



ROTARY BROACHING TOOLS WITH INTERNAL COOLING

- INTERNAL AND EXTERNAL PROFILES WITHIN SECONDS
- OPTIMAL PROCESS COOLING
- PERFECT CHIP REMOVAL
- EXACT PROFIL

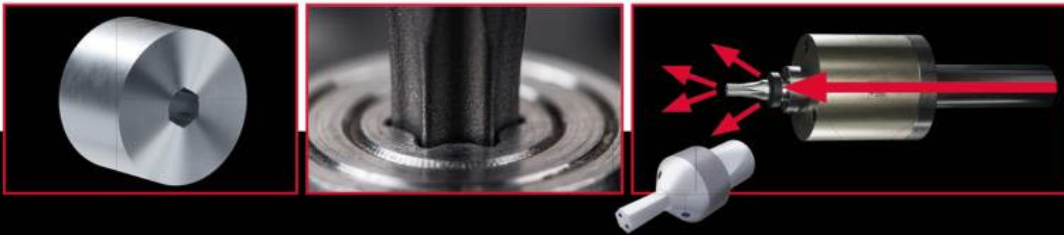


Hommel+Keller

Rotary broaching tools with internal cooling

Internal profiles within seconds with optimal process cooling and chip removal

Rotary broaching perfectly complements our range of precision tools. With the machining production method, internal profiles such as square, hexagon, Torx and Torx Plus can be produced within seconds in component parts made from materials up to 35 HRC.



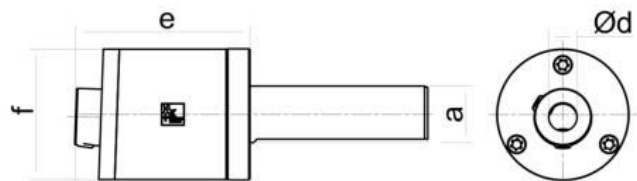
Hommel+Keller Rotary broaching tools for internal profiles

What is special about the Hommel+Keller rotary broaching tools: **The tools have internal cooling for emulsion or oil – which is currently unique on the market.** This optimized process cooling reduces wear and thus significantly increases the service life of the broaching inserts. Chip removal is also excellent, which increases process reliability, and a neat and precise profile is produced.

With numerous variants for shank connections and adapters – cylinder, morse taper, ISO-DIN 69871 / DIN 2080 connecting and VDI shanks as well as CAPTO® (Sandvik) attachments – the appropriate connection for every machine is available.

Here's how: The tool consists of a rotary broaching holder and a broaching insert for the particular profile. Via a concentric movement, the broach generates the desired profile in a quick and process-reliable manner in just one pass.

Rotary broaching holder

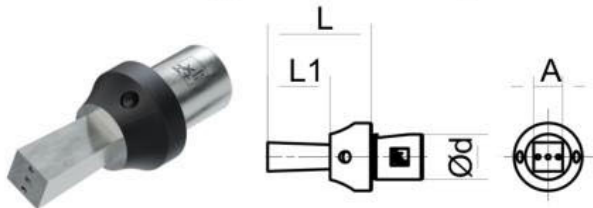


dimensions in mm

| Item no. | Shank Ø (a) | e | f | Ød |
|----------|-------------|----|----|----|
| 60000000 | 12 | 46 | 35 | 8 |
| 60000001 | 16 | 46 | 35 | 8 |
| 60000002 | 16 | 65 | 47 | 12 |
| 60000014 | 20 | 65 | 47 | 12 |
| 60000009 | 22 | 65 | 47 | 12 |
| 60000015 | 25 | 65 | 47 | 12 |

Hommel+Keller broaching inserts with the profiles square, hexagon, Torx and Torx Plus **> are available from stock.**

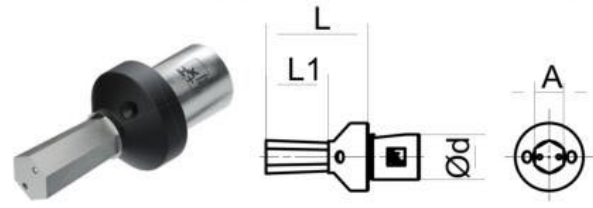
Broaching insert **Square**



dimensions in mm

| Item no. | L | L1 | Ød | A |
|----------|----|----|----|-----|
| 61000013 | 18 | 5 | 8 | 2 |
| 61000014 | 18 | 6 | 8 | 2,5 |
| 61000015 | 18 | 7 | 8 | 3 |
| 61000016 | 18 | 8 | 8 | 3,5 |
| 61000017 | 18 | 9 | 8 | 4 |
| 61000018 | 18 | 9 | 8 | 4,5 |
| 61000019 | 18 | 11 | 8 | 5 |
| 61000020 | 18 | 11 | 8 | 5,5 |
| 61000021 | 18 | 13 | 8 | 6 |
| 61000022 | 18 | 15 | 8 | 7 |
| 61000023 | 18 | 15 | 8 | 8 |
| 61000042 | 25 | 5 | 12 | 2 |
| 61000043 | 25 | 6 | 12 | 2,5 |
| 61000044 | 25 | 7 | 12 | 3 |
| 61000045 | 25 | 8 | 12 | 3,5 |
| 61000046 | 25 | 9 | 12 | 4 |
| 61000047 | 25 | 9 | 12 | 4,5 |
| 61000048 | 25 | 11 | 12 | 5 |
| 61000049 | 25 | 11 | 12 | 5,5 |
| 61000050 | 25 | 13 | 12 | 6 |
| 61000051 | 25 | 15 | 12 | 7 |
| 61000052 | 25 | 17 | 12 | 8 |
| 61000053 | 25 | 19 | 12 | 9 |
| 61000054 | 25 | 21 | 12 | 10 |
| 61000055 | 25 | 21 | 12 | 11 |
| 61000056 | 25 | 21 | 12 | 12 |

Broaching insert **Hexagon**



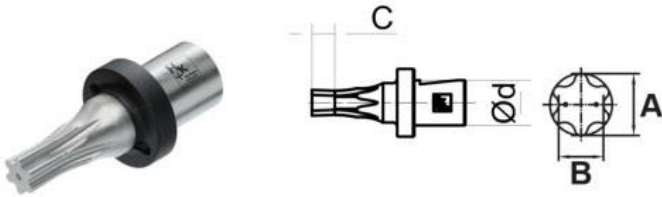
dimensions in mm

| Item no. | L | L1 | Ød | A |
|----------|----|----|----|-----|
| 61000000 | 18 | 5 | 8 | 2 |
| 61000001 | 18 | 6 | 8 | 2,5 |
| 61000002 | 18 | 7 | 8 | 3 |
| 61000003 | 18 | 8 | 8 | 3,5 |
| 61000004 | 18 | 9 | 8 | 4 |
| 61000005 | 18 | 9 | 8 | 4,5 |
| 61000006 | 18 | 11 | 8 | 5 |
| 61000007 | 18 | 11 | 8 | 5,5 |
| 61000008 | 18 | 13 | 8 | 6 |
| 61000009 | 18 | 15 | 8 | 7 |
| 61000010 | 18 | 15 | 8 | 8 |
| 61000011 | 18 | 15 | 8 | 9 |
| 61000012 | 18 | 15 | 8 | 10 |
| 61000024 | 25 | 5 | 12 | 2 |
| 61000025 | 25 | 6 | 12 | 2,5 |
| 61000026 | 25 | 7 | 12 | 3 |
| 61000027 | 25 | 8 | 12 | 3,5 |
| 61000028 | 25 | 9 | 12 | 4 |
| 61000029 | 25 | 9 | 12 | 4,5 |
| 61000030 | 25 | 11 | 12 | 5 |
| 61000031 | 25 | 11 | 12 | 5,5 |
| 61000032 | 25 | 13 | 12 | 6 |
| 61000033 | 25 | 15 | 12 | 7 |
| 61000034 | 25 | 17 | 12 | 8 |
| 61000035 | 25 | 19 | 12 | 9 |
| 61000036 | 25 | 21 | 12 | 10 |
| 61000037 | 25 | 21 | 12 | 11 |
| 61000038 | 25 | 21 | 12 | 12 |
| 61000039 | 25 | 21 | 12 | 13 |
| 61000040 | 25 | 21 | 12 | 14 |
| 61000041 | 25 | 21 | 12 | 15 |

High process reliability and stability

- > Holder and broach lie flat against each other.
- > All Hommel+Keller broaches are provided with Hommel+Keller's own INOX Plus coating.

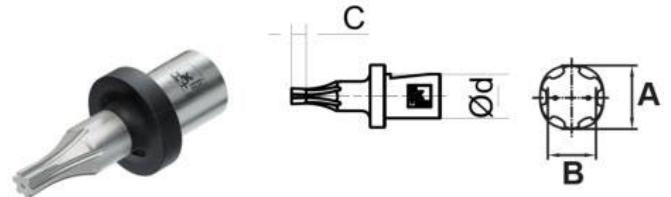
Broaching insert **Torx**



dimensions in mm

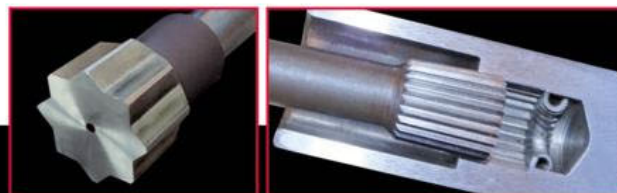
| Item no. | Size | C | Ød | A | B |
|----------|------|-----|----|--------|-------|
| 61000057 | 8 | 2 | 8 | 2,418 | 1,756 |
| 61000058 | 9 | 2 | 8 | 2,603 | 1,889 |
| 61000059 | 10 | 2 | 8 | 2,844 | 2,057 |
| 61000060 | 15 | 3 | 8 | 3,378 | 2,438 |
| 61000061 | 20 | 3,5 | 8 | 3,962 | 2,857 |
| 61000062 | 25 | 4 | 8 | 4,559 | 3,276 |
| 61000063 | 27 | 4 | 8 | 5,118 | 3,672 |
| 61000064 | 30 | 4,5 | 8 | 5,651 | 4,064 |
| 61000065 | 40 | 5 | 8 | 6,807 | 4,889 |
| 61000066 | 8 | 2 | 12 | 2,418 | 1,756 |
| 61000067 | 9 | 2 | 12 | 2,603 | 1,889 |
| 61000068 | 10 | 2 | 12 | 2,844 | 2,057 |
| 61000069 | 15 | 3 | 12 | 3,378 | 2,438 |
| 61000070 | 20 | 3,5 | 12 | 3,962 | 2,857 |
| 61000071 | 25 | 4 | 12 | 4,559 | 3,276 |
| 61000072 | 27 | 4 | 12 | 5,118 | 3,672 |
| 61000073 | 30 | 4,5 | 12 | 5,651 | 4,064 |
| 61000074 | 40 | 5 | 12 | 6,807 | 4,889 |
| 61000075 | 45 | 5,5 | 12 | 7,975 | 5,689 |
| 61000076 | 50 | 6 | 12 | 8,991 | 6,502 |
| 61000077 | 55 | 7 | 12 | 11,404 | 8,089 |
| 61000078 | 60 | 7,5 | 12 | 13,487 | 9,677 |

Broaching insert **Torx Plus**



dimensions in mm

| Item no. | Size | C | Ød | A | B |
|----------|------|-----|----|--------|--------|
| 61000079 | 8 | 2 | 8 | 2,418 | 1,86 |
| 61000080 | 9 | 2 | 8 | 2,603 | 2,014 |
| 61000081 | 10 | 2 | 8 | 2,844 | 2,174 |
| 61000082 | 15 | 3 | 8 | 3,378 | 2,606 |
| 61000083 | 20 | 3,5 | 8 | 3,962 | 3,088 |
| 61000084 | 25 | 4 | 8 | 4,559 | 3,492 |
| 61000085 | 27 | 4 | 8 | 5,118 | 3,99 |
| 61000086 | 30 | 4,5 | 8 | 5,651 | 4,391 |
| 61000087 | 40 | 5 | 8 | 6,807 | 5,283 |
| 61000088 | 8 | 2 | 12 | 2,418 | 1,86 |
| 61000089 | 9 | 2 | 12 | 2,603 | 2,014 |
| 61000090 | 10 | 2 | 12 | 2,844 | 2,174 |
| 61000091 | 15 | 3 | 12 | 3,378 | 2,606 |
| 61000092 | 20 | 3,5 | 12 | 3,962 | 3,088 |
| 61000093 | 25 | 4 | 12 | 4,559 | 3,492 |
| 61000094 | 27 | 4 | 12 | 5,118 | 3,99 |
| 61000095 | 30 | 4,5 | 12 | 5,651 | 4,391 |
| 61000096 | 40 | 5 | 12 | 6,807 | 5,283 |
| 61000097 | 45 | 6 | 12 | 7,975 | 6,923 |
| 61000098 | 50 | 7 | 12 | 8,991 | 8,766 |
| 61000099 | 55 | 7,5 | 12 | 11,385 | 10,35 |
| 6100100 | 60 | 8 | 12 | 13,442 | 12,156 |



► Individual profiles available on request

Other broaches with individual profiles (e.g. internal octagon, triangle, pentagon, knurled profiles or customer-specific profiles) and dimensions are also available on request.



Hommel+Keller

Rotary broaching tools with internal cooling

External profiles within seconds with optimal process cooling and chip removal

The big advantage: Thanks to the concentric design, the tools can be used on CNC lathes and milling centres as well as on conventional machines. There is no longer the need to move the workpieces to special machines such as broaching or shaper machines or to outsource to cost-intensive production processes such as electroerosion machining.

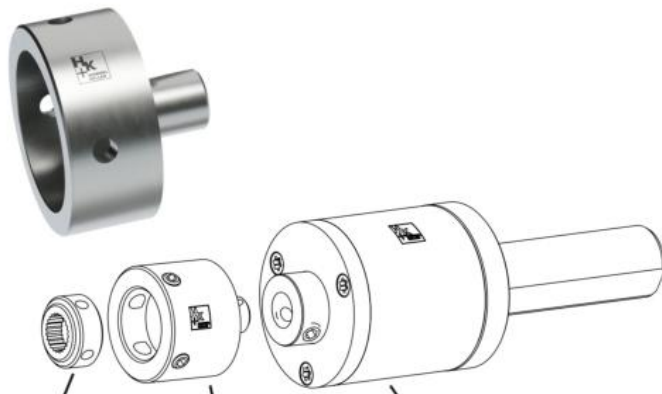


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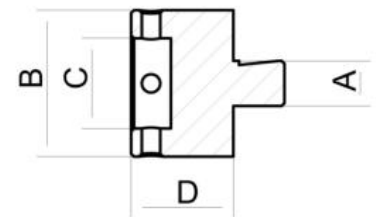
Rotary broaching tools for external profiles

Here's how: The tool consists of a rotary broaching holder, an adapter and a surface broach for the particular profile. Via a concentric movement, the surface broach generates the desired profile in a quick and process-reliable manner in just one pass. Surface broaches with different profiles are available on request.

Adapter (for surface broach for external profiles)



Surface broach for external profile available on request
Adapter
Rotary broaching holder



dimensions in mm

| Item no. | A | B | C | D |
|----------|----|----|----|----|
| 60000004 | 8 | 8 | 16 | 18 |
| 60000005 | 12 | 12 | 32 | 18 |



Hommel+Keller
Pendelräumwerkzeuge



Pendelräumwerkzeuge
➤ **ab Lager lieferbar**



Pendelräumwerkzeug mit Innenkühlung im Einsatz



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