

FEATURES OF DIMPLE BAR

Highly rigid steel shank and a lightweight head configuration designed by computer simulation analysis reduces chatter and improves the vibration damping properties.

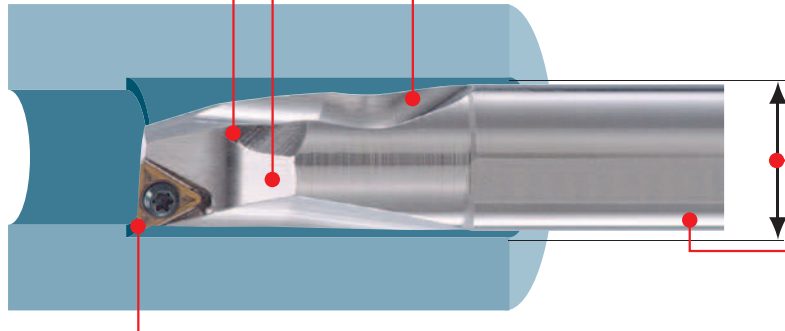
Chip disposal is improved by having two channels for chip evacuation.

The lightweight head with its large dimple reduces chatter.

Available in sizes smaller than the ISO standard. Therefore the boring of small diameter holes is possible.

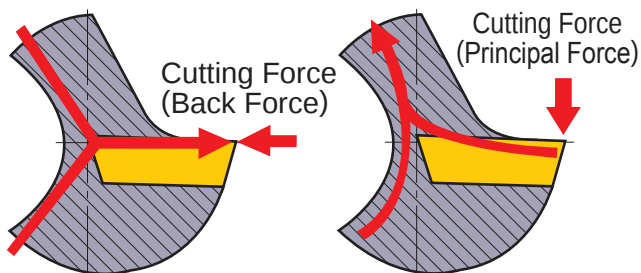
The boring bar has a laser printed scale on the shank to facilitate easy installation.

"F and FS" breakers improves the quality of the surface finish, "MV" breaker offers excellent chip disposal. High wear resistant CBN inserts are also available for the machining of hardened materials.



BORING

DEFLECTION RESISTANCE



The unique cross sectional shape engineered into the dimple effectively balances the cutting forces (principal and back force), and reduces deflection by up to 17%.

Boring Bar	Deflection
DIMPLE BAR	28.3 μ m
Conventional Bar	34 μ m

VIBRATION RESISTANCE

● DIMPLE BAR

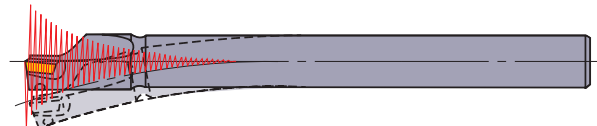
Weight of the Head	Damping Time
49.7g	15.8ms



By reducing the weight of the head, the damping properties are increased.

● Conventional Product

Weight of the Head	Damping Time
70.1g	20ms



★ The simulation data stated above was conducted with a FSCLP1816R-09A holder, under the following conditions;
l/d=5, depth of cut=0.5mm, and feed=0.05mm/rev.

Notes for the use of CCG/MT•CPG/MT•CPMX•TPG/MX type inserts

By changing the clamp screw, it is possible to use the inserts listed on the table below.

Holder : FSCLC/P•FSCLC/P...E

Insert Number	Clamp Screw
CCG/MT0602 $\odot\odot$ (ϕ 6.35)	Can be used as it is.
CPG/MT0802 $\odot\odot$ (ϕ 7.94)	Change to TS3
CPG/MT0903 $\odot\odot$ (ϕ 9.525)	Change to TS4
CPMX0802 $\odot\odot$ (ϕ 7.94)	Can be used as it is.
CPMX0903 $\odot\odot$ (ϕ 9.525)	Can be used as it is.

Holder : FSTUP•FSTUP...E

Insert Number	Clamp Screw
TPG/MX0802 $\odot\odot$ (ϕ 4.76)	Change to CS200T
TPG/MX0902 $\odot\odot$ (ϕ 5.56)	Change to CS250T
TPG/MX1103 $\odot\odot$ (ϕ 9.525)	Change to CS300890T

★ If the screw is too long, please cut to length.

(Note) TPMT/W09, W11 types cannot be used due to a different clamp screw size.