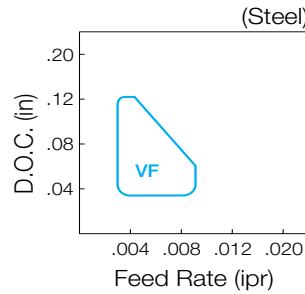


CHIPBREAKER SELECTION (NEGATIVE INSERTS)

Steel (Copying / Undercutting , Varied D.O.C.)

Finishing-Medium	VF		Good chip control for varied ap such as copying and undercutting.

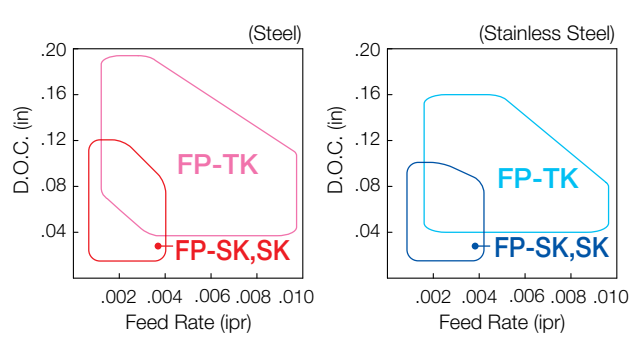
Applicable Chipbreaker Range (D.O.C. Refers to Radial Depth of Cut)



Steel / Stainless Steel (for Small Parts Machining)

Finishing-Medium	SK		For finishing to medium machining in automatic lathes. Sharp cutting performance equivalent to positive inserts. 2-step dot design provides reliable chip control at various D.O.C..
	FP-SK : Polished Sharp Edge -SK : Honed		
Medium-Roughing	FP-TK		For medium to high feed rate in automatic lathes (When machining workpieces of medium to large dia.) Superior cutting performance achieved by sharp edge and polished surface. Smooth chipbreaker geometry improves chip flow with less adhesion. Large curled chips.

Applicable Chipbreaker Range (D.O.C. Refers to Radial Depth of Cut)

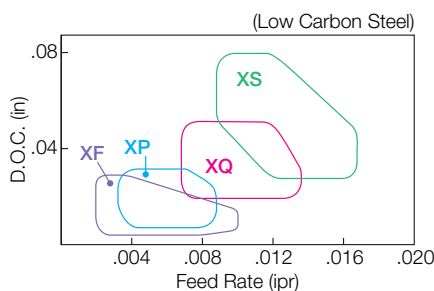


Low Carbon Steel (Pipe / Rolled Plate / Rolled Steel)

Finishing	XF		Excellent chip control at high speed and small D.O.C. machining of low carbon steel.
Finishing	XP		Short chips when finishing due to sharp cutting and special design.

Medium	XQ		Consistent chip breaking at medium machining due to moderate rake face and special design.
Roughing	XS		Consistent chip breaking when roughing due to special rake angle design.

Applicable Chipbreaker Range (D.O.C. Refers to Radial Depth of Cut)



GRADES	A
INSERTS	B
CBN & PCD	C
TOOLHOLDERS	D
SMALL TOOLS	E
BORING	F
GROOVING	G
CUT-OFF	H
THREADING	J
HSK TOOLING	N
SPARE PARTS	P
TECHNICAL	R
INDEX	T