

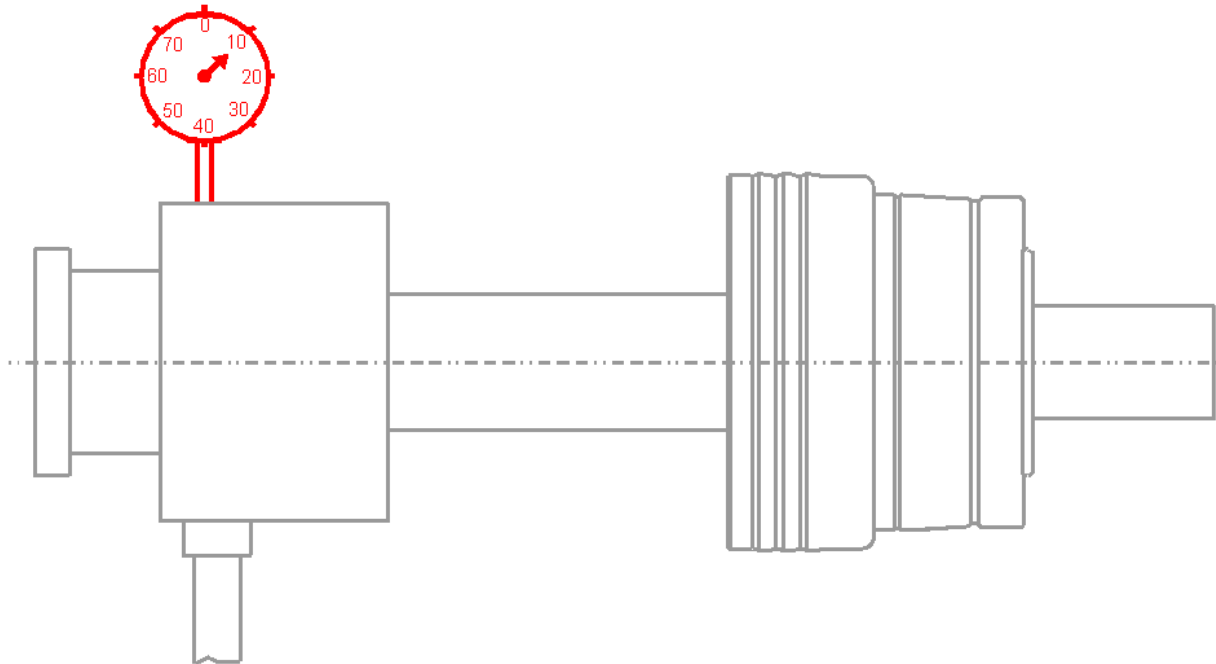
TOPlus IQ

intelligent chuck

TOPlus IQ chuck

Type 1 – TOPlus kuro:

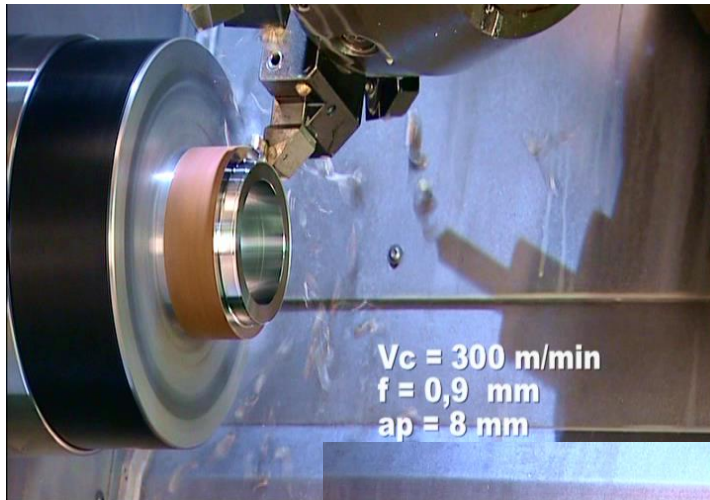
- Control of clamping forces by changing the pressure of the clamping cylinder



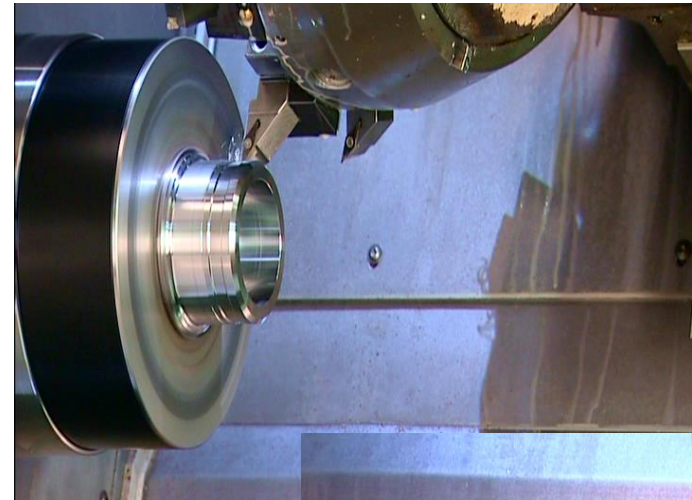
TOPlus IQ chuck

Type 1 – TOPlus kuro:

- Control of clamping forces by changing the pressure of the clamping cylinder



Rough machining of outer-Ø with clamping **pressure** of 40 bar [580 psi]
Vc = 300 m/min [984 ft per min]
f = 0,9 mm [.035 in.]
ap = 8 mm [.31 in.]

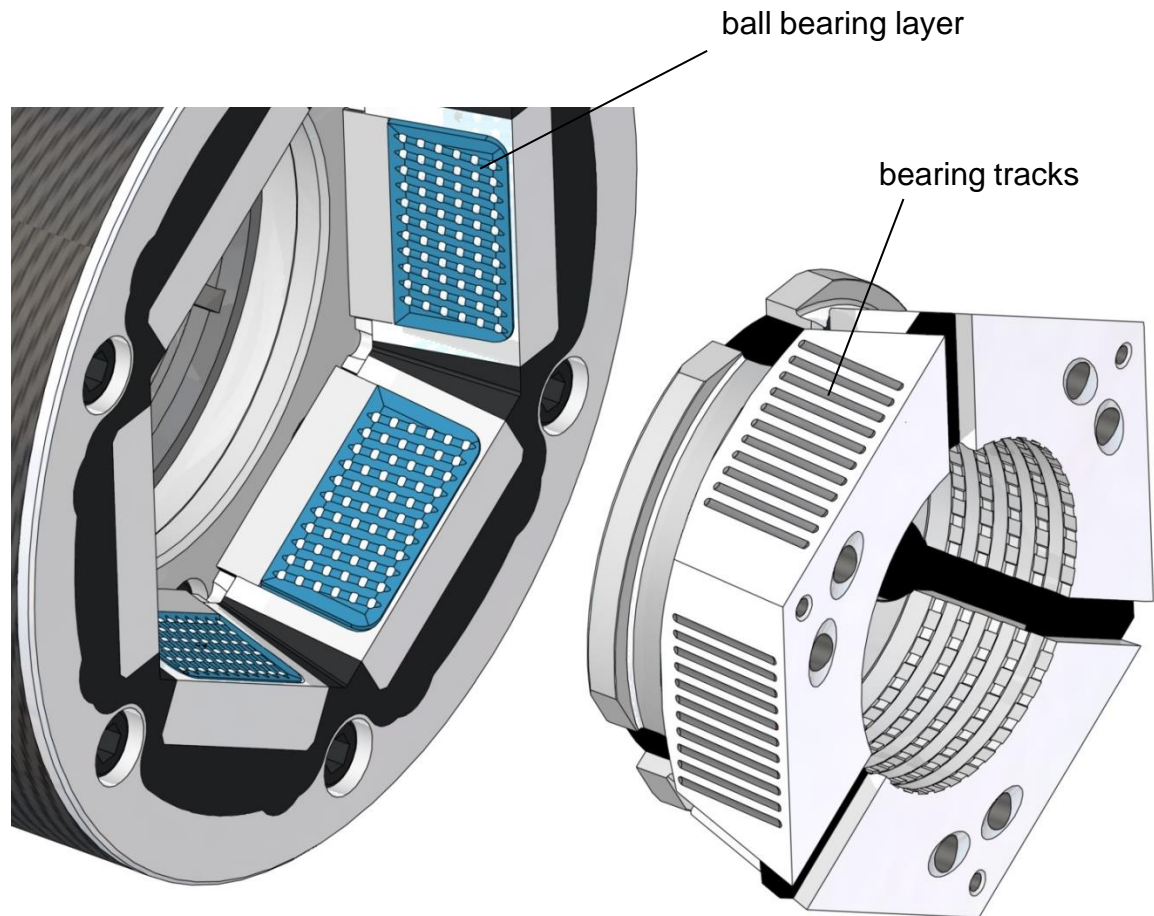


Fine machining of outer-Ø with clamping **pressure** of 20 bar [290 psi]

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Type 1 – TOPlus kuro:

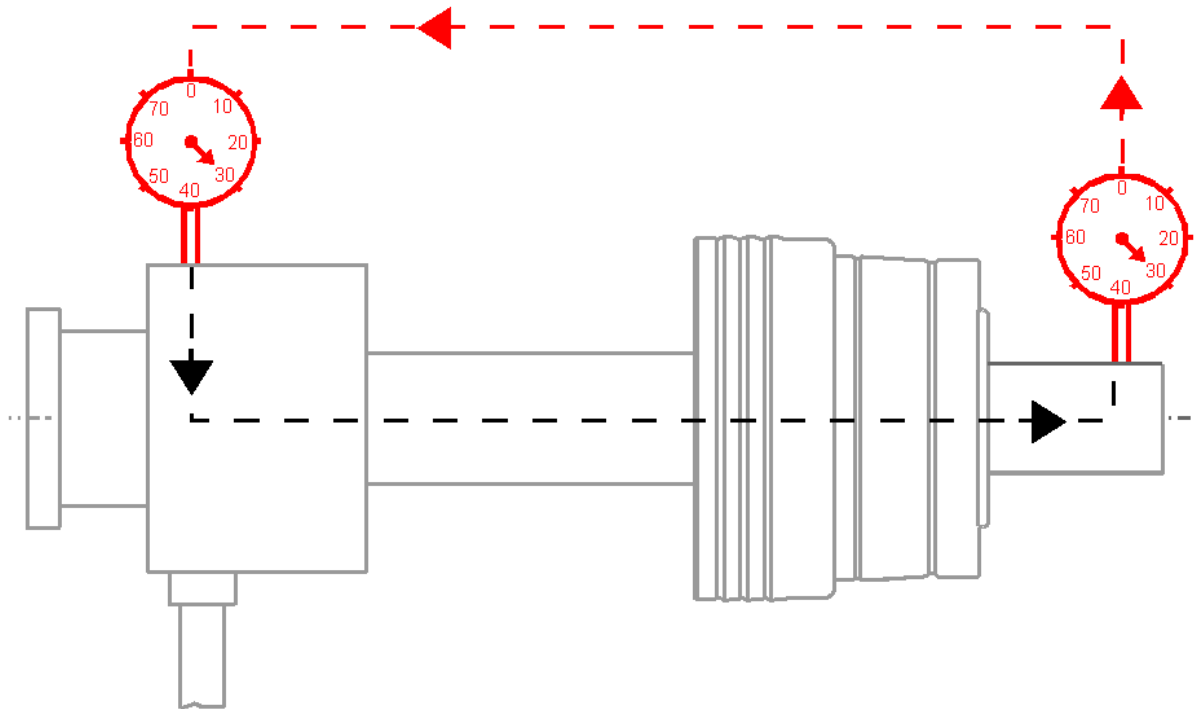
- prerequisite: no sticking friction within the chuck



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Type 2 – adjustable clamping force:

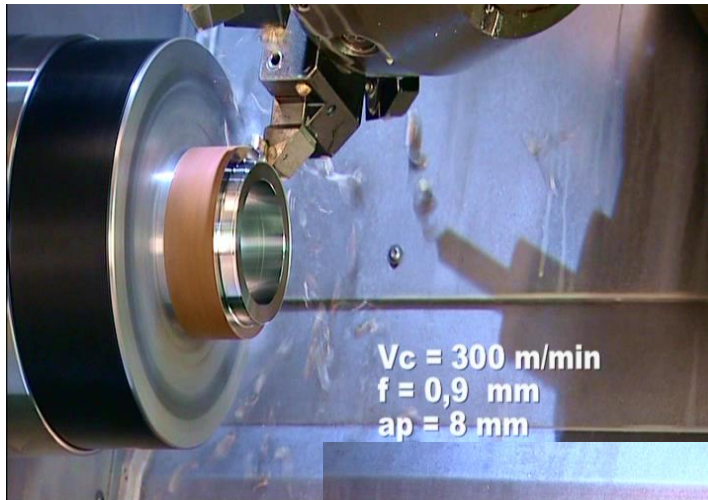
- measuring of effective clamping force
- adjustment of clamping force while machining
- compensation of varying centrifugal force



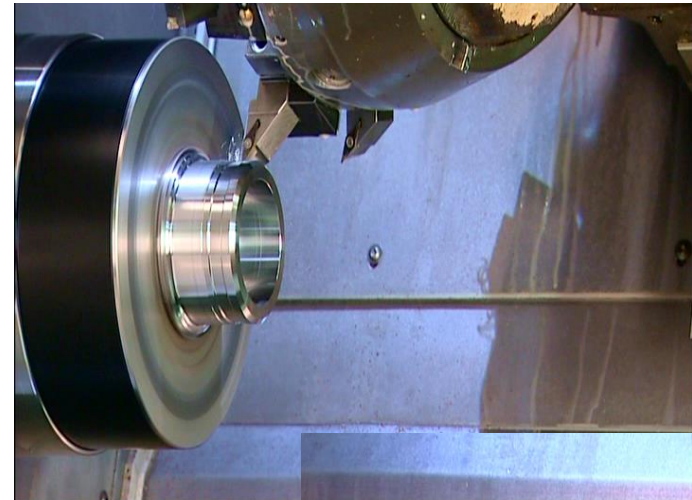
TOPlus IQ chuck

Type 2 – adjustable clamping force:

- Measuring of effective clamping force
- Adjustment of clamping force while machining
- Compensation of varying centrifugal force [control cycle]



Rough machining of outer- \emptyset with clamping **force** of 45 kN [10,100 lbf]
 $V_c = 300 \text{ m/min}$ [984 ft per min]
 $f = 0,9 \text{ mm}$ [.035 in.]
 $ap = 8 \text{ mm}$ [.31 in.]

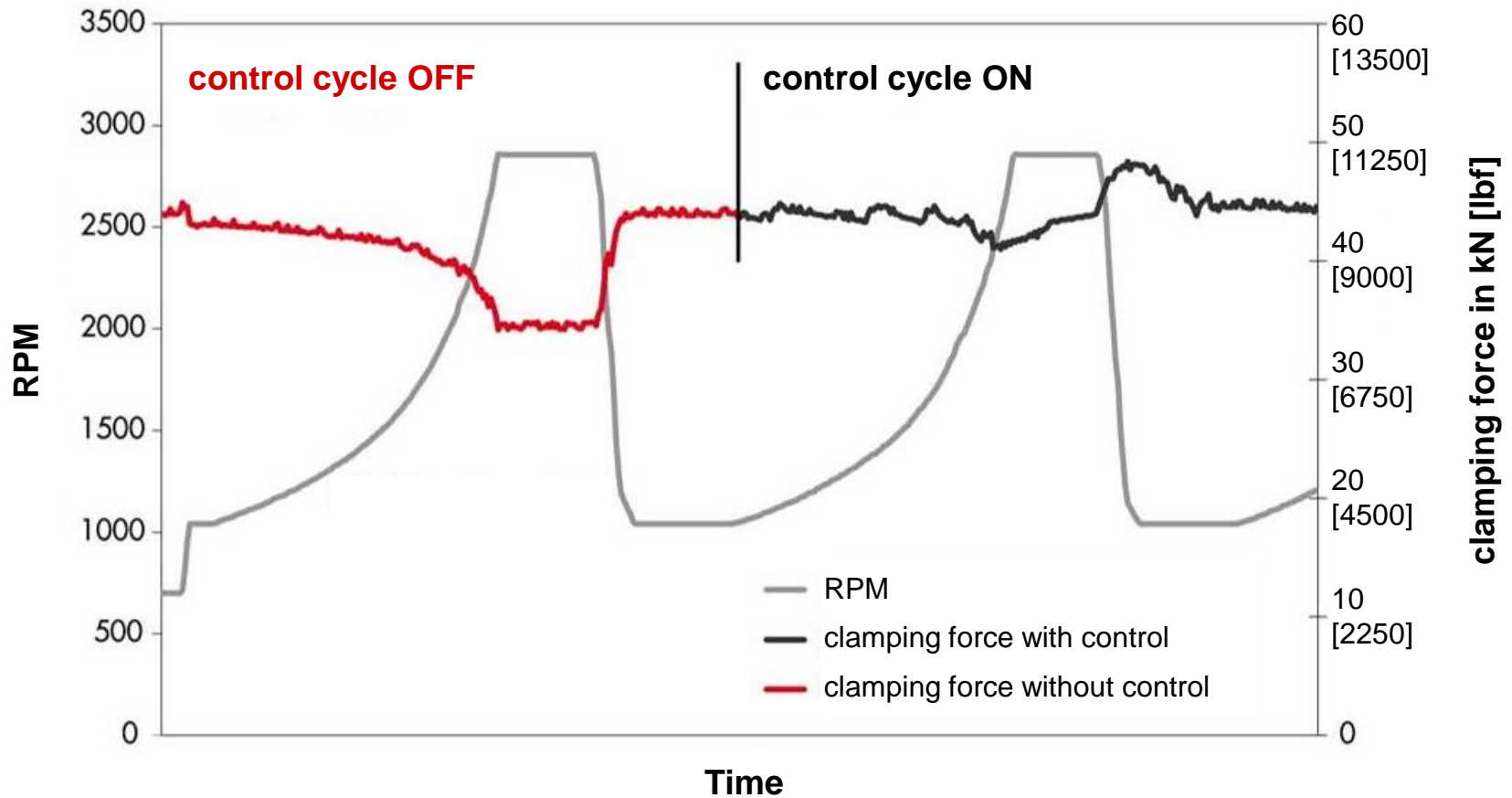


Fine machining of outer- \emptyset with clamping **force** of 25 kN [5,600 lbf]

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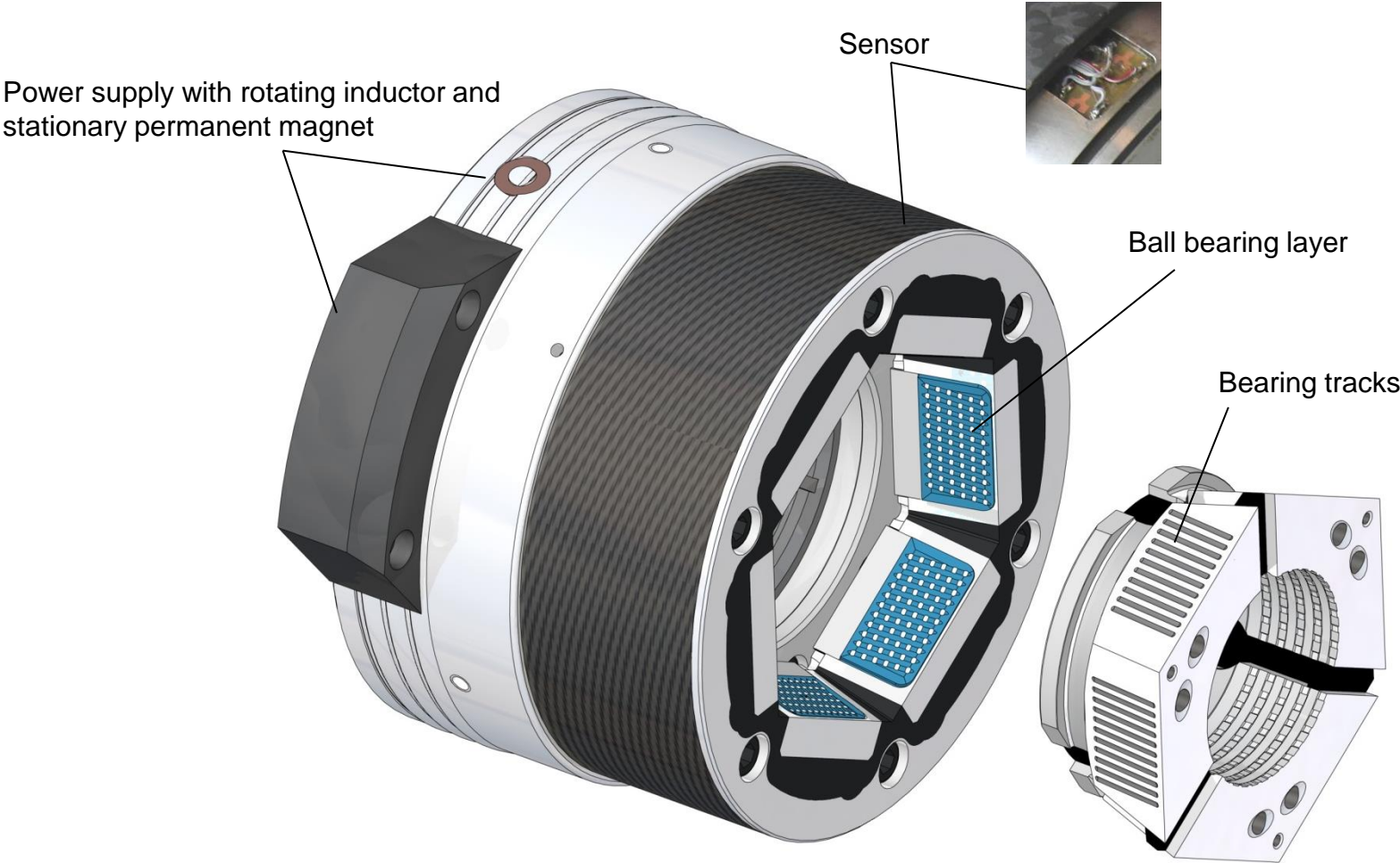
Type 2 – adjustable clamping force:

- Control cycle [increasing RPM from 1000 to 2500]



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Type 2 – adjustable clamping force:



And what can we do for you?