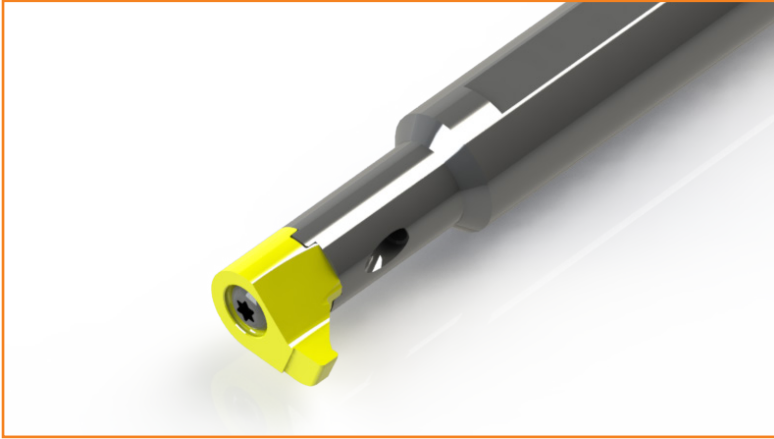


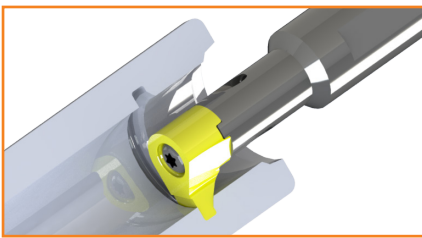
WPI System

Internal turning operations with interchangeable inserts
from bore- \varnothing 12

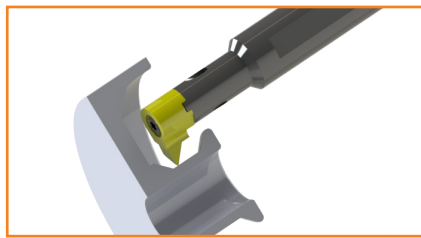


Internal coolant directly to
the cutting edge

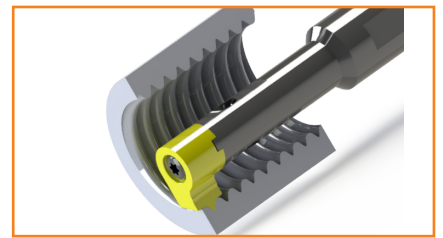
Customized applications:



Profile grooving



Turning



Thread turning

WPI System

Internal turning operations with interchangeable inserts

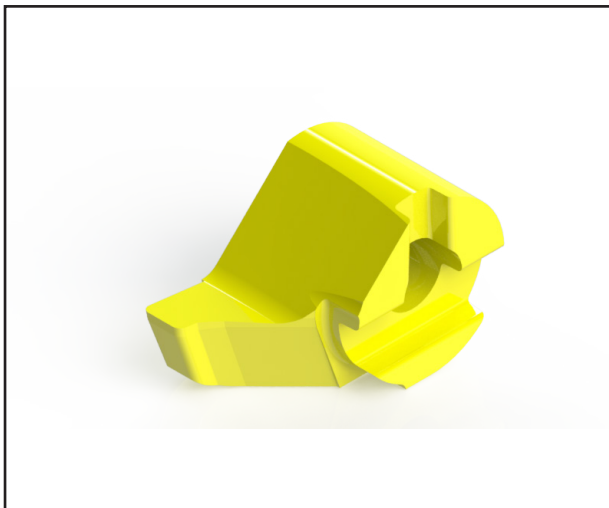
Schwanog tools impress with their high quality and customized flexibility.

In the field of internal turning, we have developed an interchangeable insert system that closes a previously existing product gap in the internal machining of workpieces between bore $\varnothing 12$ and $\varnothing 18$.

In addition to the established WSI-solid carbide systems (from bore $\varnothing 1$) and the PWP, DCI and WEP indexable insert systems (from bore $\varnothing 18$), the new WPI system is an ideal product supplement for this diameter range.

The interface developed in-house offers the following features:

- High changeover accuracy (centre height from insert to insert ± 0.015)
- High stability due to positive and non-positive locking
- Easy handling
- Internal coolant supply (IK outlet optionally on the front or rear, optionally on both sides)



Wherever standard tools can no longer meet workpiece-specific requirements, Schwanog is a competent and flexible partner.

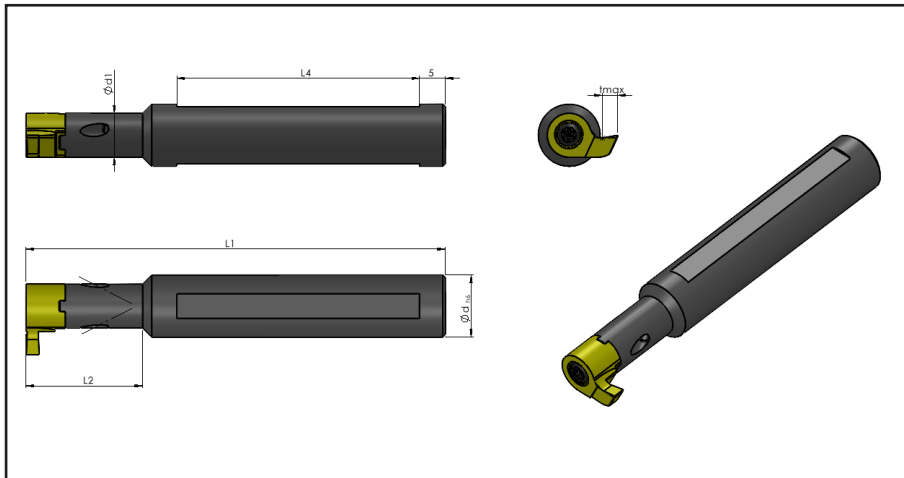
With the WPI system, we can now offer another cost-effective product in this market segment.

WPI System

Internal turning operations with interchangeable inserts

Round shaft holder with 2 clamping surfaces

Steel version with internal coolant supply



- Bore \varnothing from: 12 mm
- Grooving width up to: 5.5 mm
- Grooving depth up to: 4.2 mm

Depending on material and projection length:

- $t_{max} = 2.6$ mm from bore $\varnothing 12$
- $t_{max} = 4.2$ mm from bore $\varnothing 14$

Right-hand version

Illustration with interchangeable insert (interchangeable insert not included with the holder)

| Article No. | $\varnothing d$ | $\varnothing d_1$ | L_1 | L_2 | L_4 |
|-------------|-----------------|-------------------|-------|-------|-------|
| 348416 | 12 | 8,5 | 81 | 22 | 47 |
| 365920 | 12 | 8,5 | 90 | 30 | 47 |
| 365922 | 12 | 8,5 | 95 | 35 | 47 |
| 366243 | 12 | 8,5 | 100 | 42 | 47 |
| 362728 | 14 | 8,5 | 95 | 35 | 47 |
| 366244 | 14 | 8,5 | 100 | 42 | 47 |
| 359203 | 16 | 8,5 | 86 | 22 | 47 |
| 366245 | 16 | 8,5 | 95 | 30 | 47 |
| 366246 | 16 | 8,5 | 100 | 35 | 47 |
| 366247 | 16 | 8,5 | 105 | 42 | 47 |

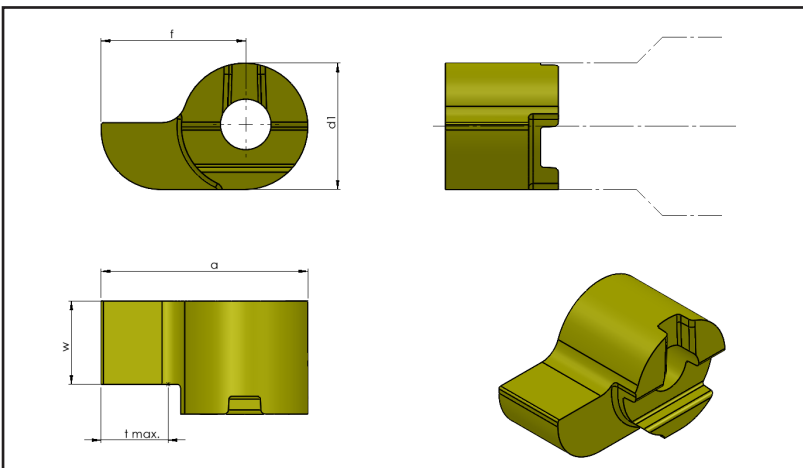
Special dimensions on request

Spare parts

| Fixing screw |
|--------------|
| 313499 |

Interchangeable insert type WPI - Blank insert for profile inserts

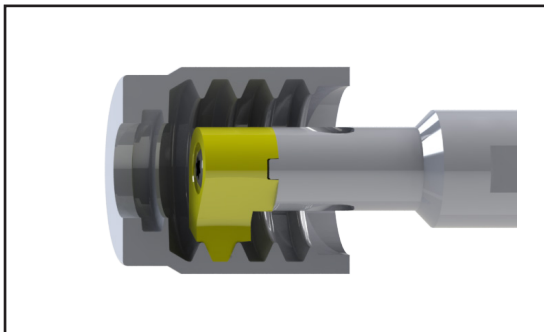
Grooving depth up to 4.2 mm



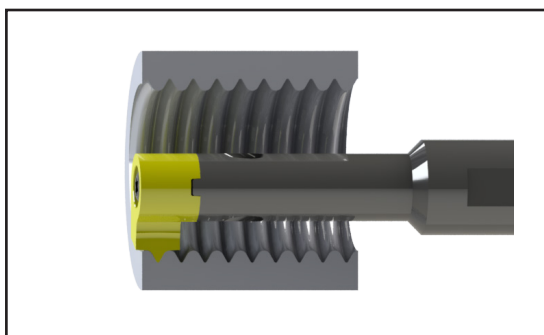
Right-hand version / HM fine grain

| Article No. | a | d_1 | w | f | t_{max} |
|-------------|-------|-------|------|------|-----------|
| 348418 | 13.65 | 8.50 | 5.50 | 9.40 | 4.20 |

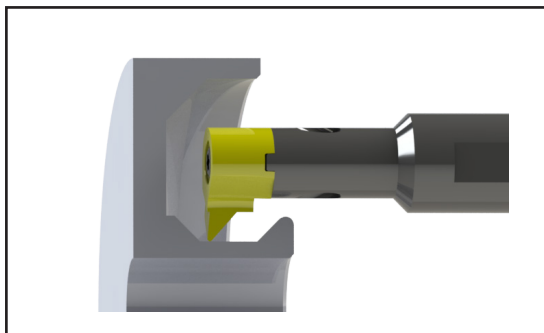
Application examples



Machining: Internal grooving from $\varnothing 14.6$ to $\varnothing 18.5$
Material: C45
Cutting data: $vc = 80 \text{ m/min}$
 $f = 0.03 \text{ mm/rev}$



Machining: Chasing special thread $P=3$ from $\varnothing 16$ to $\varnothing 19$
Material: 42CrMo4V
Cutting data: $vc = 65 \text{ m/min}$
12 cuts



Machining: Copy turning in axial recess from $\varnothing 22$ to $\varnothing 16$
Material: X20Cr13 1.4021
Cutting data: $vc = 65 \text{ m/min}$
 $f = 0.05 \text{ mm/rev}$ $ap = 1 \text{ mm}$