

Gear Cutters

HSP Shaving Cutter



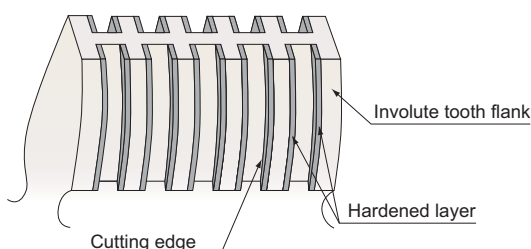
Synergy effect of employing a new tool grade and new coating technology results in increased tool life when machining cast irons, hardened materials (HB250) and when machining large number of teeth (60 and above) and wide workpiece materials (30mm and above).

HSP (Hardened Surface Treatment Premium)

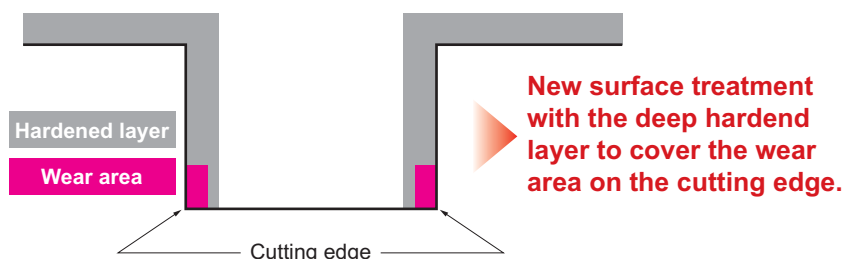
■ Features

- New high speed steel with a higher cobalt content offers improved toughness, hardness and overall wear resistance.
- Good grindability obtained with optimum vanadium content.
- New surface treatment with the deep hardened layer to cover the wear area on the cutting edge.
- Since the stiffened right face layer remains even after it is reground, steady longevity of the cutter can be achieved.

■ Surface treatment



■ Hardened layer



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Machining Example 1 Ring gear (Number of teeth 82)

Gear Dimension

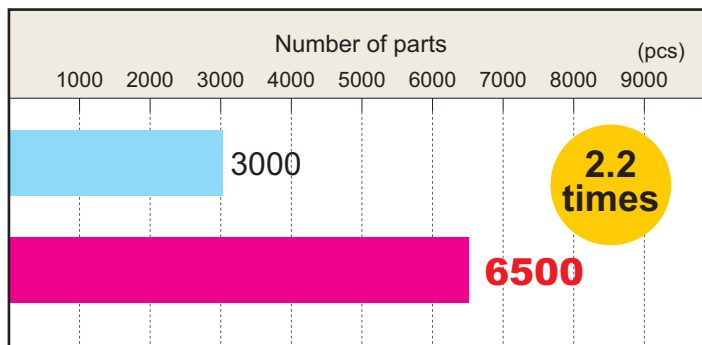
Module	1.5
Pressure angle	14.5°
Number of teeth	82
Helix angle	30°15' RH
Workpiece	HSCM815H
Hardness	Approx. 190 HB

Cutter Dimension

Number of teeth	121
Helix angle	15°LH
SV method	Plunge cut

Conventional
(HSS material + Conventional STH)

HSP



Average machining qty

Machining Example 2 FC material (Hardness approx. 250 HB)

Gear Dimension

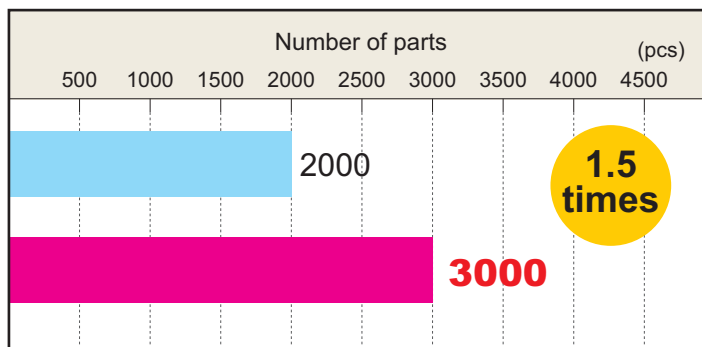
Module	1
Pressure angle	14.5°
Number of teeth	49
Helix angle	34°30' RH
Workpiece	JIS FC250
Hardness	Approx. 250 HB

Cutter Dimension

Number of teeth	199
Helix angle	19°30' LH
SV method	Plunge cut

Competitor

HSP



Average machining qty

For Your Safety

●Don't handle inserts and chips without gloves. ●Please use safety covers and wear safety glasses. ●When using compounded cutting oils, please take fire precautions. ●When using rotating tools, please make a trial run to check run-out, vibration and abnormal sounds etc. Ensure that the insert is correctly set in its location pocket. ●Before use, ensure that the tool setup and various settings (machining programme, etc) on the machine are suited to the tool specifications.

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(Tools specifications subject to change without notice.)