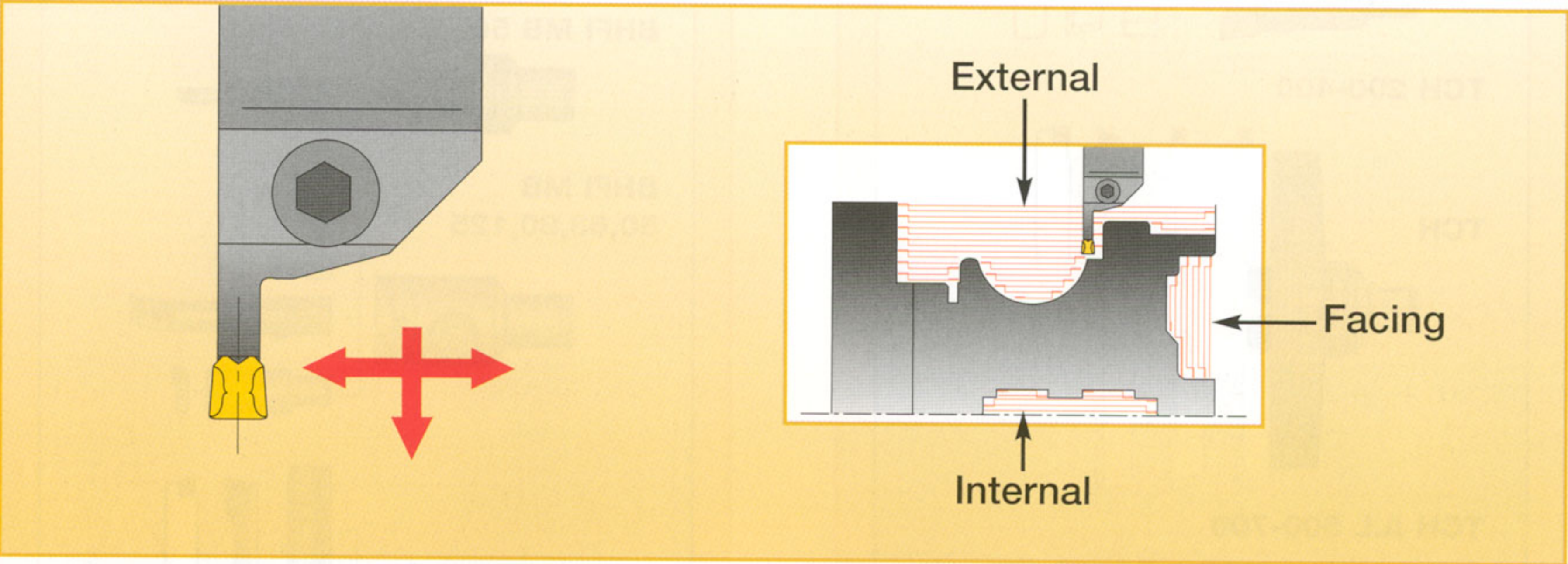
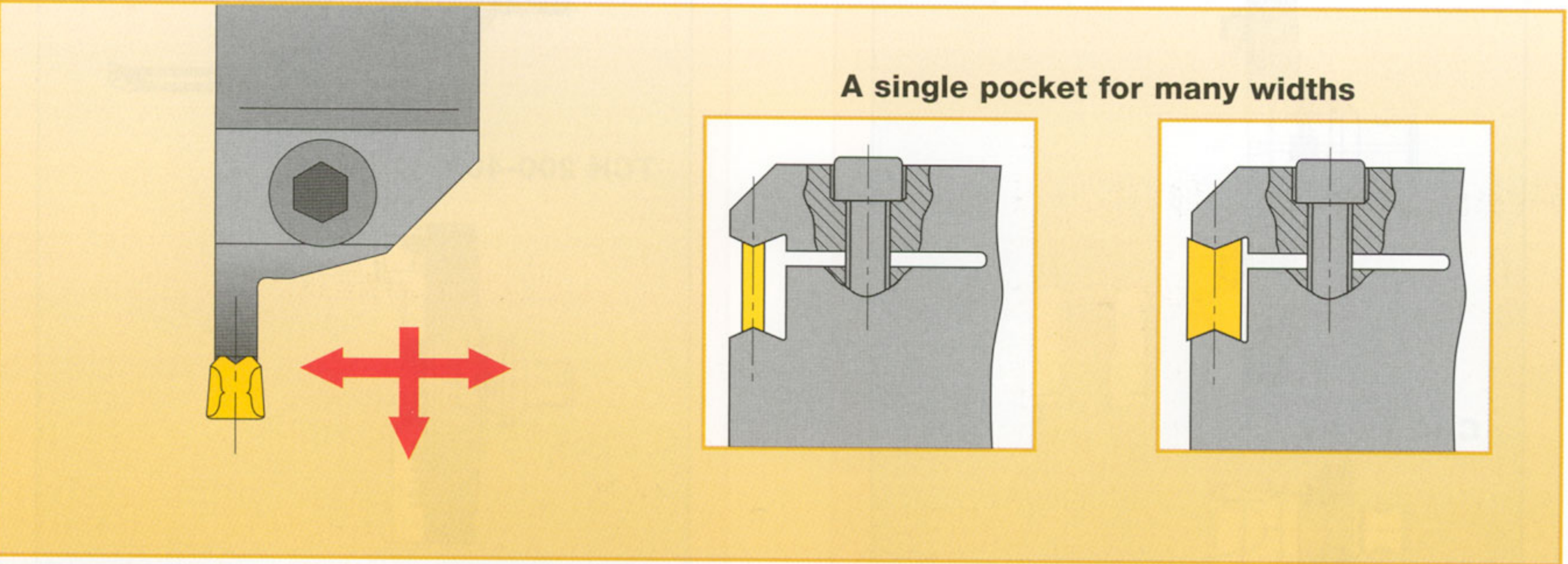


Groove-Turn Systems

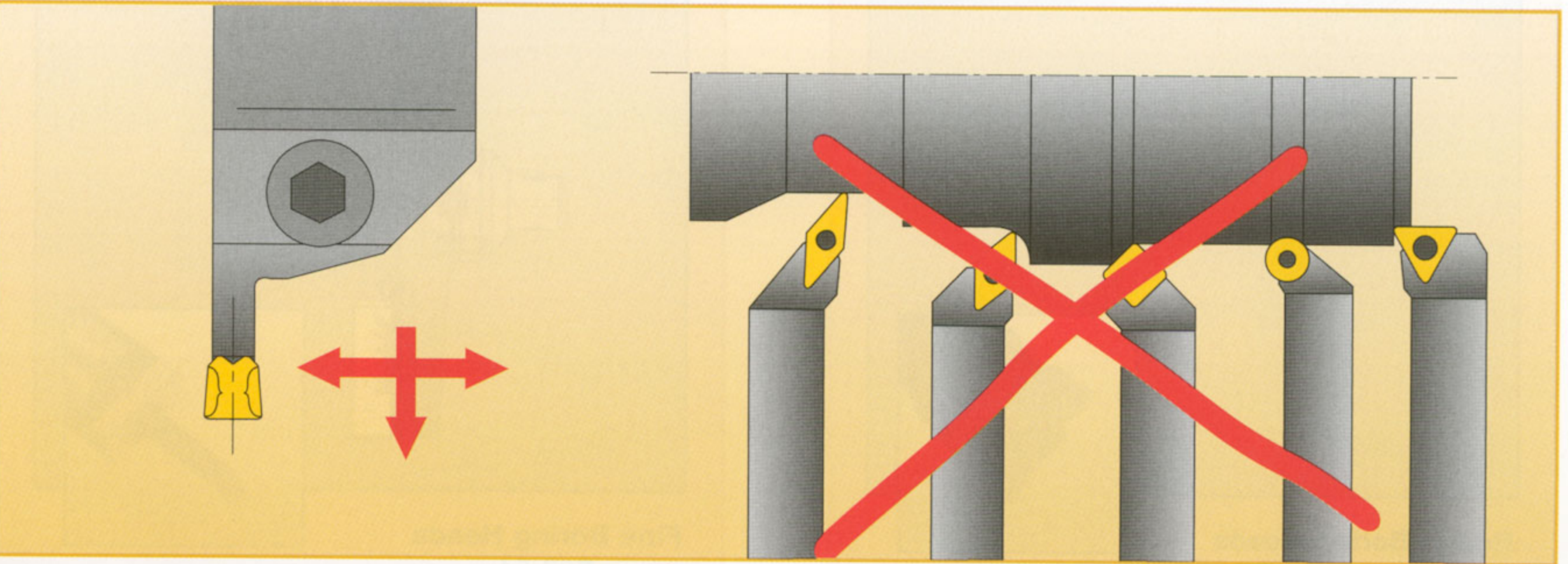
Multi-Directional Turning



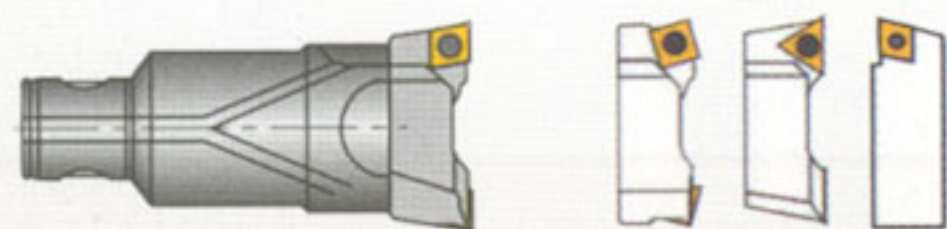
Insert Pocket Advantages



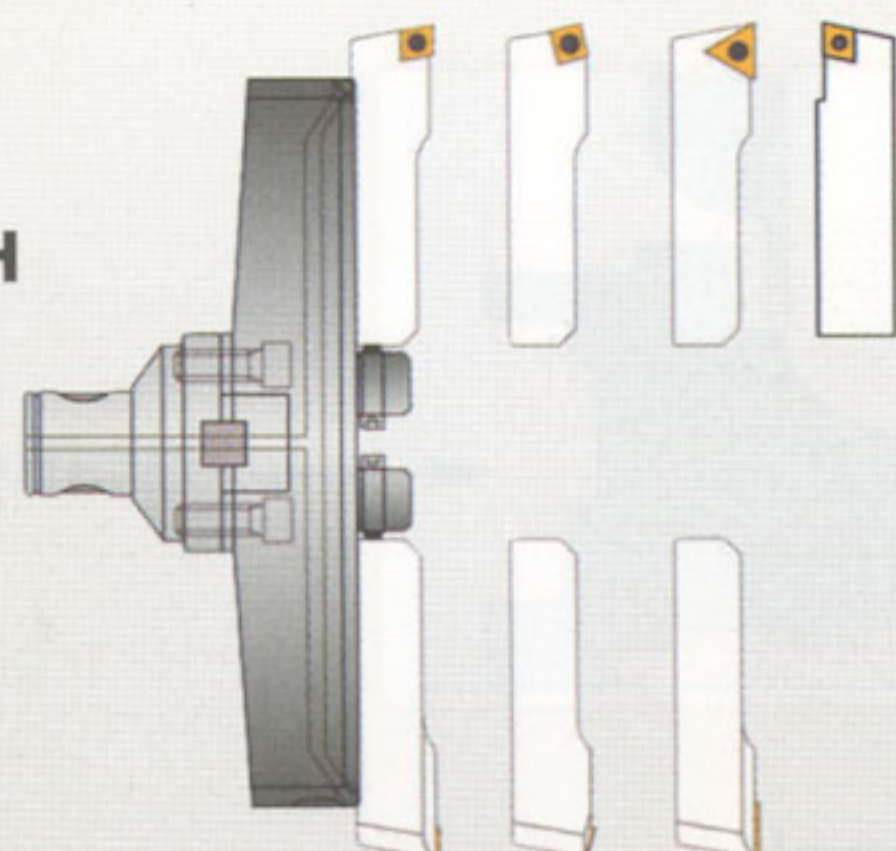
A Single Tool May Replace Several Other Tools



**MB 16-80
BHR**

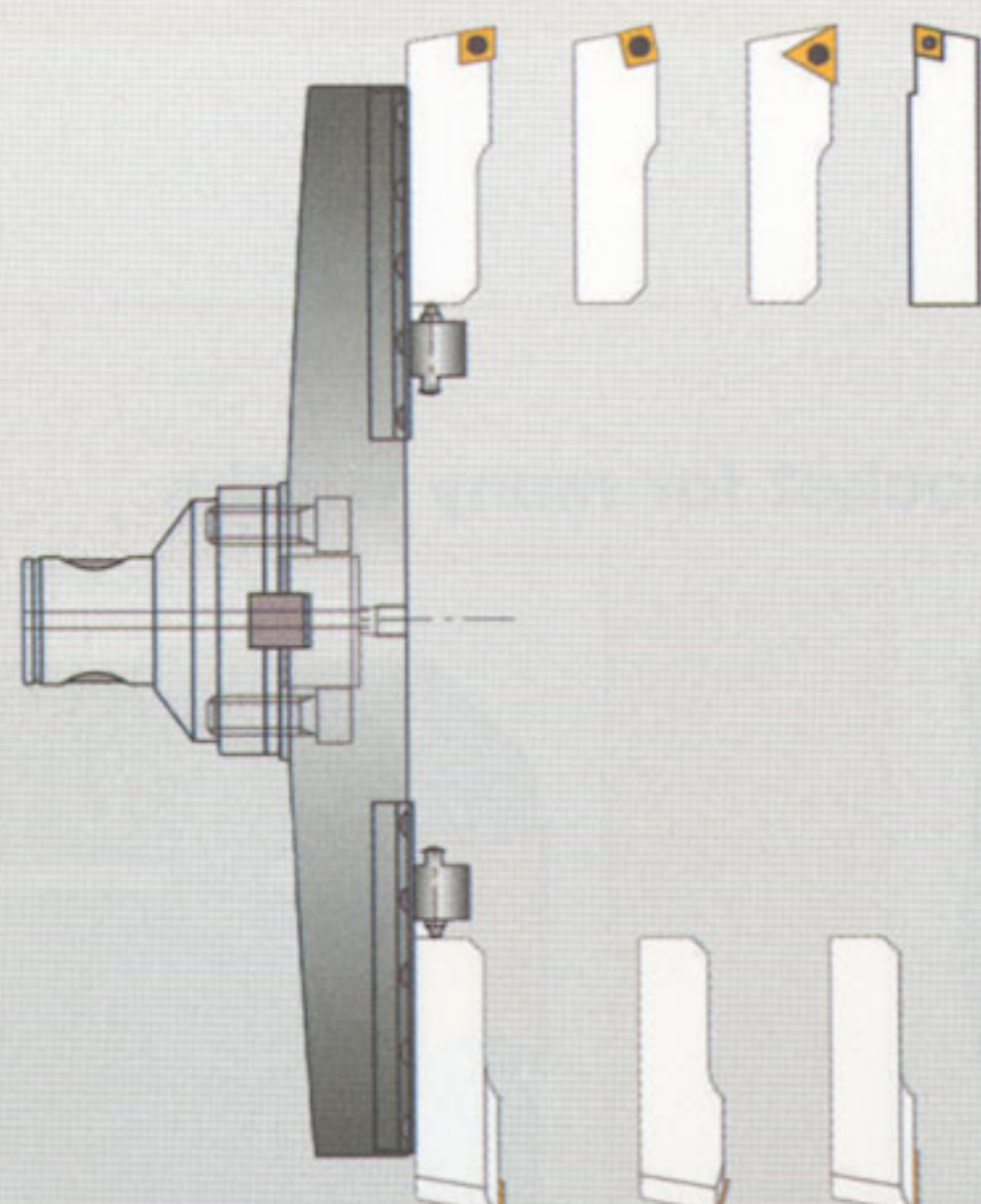


TCH 200-400

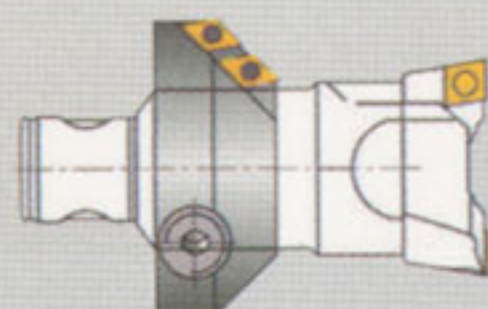


TCH

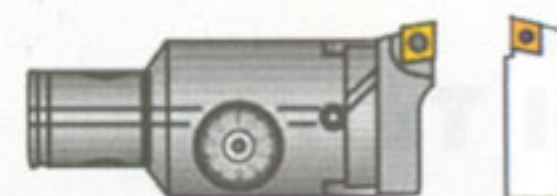
TCH A.L 500-700



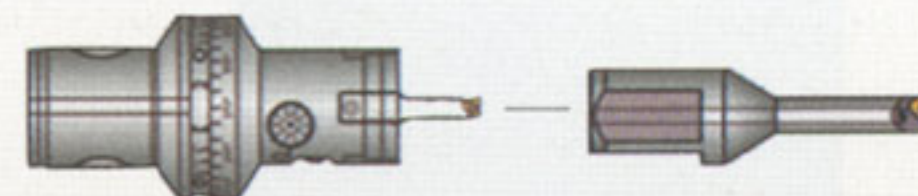
CHA 16-45



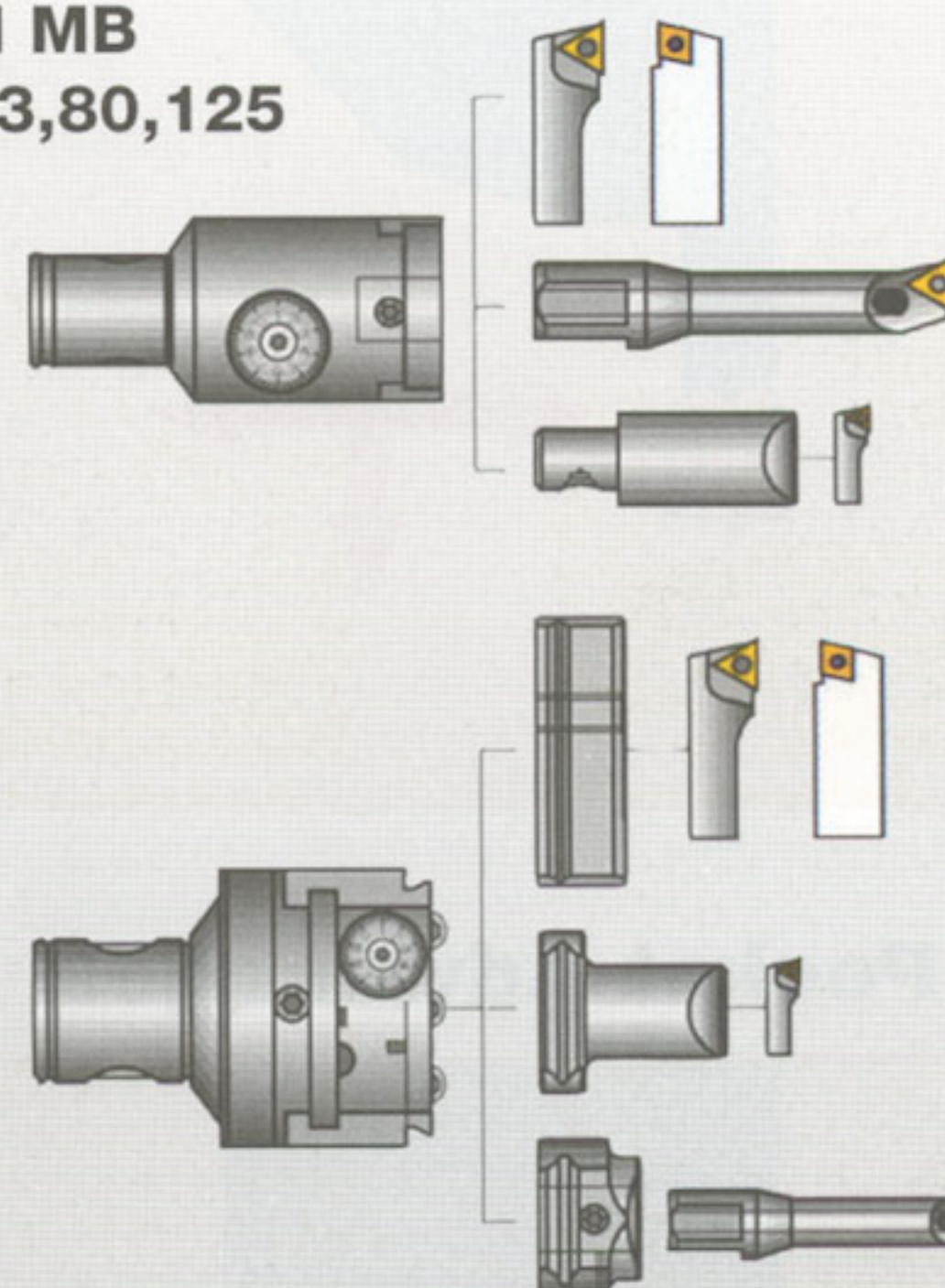
BHFI MB 16,20,25,32,40



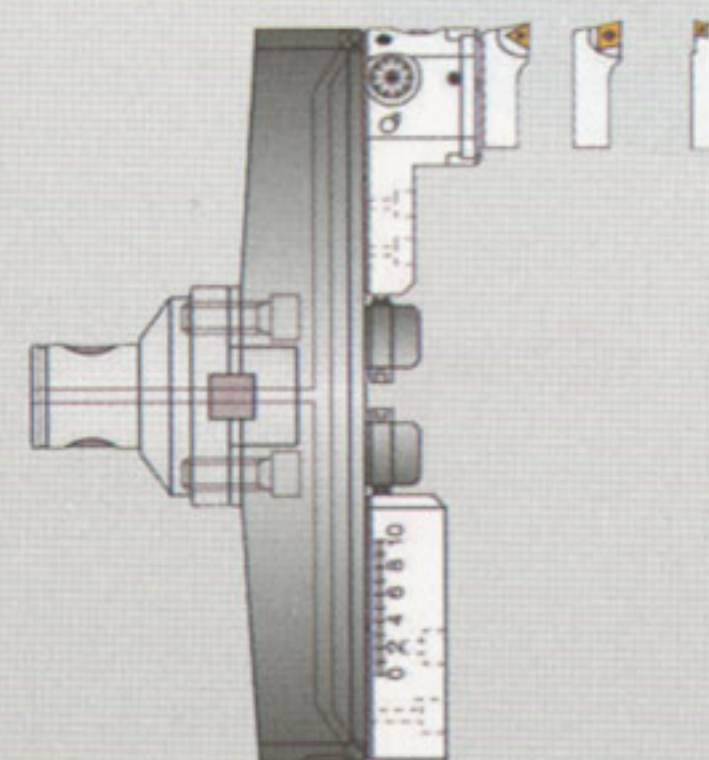
BHFI MB 50



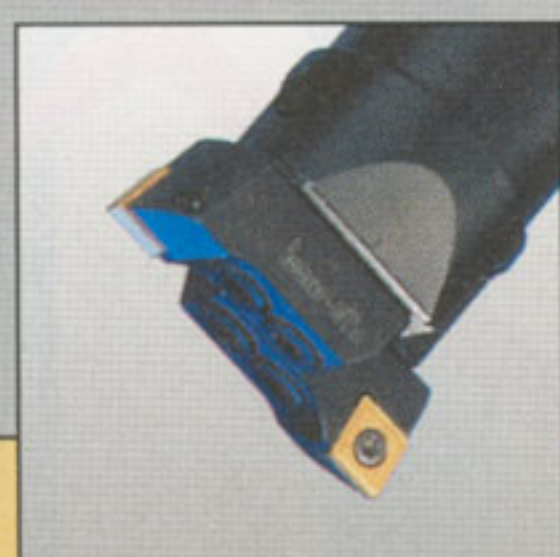
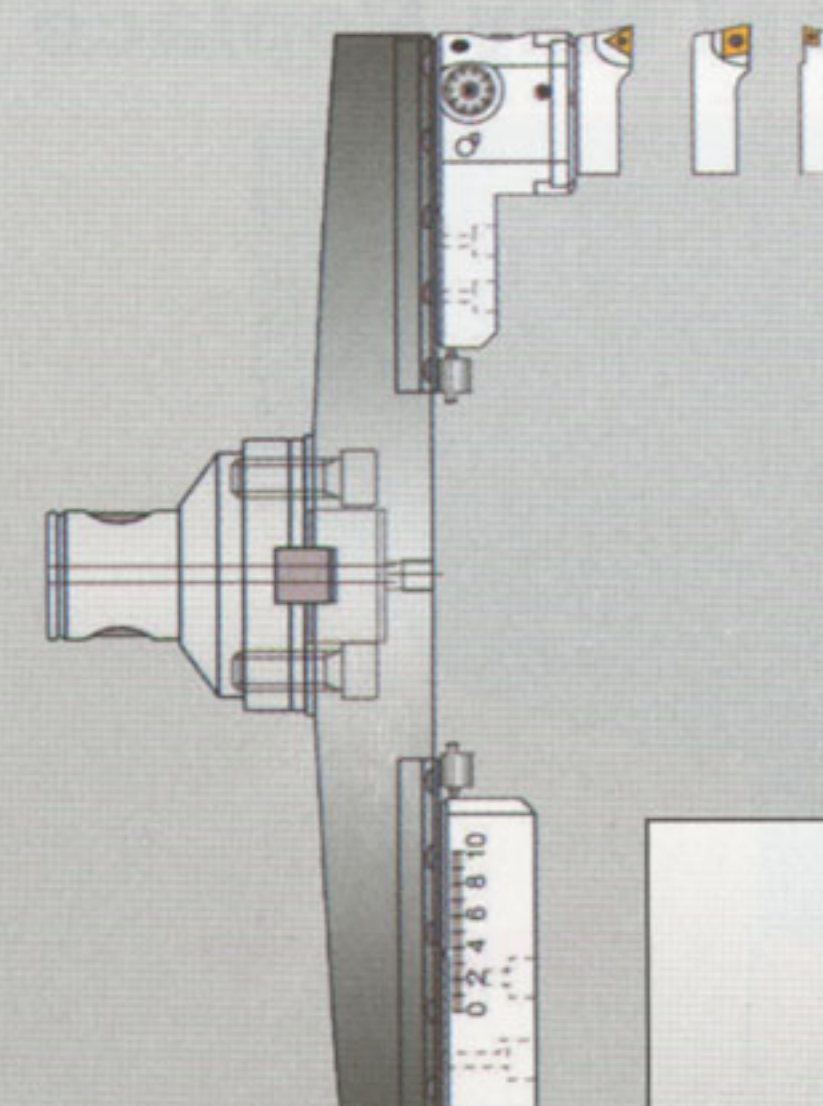
**BHFI MB
50,63,80,125**



TCH 200-400

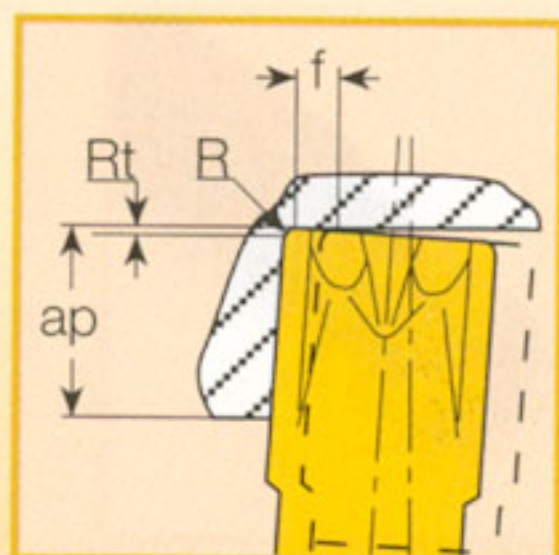


TCH A.L 500-700

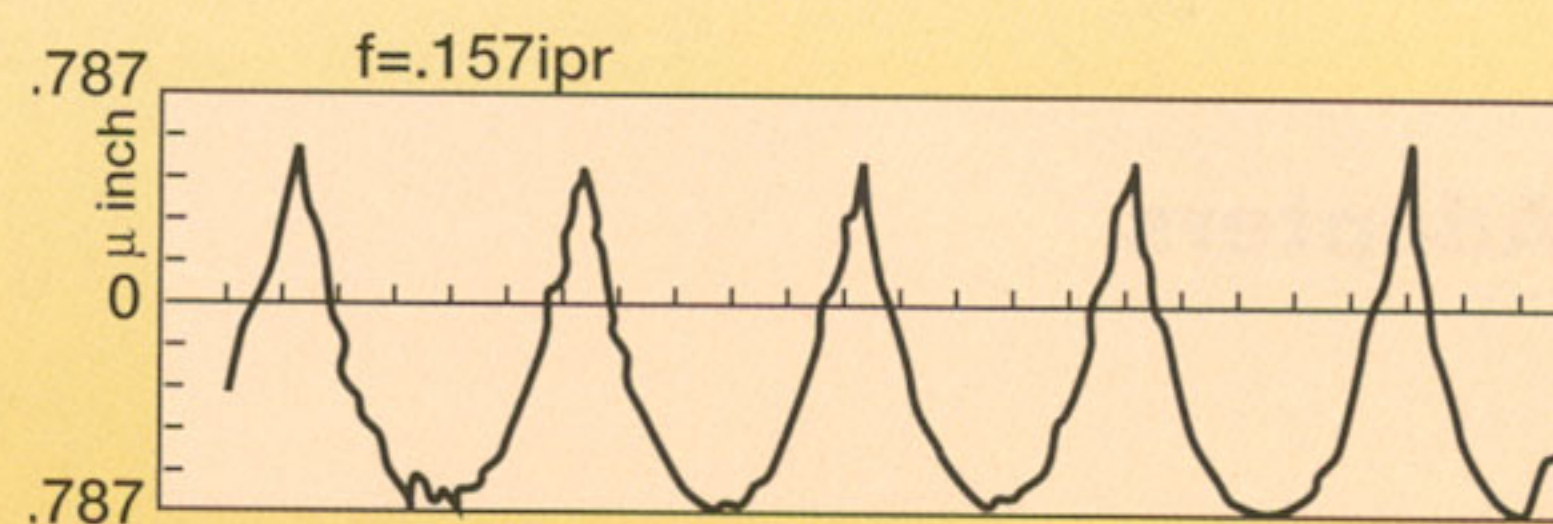
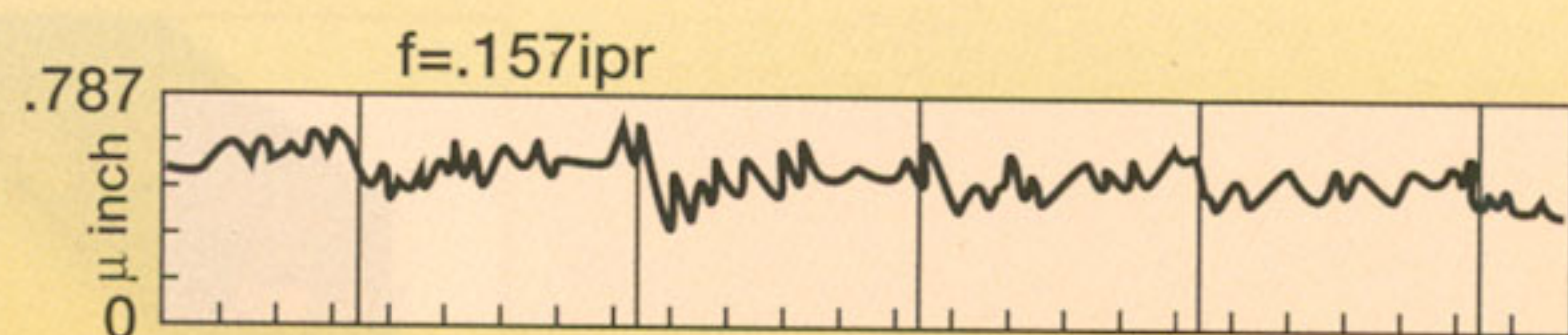
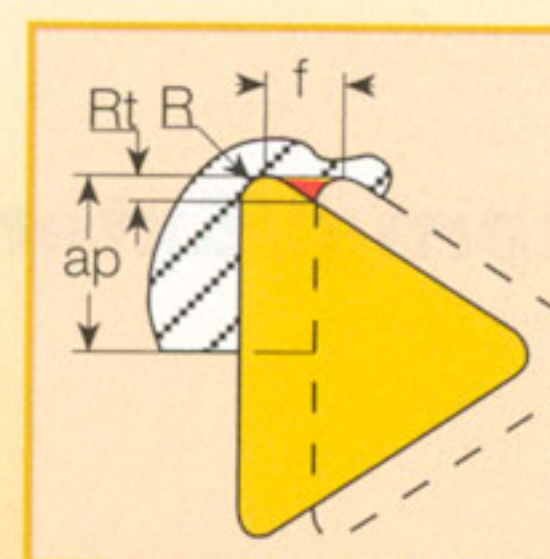


Groove-Turn Systems

Surface Finish Advantage

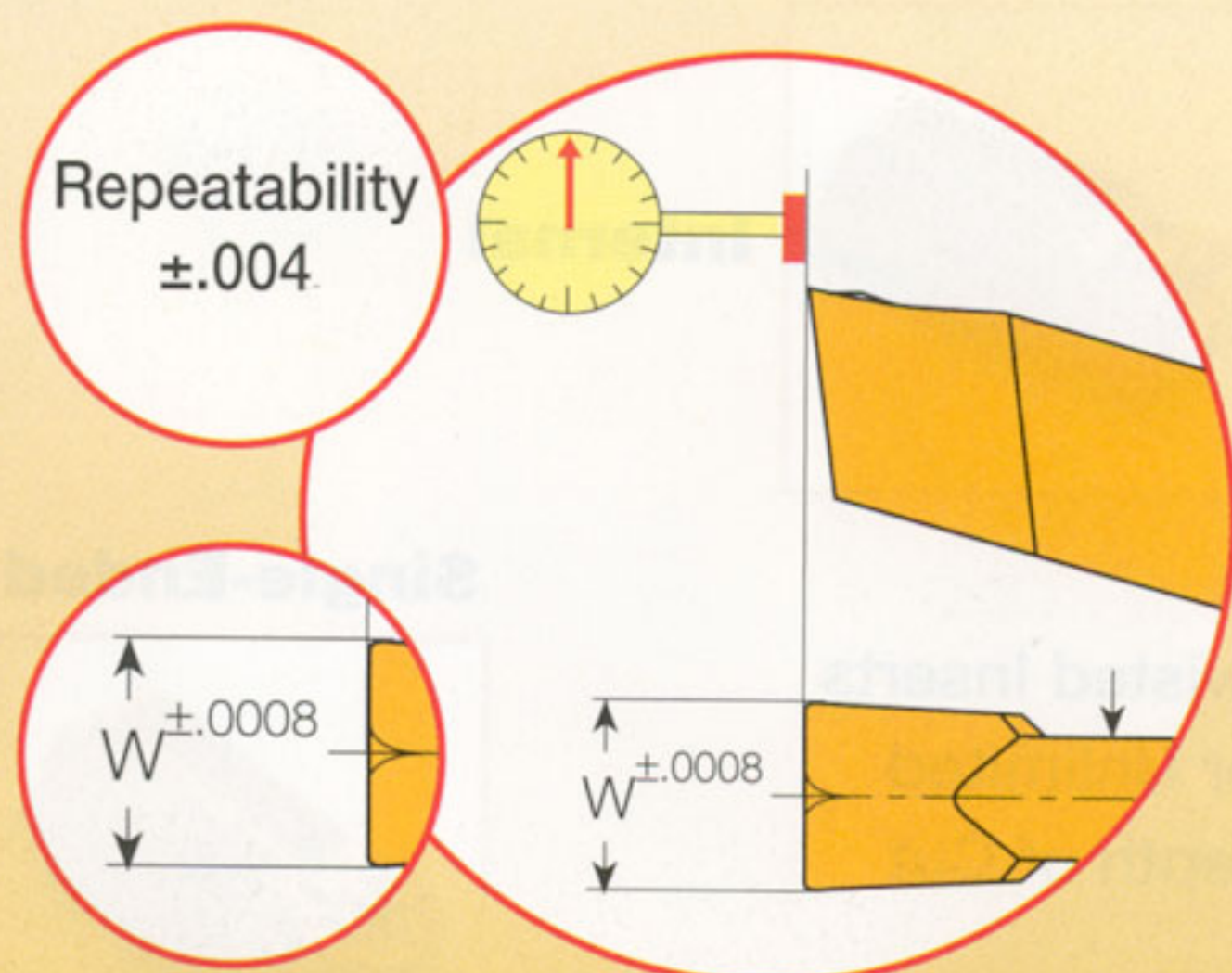


Using Groove-Turn tools improves surface finish as compared to results with ISO tools at the same cutting conditions.

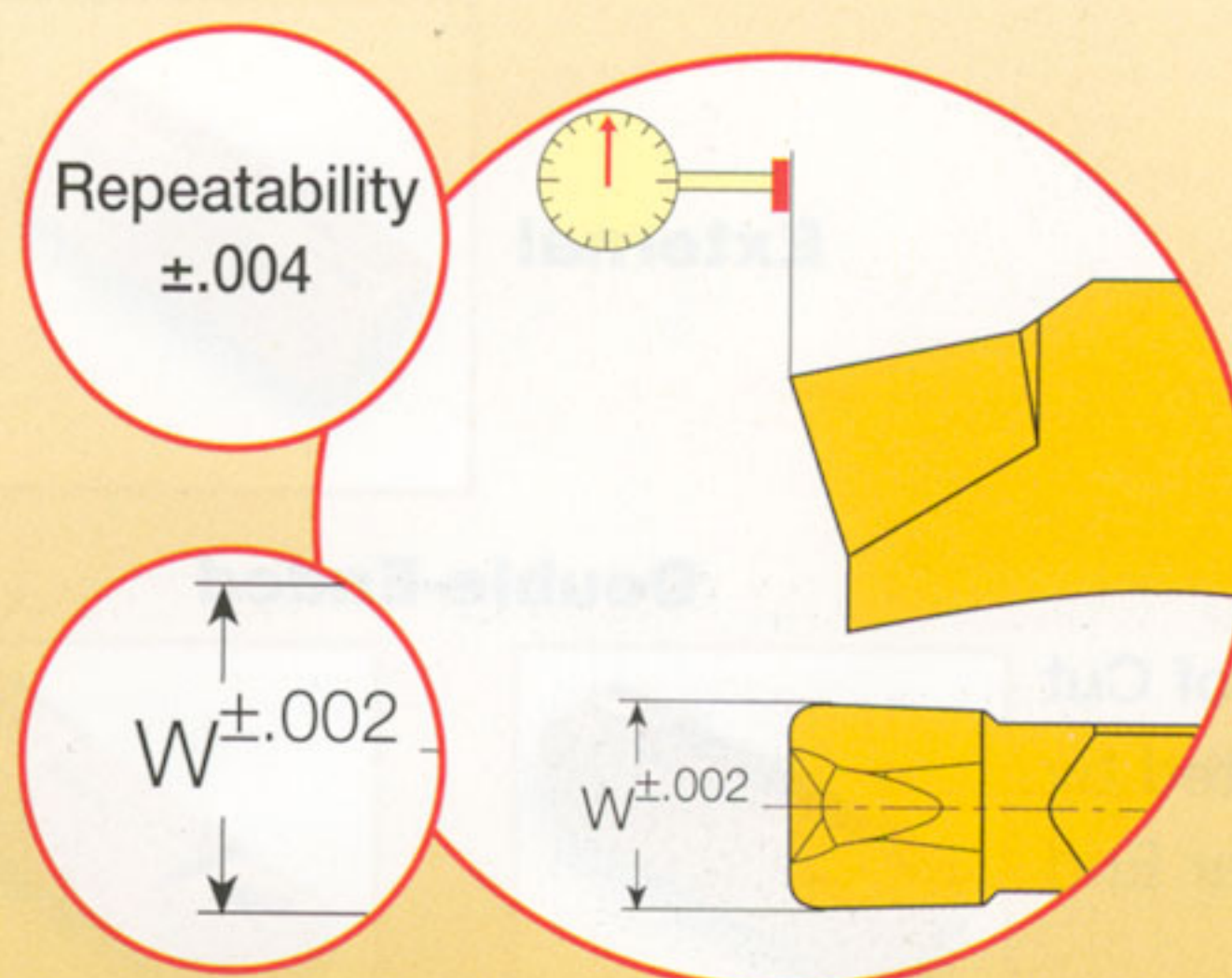


Precision vs. Utility Inserts

Precision Inserts



Utility Inserts



GRIP System

Tool Types

Integral Internal/External



Adapters



Blades Internal/External



Insert Options

External



Internal



Double-Ended

Depth of Cut
Limited by
Rear End



Limited

Twisted Inserts
for Unlimited
Depth of Cut



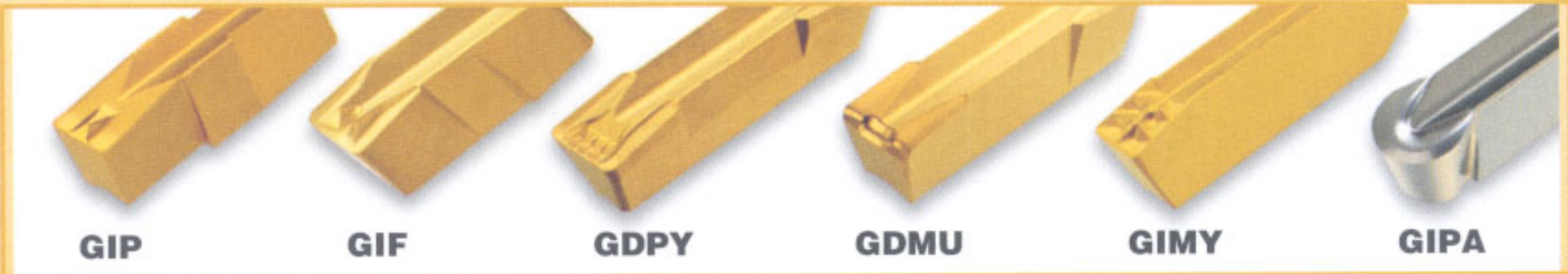
Unlimited

Single-Ended



Unlimited

Chipformers for Many Applications



GIP

GIF

GDPY

GDMU

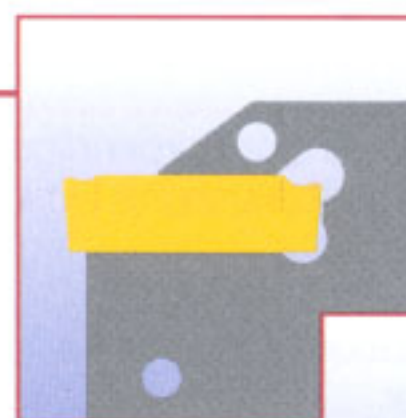
GIMY

GIPA

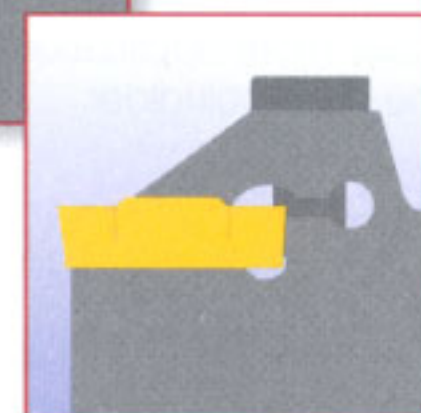
Groove-Turn - Clamping Systems
DO-GRIP

- First choice for parting
 - Double-ended insert
 - Self clamped for deep grooving and large diameters
 - Screw clamped for small diameters
- See also **HELIGRIP**, page B7

FIRST CHOICE!



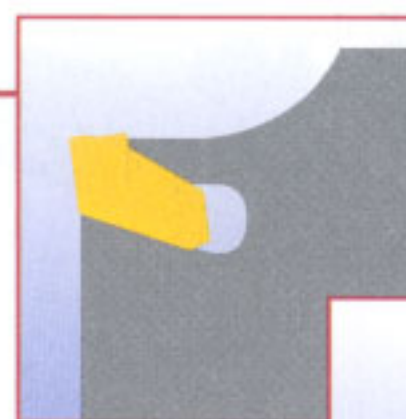
SELF-CLAMPED



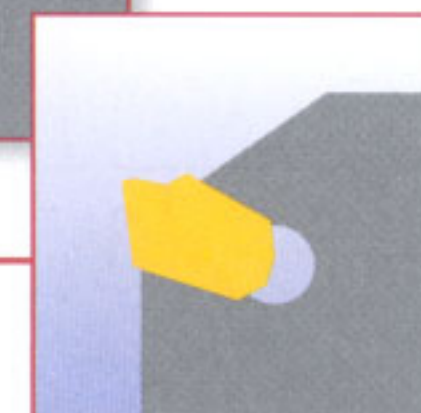
SCREW-CLAMPED

SELF-GRIP F-Type

- Single-ended insert
- For deep grooving and large diameters
- With a stopper for high radial accuracy



F-TYPE



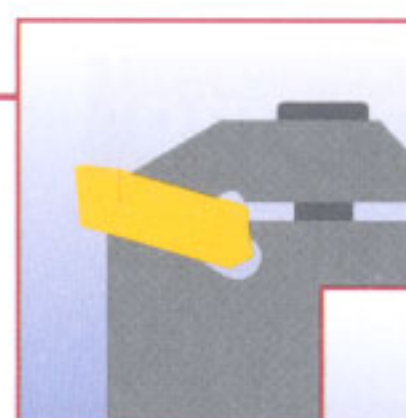
T-TYPE

SELF-GRIP F-Type

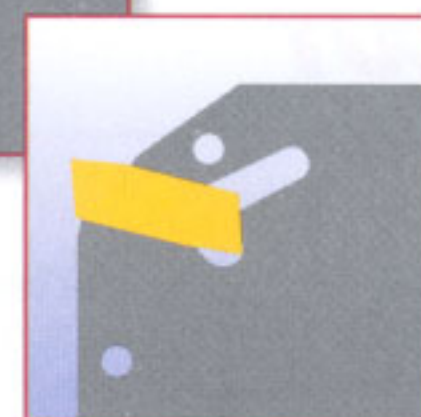
- Single-ended insert
- The original **SELF-GRIP** design

CUT-GRIP

- Single-ended insert
- Self- and screw-clamped options



SCREW-CLAMPED



SELF-CLAMPED

PENTACUT

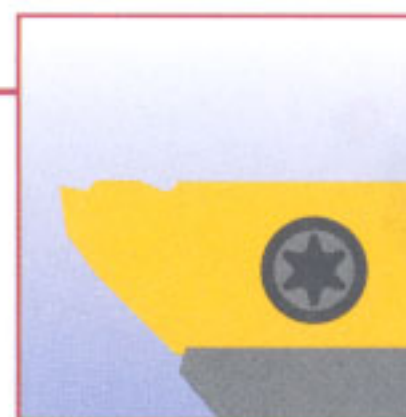
- 5 cutting edges
- Fast edge indexing
- For shallow grooving and up to .511" parting diameter



PENTACUT

SWISSCUT

- Double-ended insert
- Two clamping options
- For shallow grooving and parting small diameter parts up to .472"



SWISSCUT

see page B10

Grooving and Turning**MODULAR-GRIP**

- A single **MODULAR GRIP**, straight or perpendicular toolholder can be used for many applications, which will reduce tooling cost and stock.
- Customers already using GAD, GAM or DGAD adapters will have more application options after switching to the new toolholder.



The new toolholders can also carry new adapters for **CUT-GRIP**, **TOP-GRIP**, **HELIGRIP**, **HELIFACE** and **PENTACUT** with slanted screw-clamped inserts. Due to this improved clamping method, the rigidity of the new adapters has been increased by 100% in comparison with the current GAD adapters, thereby improving insert tool life by 15%-20%.

For more details, see pages **B 20-22**.

Parting and Grooving**PENTACUT**

ISCAR has developed a new insert designated **PENTACUT**, with 5 cutting edges, for multifunction applications including grooving, parting, recessing and chamfering.

This cost effective insert is designed to perform shallow grooving operations and parting of small solid bars up to .492" in diameter. Each cutting edge on the pentagonal shaped insert is equipped with a unique J-type positive chipformer that provides excellent chip control in grooving, parting and recessing (light side turning) applications.

For more details, see pages **B5**, **B116-117**, **B126-127**.





GPV

**HFPR**

GIMY

GDMF

GIMY



TIGER

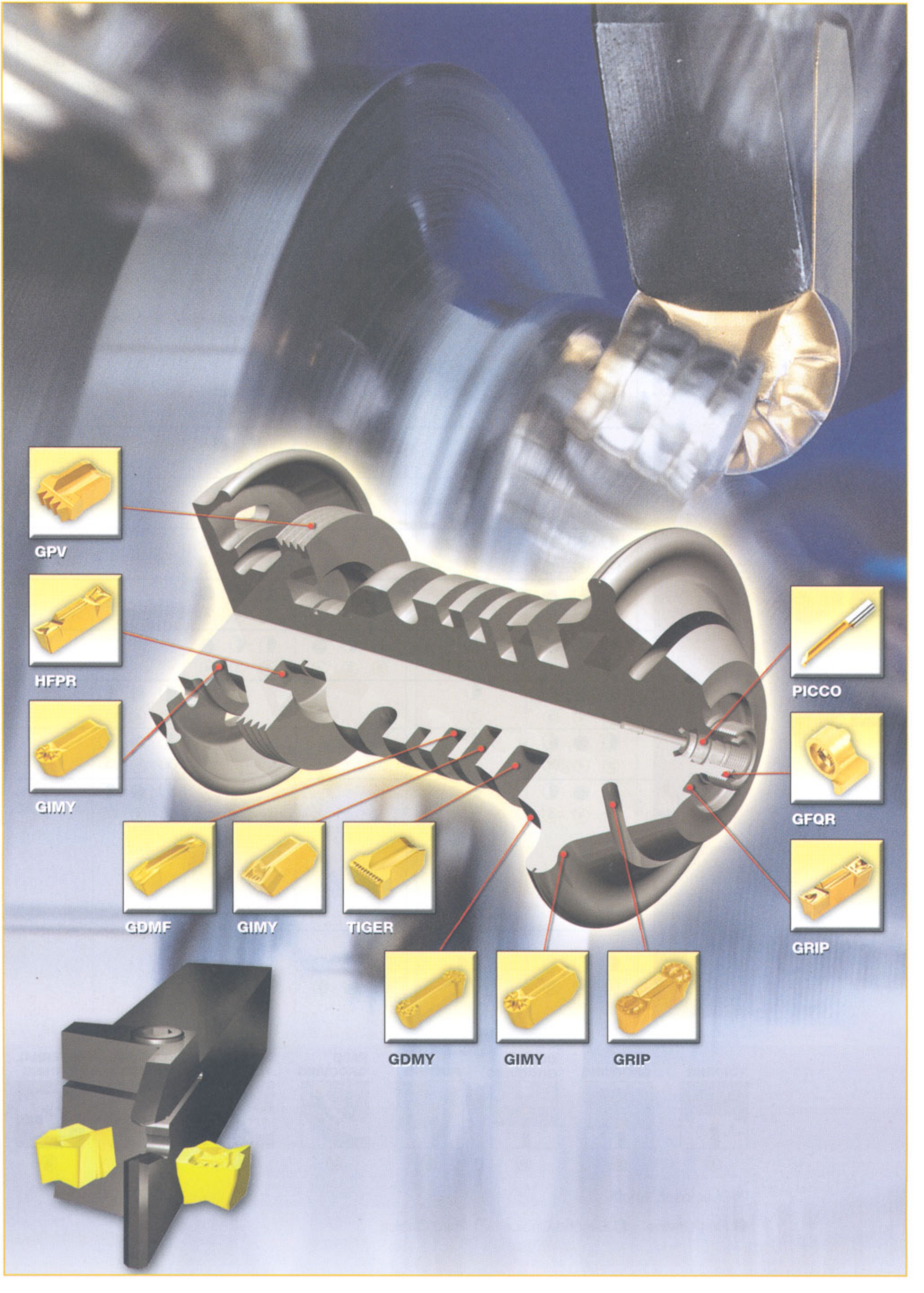
GDMY

GIMY

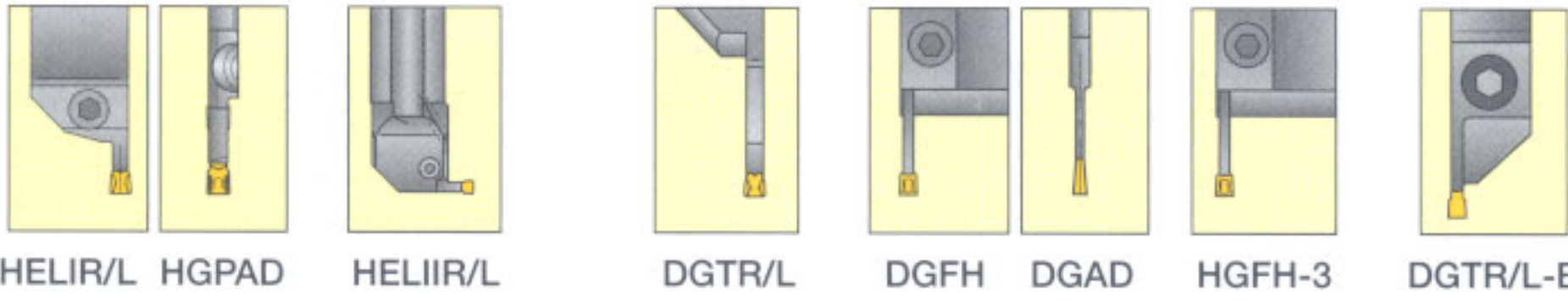
GRIP

**PICCO****GFQR**

GRIP



Choosing the Right Tool with the Right Double-Ended Twisted Insert



HELI-GRIP

DO-GRIP

Y TYPE



HELI-GRIP	GRIP/HGPL 3														
	GRIP/HGPL 4 5 6														

C TYPE



J TYPE



UA TYPE

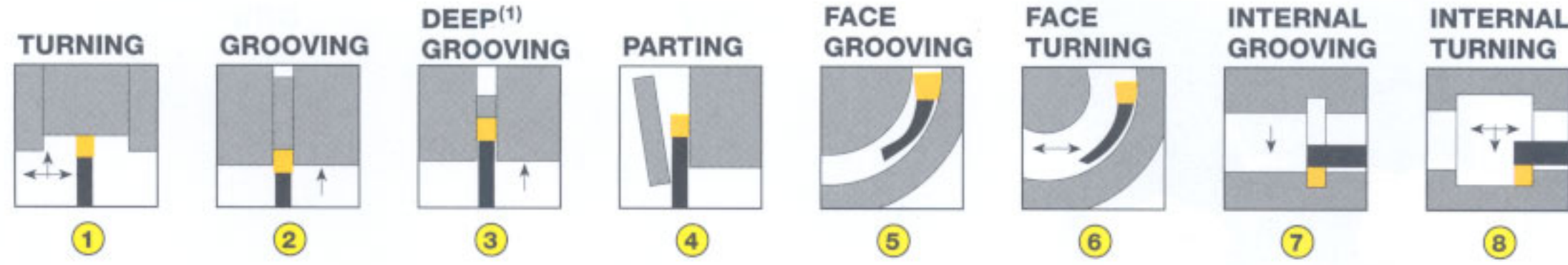


DO-GRIP	DGN/R/L	C															
		J															
		UA															
	DGN/R/L	C															
		J															
		UA															
	HGN/R/L	C															
		J															
		UA															

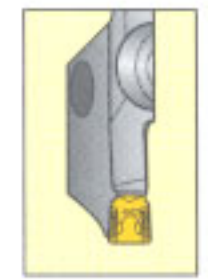
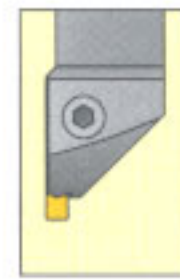
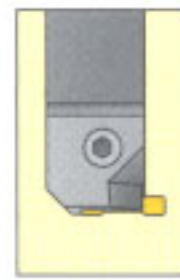
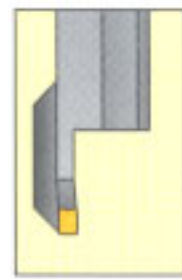
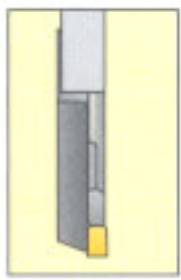
HFPR



HELIFACE	HFPR 3								
	HFPR 4 5 6								



(1) Over insert length
● First Choice ◐ Second Choice ○ Third Choice



HELIFACE

						 5 6	 5 6
 5 6	 5 6	 5 6	 5 6	 5 6	 5 6		 5 6
 5	 5	 5	 5	 5	 5		
 5	 5	 5	 5	 5	 5		
 5	 5	 5	 5	 5	 5	 5	
						 5	
						 5	
 5 6	 5 6	 5 6	 5 6	 5 6	 5 6		
 5 6	 5 6	 5 6	 5 6	 5 6	 5 6		

The PASSPORT System

This is your passport to enter the new world of small diameter, internal turning. ISCAR has designed a new concept in tool holding. Now, a single bushing toolholder can hold a full set of carbide shank boring bars capable of grooving, turning, threading, profiling and recessing.

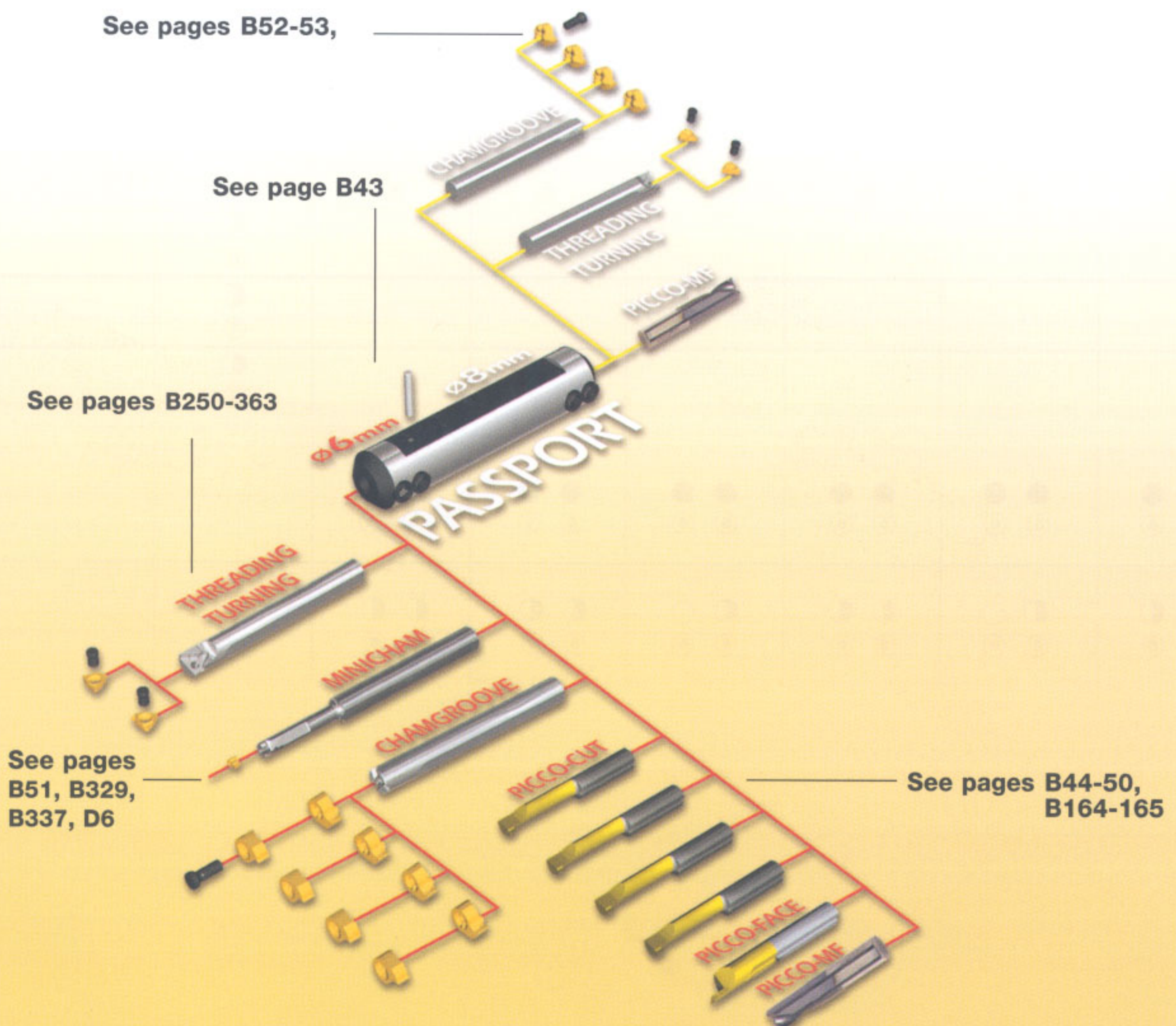
ISCAR also provides you with VISAS for cost reductions.

The carbide shanks provide excellent rigidity and a high length-to-diameter (L/D) ratio.

This allows the boring bar overhang to be adjusted to the best rigidity for each job.

The new bushing holders incorporate special stoppers, useful in many applications with ISCAR's CHAMGROOVE system and PICCO bars. Utilizing the stoppers eliminates resetting the tool after every indexing.

This new, versatile system replaces many expensive boring bars needed to perform the variety of applications now possible with this single bushing holder.

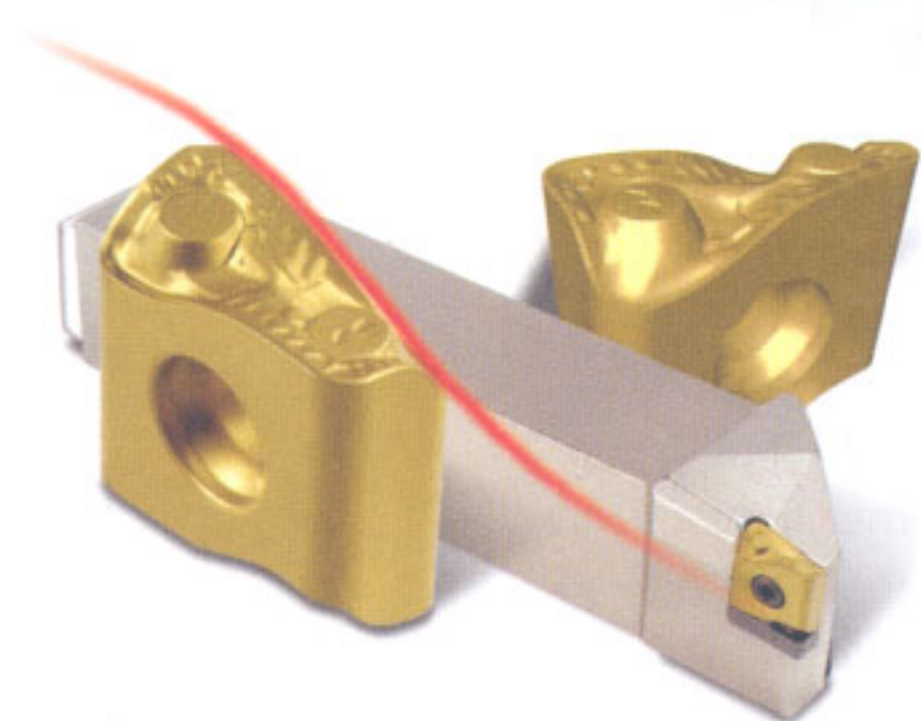


Heavy Duty Turning**HELITURN**

Fast Metal Removal (FMR) is essential especially in roughing applications where high removal rates are desired.

The new **HELITURN** holder with its tangentially clamped insert and the unique helical shaped cutting edges provide an exceptional solution, enabling the use of very large depths of cut and high feeds.

The **HELITURN** SLANR/L-...TANG toolholder uses a unique tangentially clamped insert, LNMX 150616R/L-HT. The double-sided insert, with its narrow curved rake face, is clamped into the toolholder on a corresponding seat using a conical head screw. This design protects the toolholder from overload and insert damage. The upper rake face of the insert is mounted at the same level as the holder body, thereby enabling the chips to flow without being disturbed by the tool body or any other element.

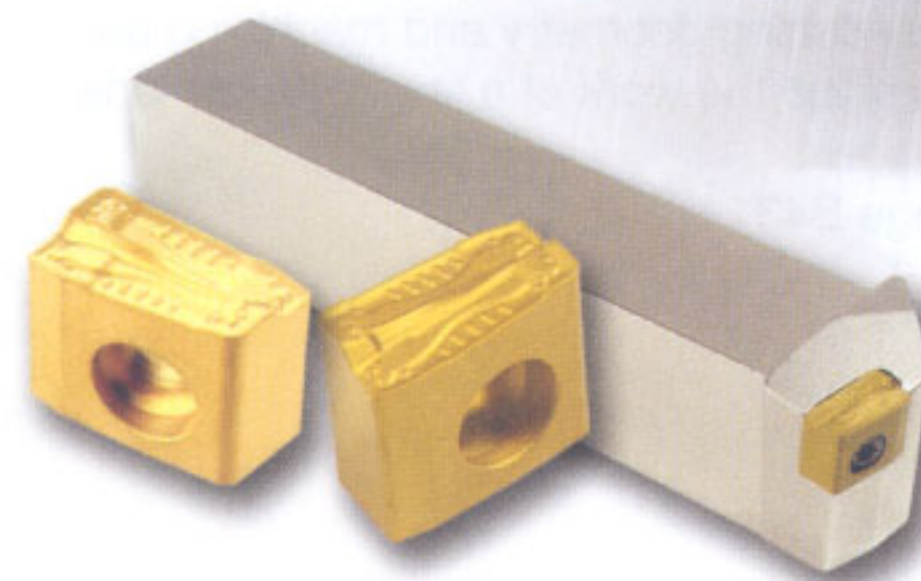


See pages B207, B239, B384, B389

FEEDTURN

ISCAR presents **FEEDTURN**, a new tangential system for **Fast Metal Removal (FMR)** in roughing applications with very high feed.

F max = .094 IPR



See page B208