



# TOS VARNSDORF a.s.

www.tosvarnsdorf.eu

**VARNSDORF**  
**TOS**

## Interpolation turning

**New technological  
function**

**Company TOS VARNSDORF a.s. has extended the offer of machines technological usage. Machines have been fully tested on new technology of interpolation turning.**

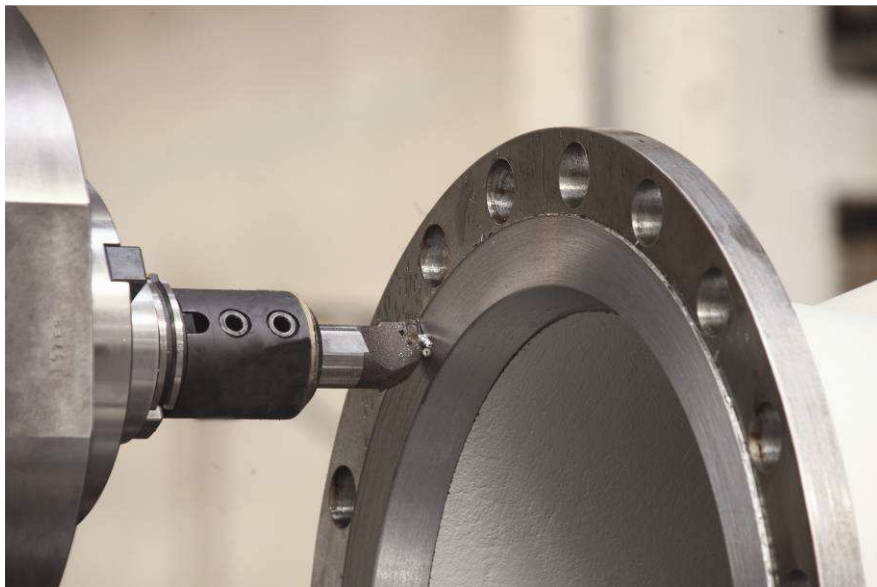
**Technology of interpolation turning can be applied on all machines of TOS VARNSDORF a.s. company.**



The technology has been tested on control systems HEIDENHAIN iTNC530 and SIEMENS Sinumerik 840D.

**Examples of practical use:**

### WHN 110 Q

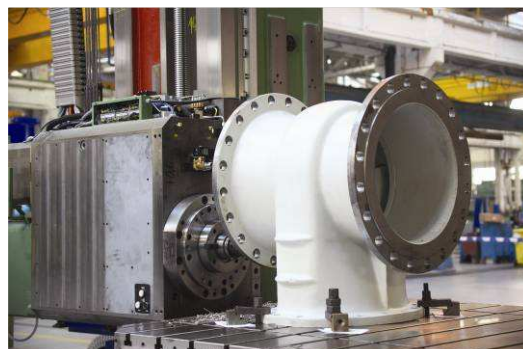


**Workpiece from cast iron GG20 – valve body - clamped on the table.**

Feed  $F = 10,000$  mm/min  
Machined average  $D = 550$  mm  
Spindle speed  $n = 7$  R.P.M.  
Cutting speed  $vc = 14$  m/min

Spindle power =  $0,35$  kW  
Feed/spindle speed  $f =$  from  $0,1$  up to  $0,3$  mm  
Machining depth  $ap = 2$  mm

**Achievements:  
Roundness –  $0,02$  mm**



# WRD 130 Q

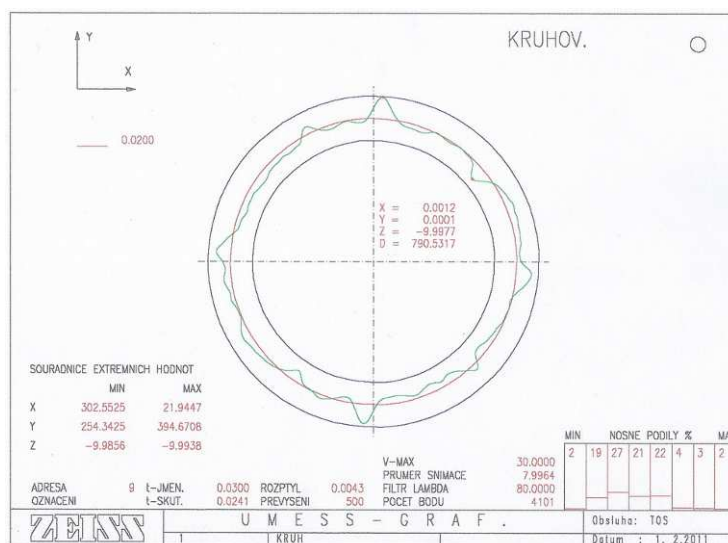


**Workpiece from steel - armature flange**  
ČSN 11 600 (DIN St 60-2) clamped on  
clamping angle plate UU2000.

Feed  $F = 15,000$  mm/min  
Machined average  $D = 790$  mm  
Spindle speed  $n = 6,5$  R.P.M.  
Cutting speed  $vc = 16$  m/min

Spindle power =  $0,4$  kW  
Feed/spindle speed  $f =$  from  $0,2$  up to  $0,3$  mm  
Machining depth  $ap =$  from  $1,5$  up to  $3$  mm

**Achievements: roundness – 0,02 mm**



### Surface quality

- 1.a – face turning  $f = 0,3$  mm/R,  $ap = 3$  mm
- 1.b – face turning  $f = 0,2$  mm/R,  $ap = 1$  mm
- 2 – face turning  $f = 0,2$  mm/R,  $ap = 0,05$  mm

R = spindle speed

