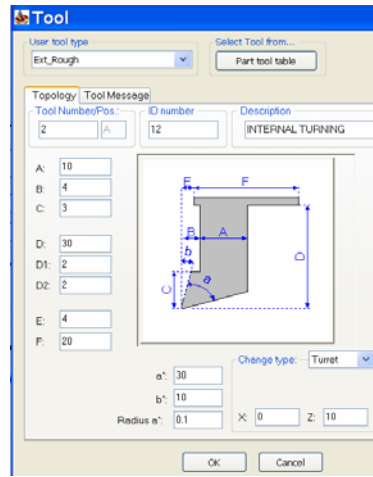
1.Operation:
rough turning

AS

2. Operation: profile turning-finish

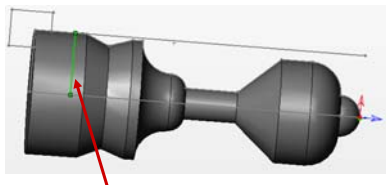


define the Tool

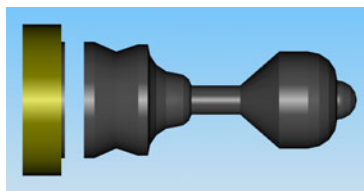


A S

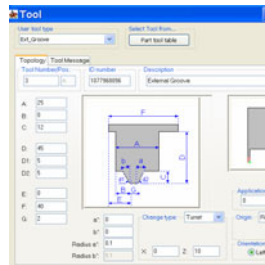
3. Operation: cutting



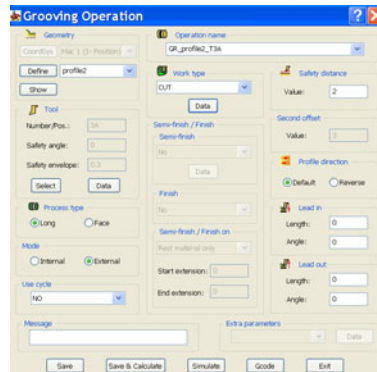
define cutting position-line



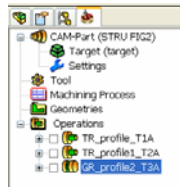
define the Tool



dialog box



A S



```
%  
:11 (STRUFIG2.TAP)  
/G28 U0. W0.  
M01  
N01 ( T01 )  
G28 U0.  
T0101  
G0 X150. Z200.  
G97 S1000 M3  
G0 X16. Z3. M8  
(-----)  
(TR-PROFILE-T1A - TURN)  
(-----)  
G99 G97  
G0 X16. Z3.  
Z2.  
X14.  
X10.  
G1 Z-3.44 F0.3  
G3 X11.6 Z-5.84 R4.  
G1 Z-9.16  
G3 X11.441 Z-9.551 R1.  
G1 X10. Z-11.249  
Z-21.263  
G2 X10.367 Z-21.306 R2.  
G1 X12. Z-21.458  
G0 X12.4  
Z-13.249  
G1 X10. Z-11.249  
X8. Z-13.605  
Z-20.604  
G2 X10. Z-21.263 R2.  
G1 X10.4 Z-21.063  
G0 Z-13.605  
G1 X8.  
X6. Z-15.962  
Z-17.767  
G3 X7.1 Z-19.34 R2.525  
G2 X8. Z-20.604 R2.
```

G code...