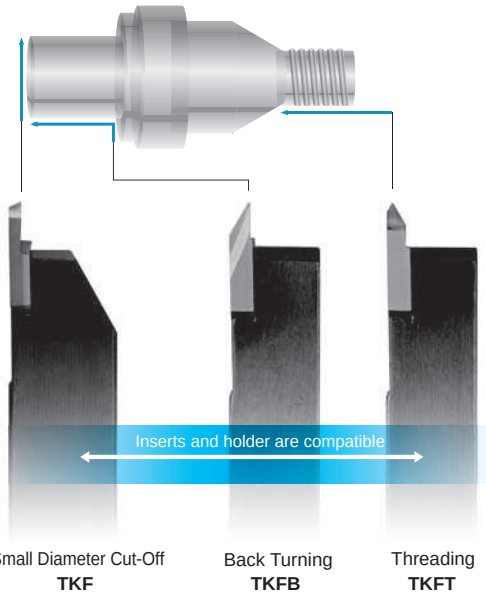
Summary of Threading Inserts

KTKF J18

"Threading" is added to Small Tools special tool series.

Total toolholder length 120 mm series is now available (referred to as JX in the part number).



Threading

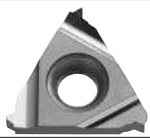
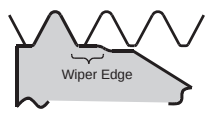
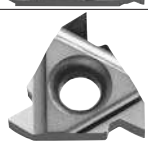
For Threading

TKFT

- Applicable for various types of threading
  - Metric (M)
  - Parallel Pipe [G (PF)]
  - Unified (UN)
  - Tapered Pipe [R (PT) (BSPT)]

Threading Insert Features

Full Profile and Partial Profile

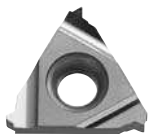
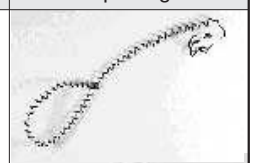
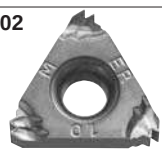
	Shape	Function	Features
Full Profile			① Burr-free thread surface; high quality (Smooth feeling) ② Leave the workpiece diameter slightly oversized for full topping ③ Every pitch size requires a specific insert
Partial Profile			① Thread's corner tends to be sharp edged ② Thread's O.D. or I.D. needs to be finished to the size before threading ③ One insert can machine various pitch sizes

Thread Precision

Type of Thread		Thread Precision Strict ⟷ Loose		
M	External	4h (1st Class)	6g (2nd Class)	8g (3rd Class)
	Internal	5H (1st Class)	6H (2nd Class)	7H (3rd Class)
Unified	External	3A	2A	1A
	Internal	3B	2B	1B
* Applicable precision with Full Profile Insert		×	○	○

* Not recommended if strict thread precision is required.

With and Without Chipbreaker

	Shape	Condition	Cutting Force	Chip Length
Without Chipbreaker		・When less cutting force is needed for small or thin part machining	Small	
1-Thread, With Chipbreaker	-TS 	・When Better Chip Control is needed	Smaller	
2-Thread, With Chipbreaker	-M02 	① Fewer passes and less machining time ② For rigid workpiece ③ Wider dead space	Large (2 Edges engage in threading)