SUMITOMO
CARBIDE - CBN - DIAMOND

HFT System with Octagonal CBN Insert

High Feed Turning HFT with CBN

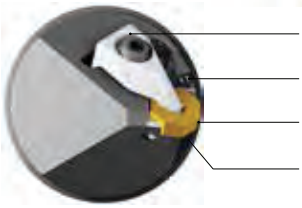
Monoblock Tool Holders in Various Design

Combination possible to adopt to different applications like boring,facing, outer diameter turning, and chamfering.
Couplings available as HSK, VDI, PSC and DIN shank.

VDI

PSC

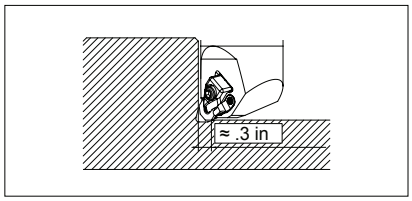
DIN



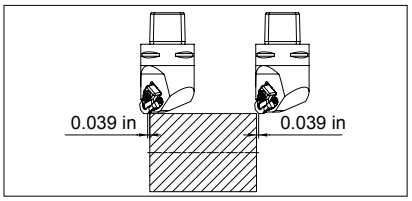
Advantages:

- Special wiper geometry
- High metal removal rates
- Octagonal Insert offers 8 cutting edges
- 8 times higher productivity than conventional hard turning
- Good surface roughness (Rz < 4 µ) even at elevated feed rates of f = 0.047 IPR
- High stiffness monoblock design holders based on HSK, PSC, VDI or DIN coupling

General Details

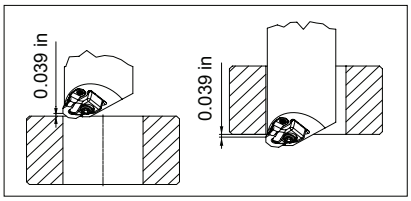


To machine close to shoulder (inner or outer diameter) you need a relief groove of approximately 0.3 in.



Distance overhang shaft exit 0.039 in

Safety distance shaft entrance 0.039 in



Safety distance hole entrance 0.03in

Distance overhang hole exit 0.039in

Cutting Conditions

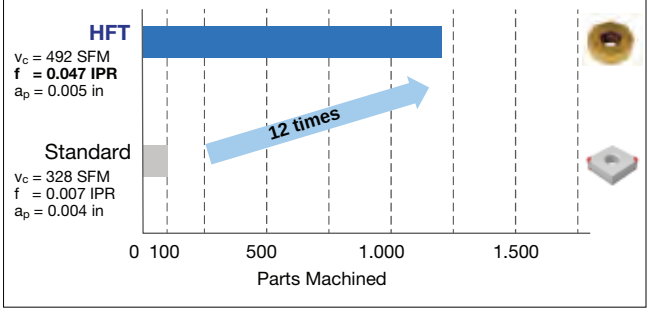
General Conditions*	v_c = 262 ~ 656 SFM	f = 0.008 ~ 0.047 IPR	a_p = 0.002 ~ 0.010 in

* are set according to the project

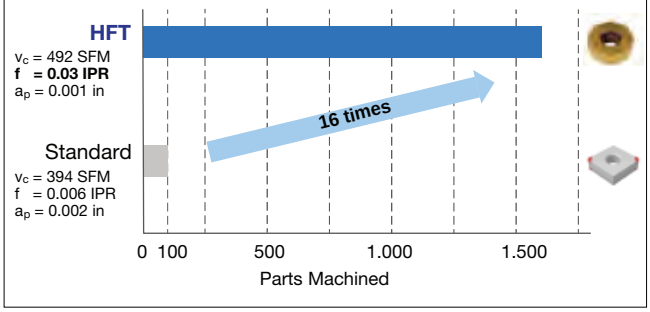
HFT - Offering Production Cost Reduction

Cutting Process Time up to 90 %

Productivity Roughing



Productivity Finishing



Result: **HFT** = 12–16 times faster than existing process with keeping the requested tolerances and surface roughness requirements.
Insert offers double number of cutting edges. Additionally, the tool life could be doubled

Application Range

Inner Diameter Boring

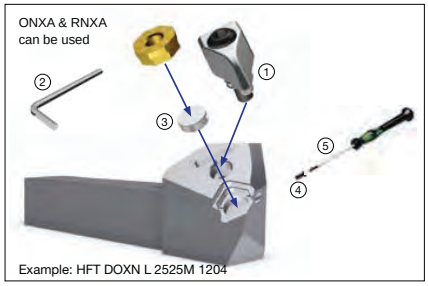
- Through hole application is not recommended (blind hole makes chip stacking and jamming).
- Inner diameter has to be more than 50 mm.
- Length of cut should be less than 3xD.

Outer Diameter and Facing

- Straight outer diameter turning and facing.
- No limitation of part size. But rigidity of the workpieces and clamping are important.

Spare Parts

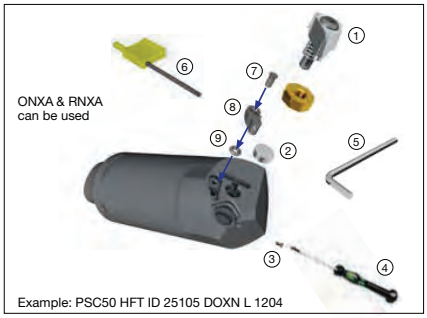
• Spare Parts for HFT-Shank



■ Spare Parts for Clamping System:

① SCP2 → Clamp set
② LH040 → Clamp Wrench
③ CSCFHFT → Shim
④ MIB1.6-3 → Screw
⑤ SDBSM → Screw Wrench

• Spare Parts for VDI40-, PSC50- Toolholders



■ Spare Parts for Clamping System:

① SCP2 → Clamp set
② CSCFHFT → Shim
③ MIB1.6-3 → Screw
④ SDBSM → Screw Wrench
⑤ LH040 → Clamp Wrench
⑥ TRX10 → Torx Wrench

■ Spare Part Set for Coolant Supply:

CBLHFTSP/ CBRHFTSP
→ ⑦ Screw
→ ⑧ Coolant Block
→ ⑨ Seal