

2023
BAOJE Industrial Co.,Ltd.








BAOJE













CATALOGUE





Contents

 About	1
 Features	3
 BJ vs. Others	4
 Micro Boring Tools	5
 Tool Identification	6

BJ Tool Specifications

  10 Degree Turning Tools	7
  0 Degree Turning Tools	10
  50 Degree Turning Tools	12
  50 Degree Turning Tools (Radius Tip)	14
  Grooving Tools	16
  Threading Tools	18

	D	Face Grooving Tools	20
	D	Face Grooving Tools (Customized)	22

BJ Patented Toolholders Specifications

		Holder Classification	24
D Type		Direct Toolholders	25
B Type		Butterfly Toolholders	28
E Type		Easy Toolholders	31
F Type		Flash Toolholders	32
S Type		Special Toolholders	33

BJ Tool Special Torque Screwdrivers

		BJ Torque Screwdriver Kits	34
		BJ Toolholders Screw Specifications Comparison Table	42

■ Baoje: 30 years of CNC lathe precision machining

With our past 30 year's experiences of CNC lathe precision machining, we found out nowadays that the technicians have difficulties in changing tools and skilled Tech-Worker shortage has been an issue. Therefore, we invested in Research and Design (R&D) to assemble our own CNC grinding machine and produce micro boring tools which are our strengths.

Baoje systematic boring tools provides higher precision and premium quality. This is perfect for precision machining and it helps reducing labor cost and increasing productivity. Most importantly, we offer our business partner a golden customer service.



■ Baoje - Micro Boring Tool Features

1. Customized upon your request

- ▶▶ We can make exclusive micro/ internal boring tools based on your workpiece or drawing.

2. The concept of systematic boring tool design

- ▶▶ Quick Change Tool (change complete in one (1) minute), fool-proofing function design and Standard operation procedures.

3. Coated using professional and advanced imported equipment.

4. Specialized in “difficult-to-cut” material.

5. Longer lifetime than other brands.

About

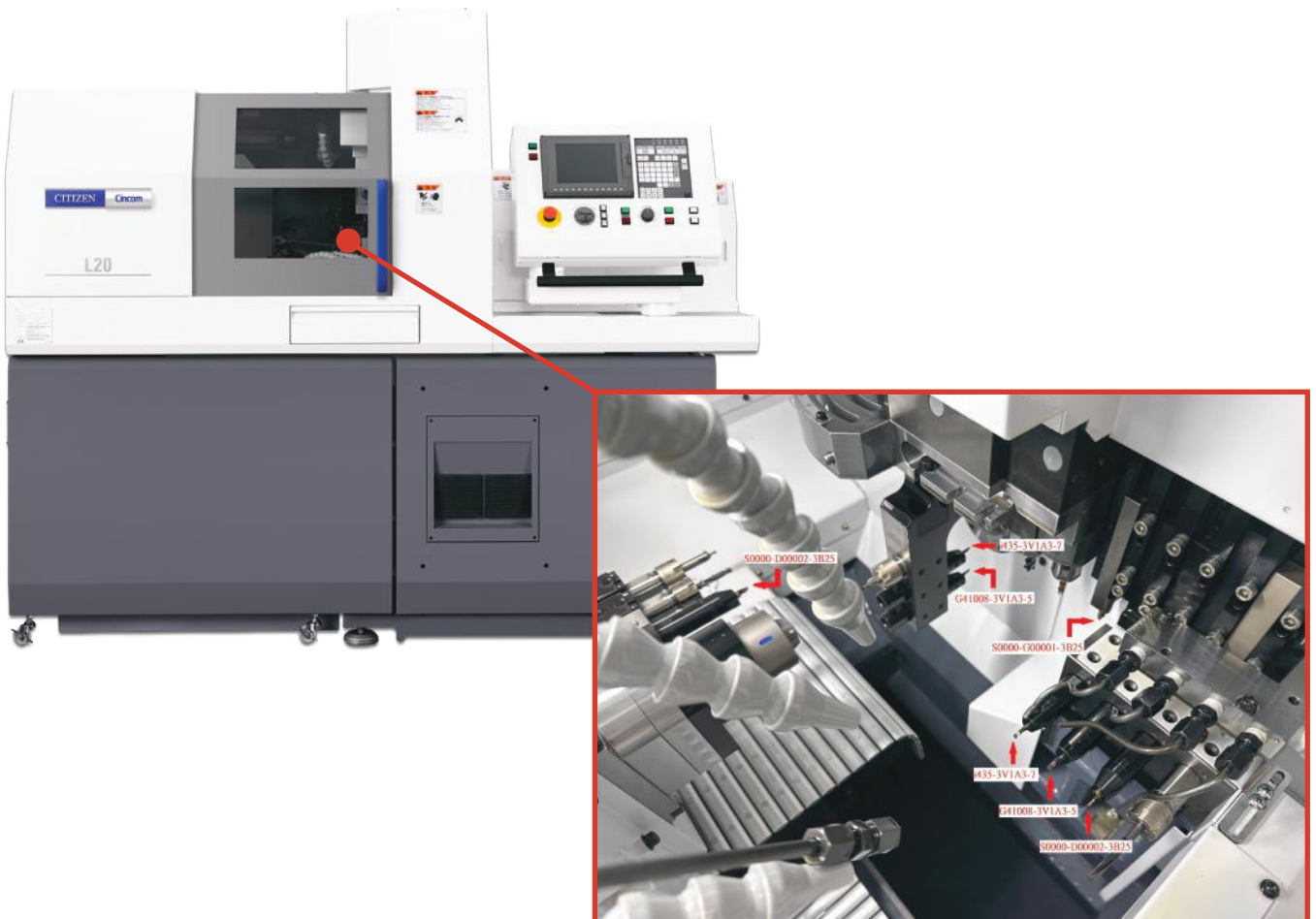
■ 2023 Active the Cutting Tool Laboratory

BAOJE set up a complete equipped laboratory in order to improve tool quality, optimize tool design, testing tool life, and demonstrate BAOJE internal cutting tools to visiting guests. To accurately test and optimize the experiment process, BAOJE cooperates with the Academy for Academia and Industry Collaboration.

In terms of equipment aspect, BAOJE purchased Citizen L20E-2M8 CNC Swiss type machine equipped with High Pressure Coolant Through.

All cutting tools in BJ cutting tool laboratory are screwed with BJ Tool Special Torque Screwdrivers for standardization control to eliminate human factors and cause unstable tool life, poor production utilization etc. negative effects.

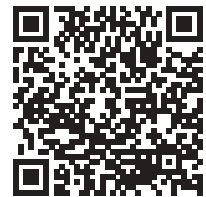
Visitors can fully understand BJ cutting tools practical application by visiting BJ cutting tool laboratory, including Turning Tool, Grooving Tool, Threading Tool, Face Grooving Tool.



■ BJ Tools & Holders Special Features

Tool locking procedure:

- ▶▶ Find the right angle, align the tool accordingly and insert until the end.
- ▶▶ Slightly lock the rear screw.
- ▶▶ Tightly lock the front screw.
- ▶▶ Firmly relock the rear screw.



View Full Video on YouTube ▶

Our Tools are easy to lock and can be changed without removing the holders.

■ Understanding Reference Plane

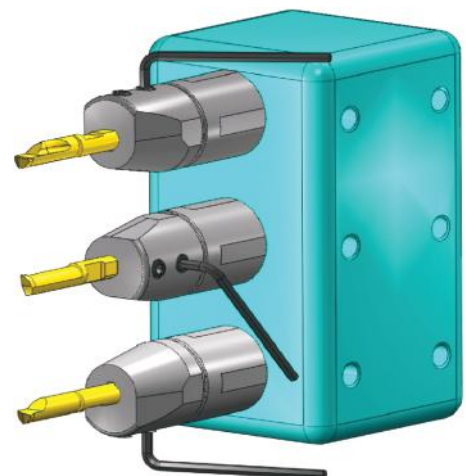
To facilitate easy tool change, regardless of the brands and different machine types, we designed 2 types of reference plane.



- ▶▶ **0°** : Reference plane and tip are on the same side.



- ▶▶ **180°** : Reference plane and tip are opposite sides.
(top and bottom)



View Full Video on YouTube ▶

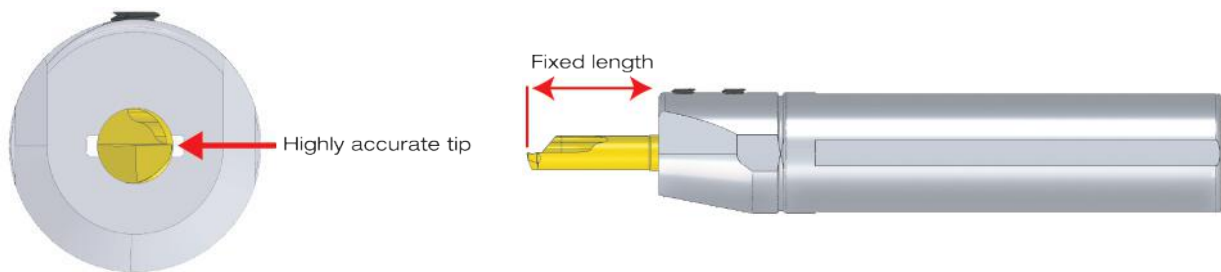
BJ vs. Others

BJ vs. Others

▶▶ BJ's Tools :

- Accurate and rapid tool change. Easy for technician to set up.
- Highly accurate tip and excellent life time.
- Shorter time for good production and delivery , premium quality, increase efficiency, reduced costs.
- Customized upon request, reducing tools development time.

▼ YouTube Link

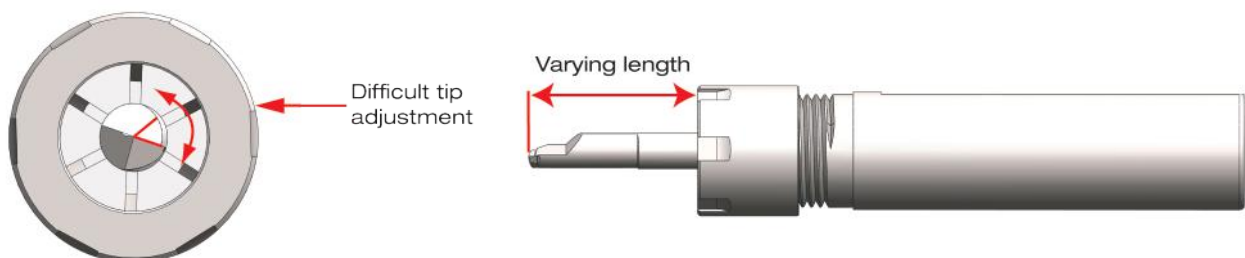


Most Prominent Features :

Easy for beginners to use, preventing and solving technical problems.

▶▶ Others' Tools :

- Longer adjustment time, leading to very long machine downtime.
- Frequent NC code modification, reducing machine efficiency.
- Not easily adjustable tip, with unstable size and short tool life time.
- Low yield rate, low production rate and low quality control, resulting in higher cost.



Biggest Blind Spot :

Difficult for unskilled technician to replace the tool and bringing on technical problems.

■ BJ Boring Tools Series

Our tools are coated by the PVD method with TiN, TiCN, DLC, and/or TiAlN. They have superior toughness and sharper cutting edges with excellent wear resistance and thermal crack resistance.

▶▶ Premium Quality:

Long lifetime tool, higher quality, speedy delivery and easy for beginner technicians.

▶▶ Reasonable Price:

Very competitive price compared to world's branded tooling company.

▶▶ Easy Exchanging Tool:

Easy positioning and high precision repeatability. It saves time with no mistakes.

▶▶ Customized Design:

We will be at your service all the time.



T 10 Degree Turning Tool



G Grooving Tool



TA 0 Degree Turning Tool



I Threading Tool



U 50 Degree Turning Tool



D Face Grooving



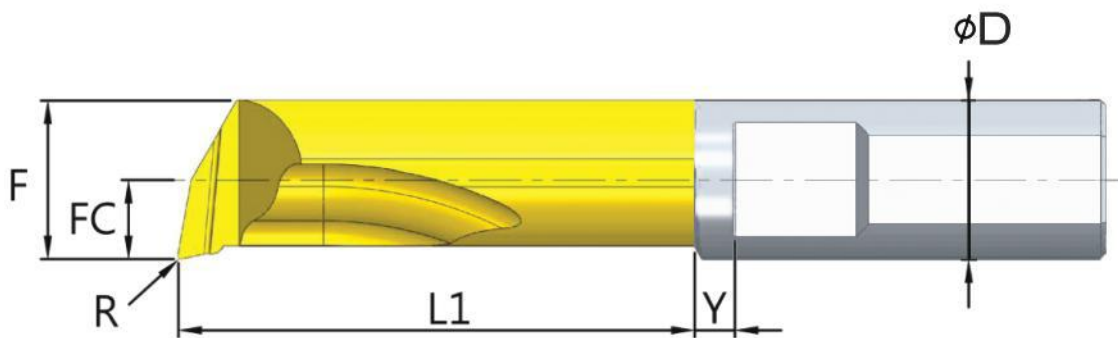
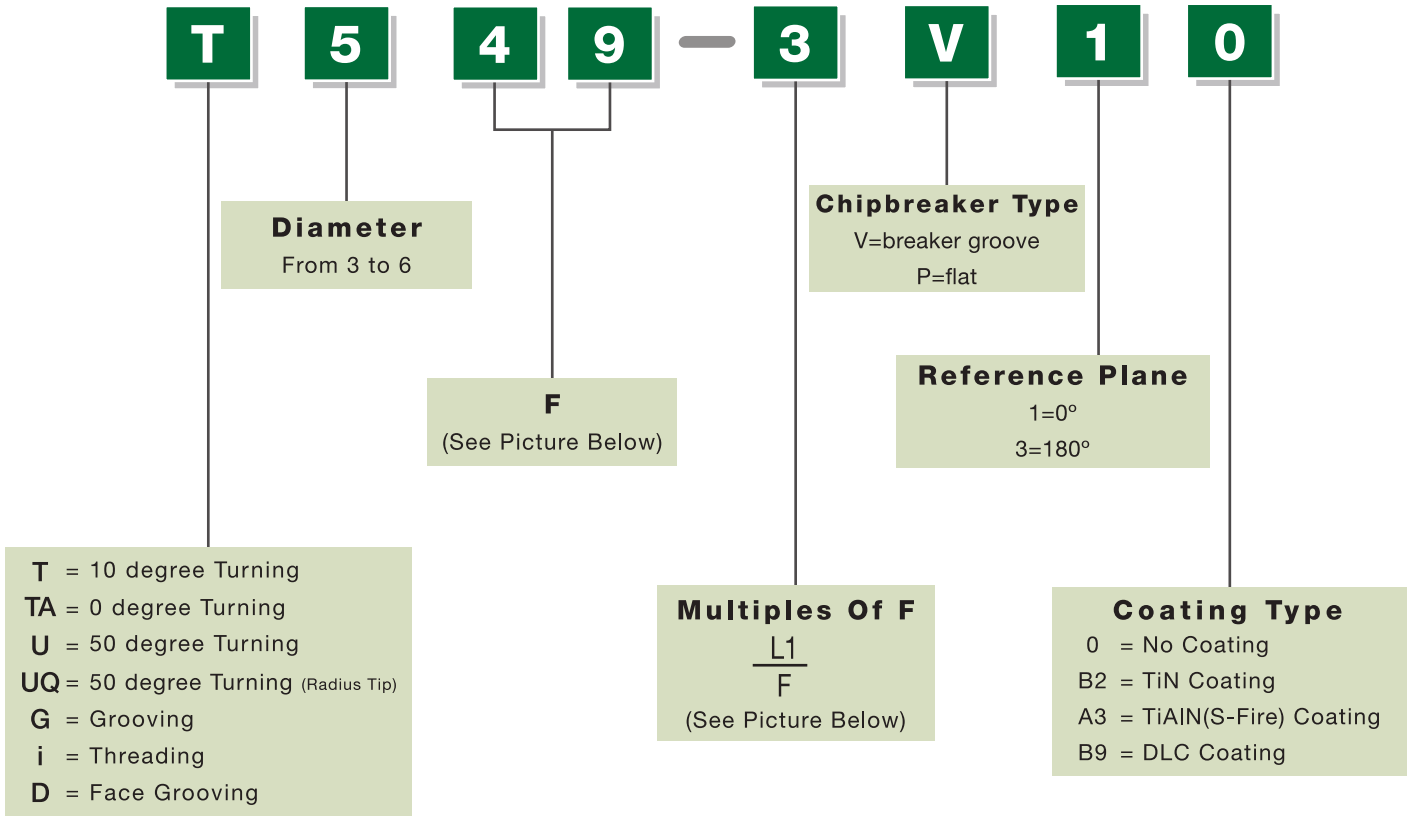
UQ 50 Degree Turning Tool (Radius Tip)



D Face Grooving (Customized)

Tools Identification

Tools Identification



10 Degree Turning Tool

▶▶ Specification Tool Range

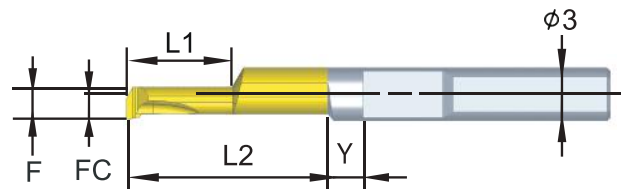
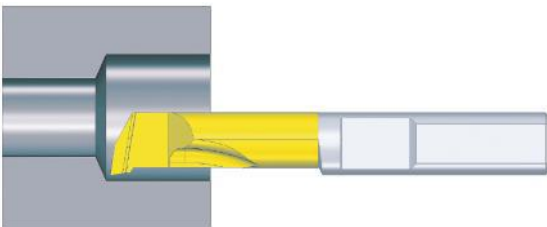
0.6mm~ 8mm.Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

For Rough or Precision cutting.

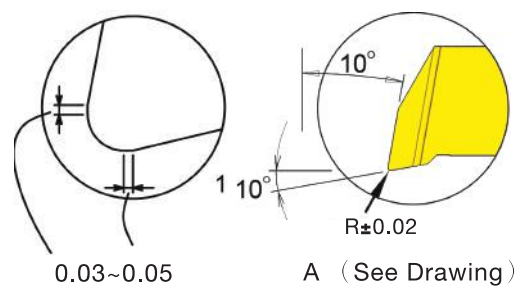
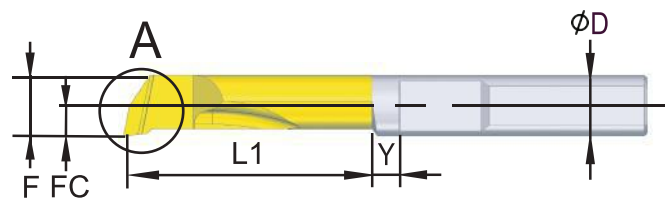
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3□☆○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

T Tool

10 degree Turning Tool

Item number	D	Minimum Diameter	F	FC	R	Multiples	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
T306-4V1A3	3	0.7	0.6	1.4	0.03	4	2.7	4	3	✓	0	S-Fire (TiAlN)
T310-4V1A3	3	1.2	1.0	1.4	0.03	4	4.5	6	3	✓	0	S-Fire (TiAlN)
T318-3V1A3						3	6	8				
T318-4V1A3						4	8	10.4				
T318-5V1A3	3	2.0	1.8	1.4	0.05	5	10	13	3	✓	0	S-Fire (TiAlN)
T318-6V1A3						6	12	13				
T318-7V1A3						7	14	17				
T329-3V1A3						3	8					
T329-4V1A3						4	10.4					
T329-5V1A3	3	3.2	2.9	1.4	0.1	5	13	-	3	✓	0	S-Fire (TiAlN)
T329-6V1A3						6	17					
T329-7V1A3						7	20					
T439-3V1A3						3	10					
T439-4V1A3						4	13.5					
T439-5V1A3	4	4.2	3.9	1.9	0.1	5	17	-	3	✓	0	S-Fire (TiAlN)
T439-6V1A3						6	22					
T439-7V1A3						7	26					
T549-3V1A3						3	14					
T549-4V1A3						4	18					
T549-5V1A3	5	5.2	4.9	2.4	0.1	5	22	-	3	✓	0	S-Fire (TiAlN)
T549-6V1A3						6	29					
T549-7V1A3						7	34					
T659-3V1A3						3	16					
T659-4V1A3						4	22					
T659-5V1A3	6	6.2	5.9	2.9	0.1	5	27	-	3	✓	0	S-Fire (TiAlN)
T659-6V1A3						6	33					
T659-7V1A3						7	41					
T879-3V1A3						3	22		2			
T879-4V1A3						4	30		2			
T879-5V1A3	8	8.2	7.9	3.9	0.1	5	37	-	3	✓	0	S-Fire (TiAlN)
T879-6V1A3						6	45		3			
T879-7V1A3						7	53		3			

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / Φ D / Tip Radius / Front angle, according to your requirement beside standard 10 degree turning tool.
- ▶▶ Can manufacture inch dimension on request.

T Tool

10 degree Turning Tool (T-R0.2 Tool)

Item number	D	Minimum Diameter	F	FC	R	Multiples	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
T318-3V1A3-R10						3	6	8				
T318-4V1A3-R10	3	2.0	1.8	1.4	0.1	4	8	10.4	3	✓	0	S-Fire (TiAlN)
T318-5V1A3-R10						5	10	13				
T329-3V1A3-R20						3	8					
T329-4V1A3-R20						4	10.4					
T329-5V1A3-R20	3	3.2	2.9	1.4	0.2	5	13	-	3	✓	0	S-Fire (TiAlN)
T329-6V1A3-R20						6	17					
T329-7V1A3-R20						7	20					
T439-3V1A3-R20						3	10					
T439-4V1A3-R20						4	13.5					
T439-5V1A3-R20	4	4.2	3.9	1.9	0.2	5	17	-	3	✓	0	S-Fire (TiAlN)
T439-6V1A3-R20						6	22					
T439-7V1A3-R20						7	26					
T549-3V1A3-R20						3	14					
T549-4V1A3-R20						4	18					
T549-5V1A3-R20	5	5.2	4.9	2.4	0.2	5	22	-	3	✓	0	S-Fire (TiAlN)
T549-6V1A3-R20						6	29					
T549-7V1A3-R20						7	34					
T659-3V1A3-R20						3	16					
T659-4V1A3-R20						4	22					
T659-5V1A3-R20	6	6.2	5.9	2.9	0.2	5	27	-	3	✓	0	S-Fire (TiAlN)
T659-6V1A3-R20						6	33					
T659-7V1A3-R20						7	41					
T879-3V1A3-R20						3	21		3			
T879-4V1A3-R20						4	29		3			
T879-5V1A3-R20	8	8.2	7.9	3.9	0.2	5	37	-	3	✓	0	S-Fire (TiAlN)
T879-6V1A3-R20						6	45		3			
T879-7V1A3-R20						7	53		3			

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / Φ D / Tip Radius / Front angle, according to your requirement beside standard 10 degree turning tool.
- ▶▶ Can manufacture inch dimension on request.

0 Degree Turning Tool

▶▶ Specification Tool Range

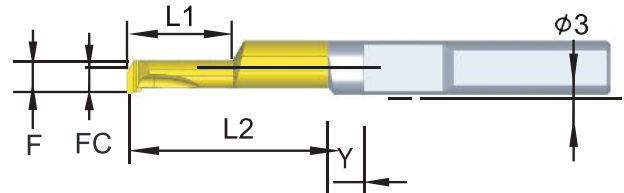
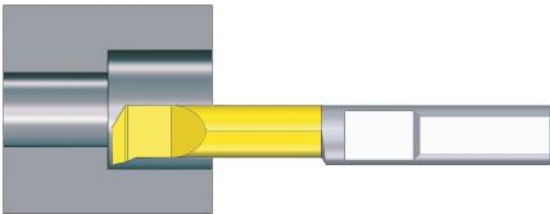
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

It is suitable for blind hole workpiece, for rough or precision cutting.

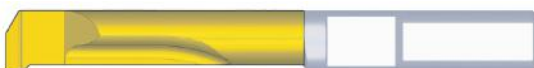
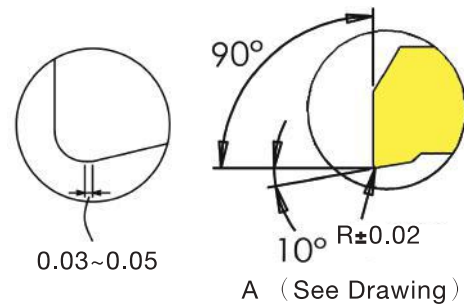
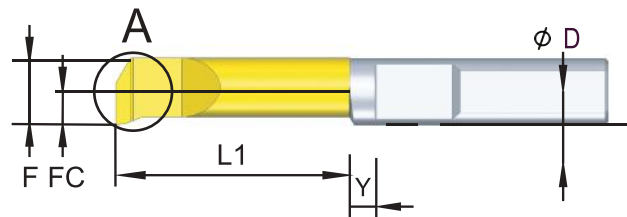
▶▶ Remark

Coated by imported equipment.

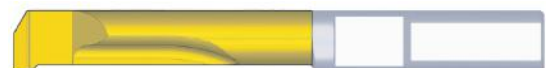


Tool Numbering : 3 □ ☆ ○

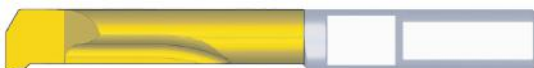
- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

0 Degree Turning Tool

Item number	D	Minimum Diameter	F	FC	R	Multiples	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
TA306-4V1A3	3	0.7	0.6	1.4	0.03	4	2.7	4	3	✓	0	S-Fire (TiAlN)
TA310-4V1A3	3	1.2	1.0	1.4	0.03	4	4.5	6	3	✓	0	S-Fire (TiAlN)
TA318-3V1A3						3	6	8				
TA318-4V1A3						4	8	10.4				
TA318-5V1A3	3	2.0	1.8	1.4	0.05	5	10	13	3	✓	0	S-Fire (TiAlN)
TA318-6V1A3						6	12	13				
TA318-7V1A3						7	14	17				
TA329-3V1A3						3	8					
TA329-4V1A3						4	10.4					
TA329-5V1A3	3	3.2	2.9	1.4	0.1	5	13	-	3	✓	0	S-Fire (TiAlN)
TA329-6V1A3						6	17					
TA329-7V1A3						7	20					
TA439-3V1A3						3	10					
TA439-4V1A3						4	13.5					
TA439-5V1A3	4	4.2	3.9	1.9	0.1	5	17	-	3	✓	0	S-Fire (TiAlN)
TA439-6V1A3						6	22					
TA439-7V1A3						7	26					
TA549-3V1A3						3	14					
TA549-4V1A3						4	18					
TA549-5V1A3	5	5.2	4.9	2.4	0.1	5	22	-	3	✓	0	S-Fire (TiAlN)
TA549-6V1A3						6	29					
TA549-7V1A3						7	34					
TA659-3V1A3						3	16					
TA659-4V1A3						4	22					
TA659-5V1A3	6	6.2	5.9	2.9	0.1	5	27	-	3	✓	0	S-Fire (TiAlN)
TA659-6V1A3						6	33					
TA659-7V1A3						7	41					

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / Φ D / Tip Radius / Front angle, according to your requirement beside standard 0 degree turning tool.
- ▶▶ Can manufacture inch dimension on request.

U Tool

50 Degree Turning Tool

▶▶ Specification Tool Range

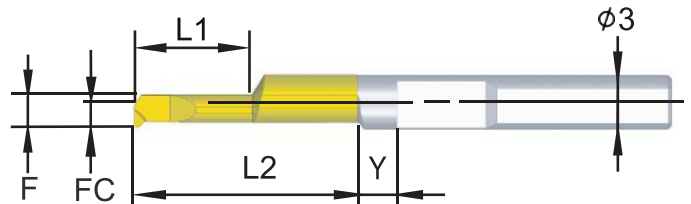
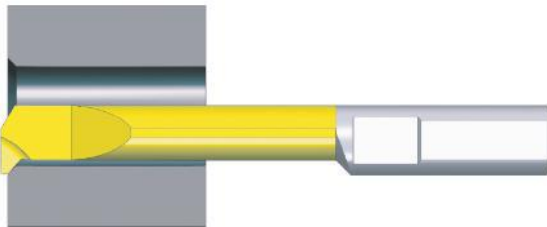
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

Can turn and chamfer. For rough or precision cutting.

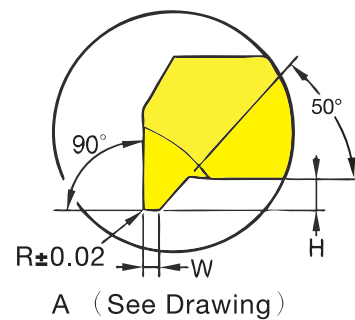
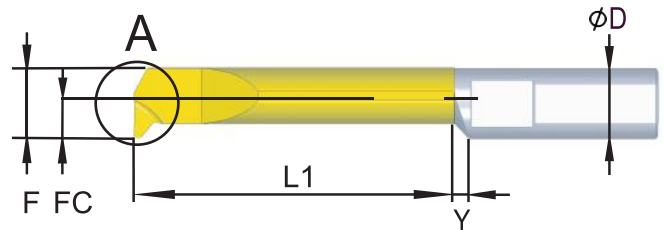
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3 □ ☆ ○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

50 Degree Turning Tool

Item number	D	Minimum Diameter	F	FC	R	W	H	Multiples	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
U318-3V1A3								3	6	8				
U318-4V1A3								4	8	10.4				
U318-5V1A3	3	2.0	1.8	1.4	0.05	0.3	0.5	5	10	13	3	✓	0	S-Fire (TiAIN)
U318-6V1A3								6	12	13				
U318-7V1A3								7	14	17				
U329-3V1A3								3	8					
U329-4V1A3								4	10.4					
U329-5V1A3	3	3.2	2.9	1.4	0.05	0.4	0.7	5	13	-	3	✓	0	S-Fire (TiAIN)
U329-6V1A3								6	17					
U329-7V1A3								7	20					
U439-3V1A3								3	10					
U439-4V1A3								4	13.5					
U439-5V1A3	4	4.2	3.9	1.9	0.1	0.5	0.8	5	17	-	3	✓	0	S-Fire (TiAIN)
U439-6V1A3								6	22					
U439-7V1A3								7	26					
U549-3V1A3								3	14					
U549-4V1A3								4	18					
U549-5V1A3	5	5.2	4.9	2.4	0.1	0.5	1.1	5	22	-	3	✓	0	S-Fire (TiAIN)
U549-6V1A3								6	29					
U549-7V1A3								7	34					
U659-3V1A3								3	16					
U659-4V1A3								4	22					
U659-5V1A3	6	6.2	5.9	2.9	0.1	0.5	1.2	5	27	-	3	✓	0	S-Fire (TiAIN)
U659-6V1A3								6	33					
U659-7V1A3								7	41					

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / W / H / Φ D / Tip Radius / Front angle, according to your requirement beside standard 50 degree front turning + back chamfering tool.
- ▶▶ Can manufacture inch dimension on request.

50 Degree Turning Tool (Radius Tip)

▶▶ Specification Tool Range

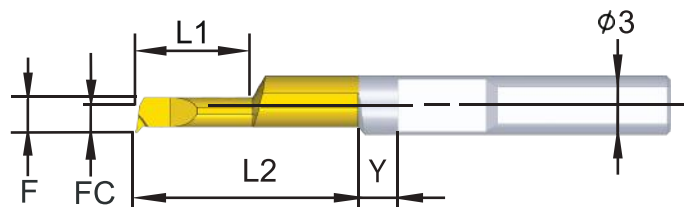
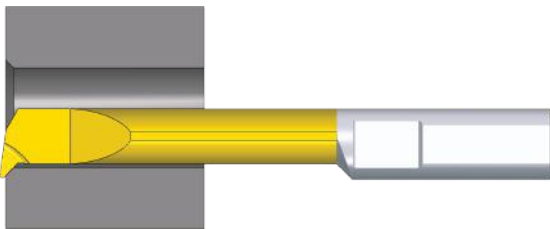
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

Can turn and chamfer. For rough or precision cutting.

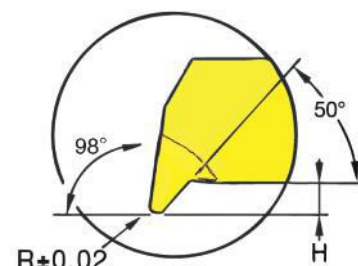
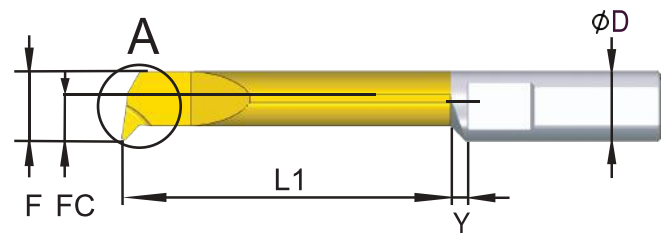
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3 □ ☆ ○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



A (See Drawing)



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

50 Degree Turning Tool (Radius Tip)

Item number	D	Minimum Diameter	F	FC	R	H	Multiples	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
UQ318-3V1A3-R05							3	6	8				
UQ318-4V1A3-R05	3	2.0	1.8	1.4	0.05	0.5	4	8	10.4	3	✓	0	S-Fire (TiAlN)
UQ318-5V1A3-R05							5	10	13				
UQ329-3V1A3-R10							3	8					
UQ329-4V1A3-R10							4	10.4					
UQ329-5V1A3-R10	3	3.2	2.9	1.4	0.1	0.7	5	13	-	3	✓	0	S-Fire (TiAlN)
UQ329-6V1A3-R10							6	17					
UQ329-7V1A3-R10							7	20					
UQ439-3V1A3-R20							3	10					
UQ439-4V1A3-R20							4	13.5					
UQ439-5V1A3-R20	4	4.2	3.9	1.9	0.2	0.8	5	17	-	3	✓	0	S-Fire (TiAlN)
UQ439-6V1A3-R20							6	22					
UQ439-7V1A3-R20							7	26					
UQ549-3V1A3-R20							3	14					
UQ549-4V1A3-R20							4	18					
UQ549-5V1A3-R20	5	5.2	4.9	2.4	0.2	1.1	5	22	-	3	✓	0	S-Fire (TiAlN)
UQ549-6V1A3-R20							6	29					
UQ549-7V1A3-R20							7	34					
UQ659-3V1A3-R20							3	16					
UQ659-4V1A3-R20							4	22					
UQ659-5V1A3-R20	6	6.2	5.9	2.9	0.2	1.4	5	27	-	3	✓	0	S-Fire (TiAlN)
UQ659-6V1A3-R20							6	33					
UQ659-7V1A3-R20							7	41					

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / W / H / Φ D / Tip Radius / Front angle, according to your requirement beside standard 50 degree front turning + back chamfering tool.
- ▶▶ Can manufacture inch dimension on request.

Grooving Tool

▶▶ Specification Tool Range

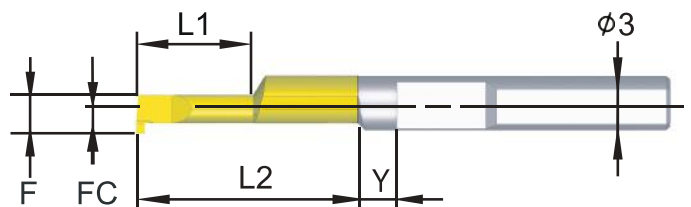
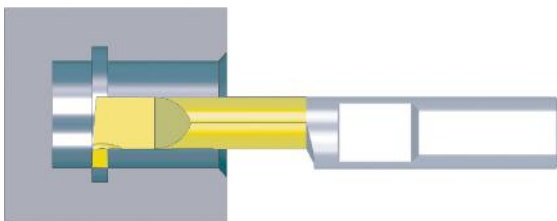
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

For Rough or Precision cutting.

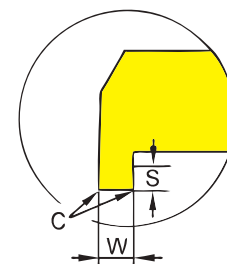
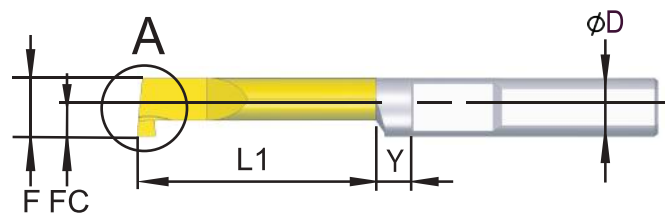
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3 □ ☆ ○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



A (See Drawing)



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

Grooving Tool

Item number	D	Minimum Diameter	F	FC	W	S	H	Multiples	L1	Y	C±0.01	Chipbreaker	Reference Plane (degree)	Coating Type
G318-05035-3V1A3	3	2.0	1.8	1.4	0.5	0.35	0.5	3	8	3	0	✓	0	S-Fire (TiAlN)
G318-05035-4V1A3								4	10.4	3				
G30505-3V1A3	3	3.2	2.9	1.4	0.5	0.5	0.7	3	8	3	0.04	✓	0	S-Fire (TiAlN)
G30505-4V1A3								4	10.4	3				
G30505-5V1A3								5	13	3				
G307508-3V1A3	3	3.2	2.9	1.4	0.75	0.8	1.0	3	8	3	0.04	✓	0	S-Fire (TiAlN)
G307508-4V1A3								4	10.4	3				
G307508-5V1A3								5	13	3				
G40505-3V1A3	4	4.2	3.9	1.9	0.5	0.5	0.7	3	10	3	0.04	✓	0	S-Fire (TiAlN)
G40505-4V1A3								4	13.5	3				
G40505-5V1A3								5	17	3				
G407508-3V1A3	4	4.2	3.9	1.9	0.75	0.8	1.0	3	10	3	0.04	✓	0	S-Fire (TiAlN)
G407508-4V1A3								4	13.5	3				
G407508-5V1A3								5	17	3				
G50506-3V1A3	5	5.2	4.9	2.4	0.5	0.6	0.8	3	14	3	0.04	✓	0	S-Fire (TiAlN)
G50506-4V1A3								4	18	3				
G50506-5V1A3								5	22	3				
G51010-3V1A3	5	5.2	4.9	2.4	1.0	1.0	1.2	3	14	3	0.04	✓	0	S-Fire (TiAlN)
G51010-4V1A3								4	18	3				
G51010-5V1A3								5	22	3				
G512515-3V1A3	5	5.2	4.9	2.4	1.25	1.5	1.7	3	14	3	0.04	✓	0	S-Fire (TiAlN)
G512515-4V1A3								4	18	3				
G512515-5V1A3								5	22	3				
G60506-3V1A3	6	6.2	5.9	2.9	0.5	0.6	0.8	3	16	3	0.04	✓	0	S-Fire (TiAlN)
G60506-4V1A3								4	22	3				
G60506-5V1A3								5	27	3				
G61015-3V1A3	6	6.2	5.9	2.9	1.0	1.5	1.7	3	16	3	0.04	✓	0	S-Fire (TiAlN)
G61015-4V1A3								4	22	3				
G61015-5V1A3								5	27	3				
G61518-3V1A3	6	6.2	5.9	2.9	1.5	1.8	2.0	3	16	3	0.04	✓	0	S-Fire (TiAlN)
G61518-4V1A3								4	22	3				
G61518-5V1A3								5	27	3				
G62022-3V1A3	6	6.2	5.9	2.9	2.0	2.2	2.4	3	16	3	0.04	✓	0	S-Fire (TiAlN)
G62022-4V1A3								4	22	3				
G62022-5V1A3								5	27	3				

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ Internal grooving tools have several sizes (W and S), please call for inquiries.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / W / S / C / ΦD / Tip Radius, according to your requirement beside standard grooving tool.
- ▶▶ Can manufacture inch dimension on request.

Threading Tool

▶▶ Specification Tool Range

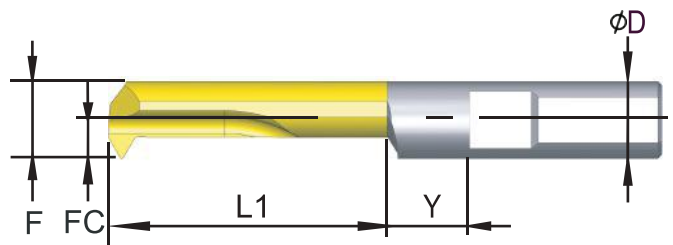
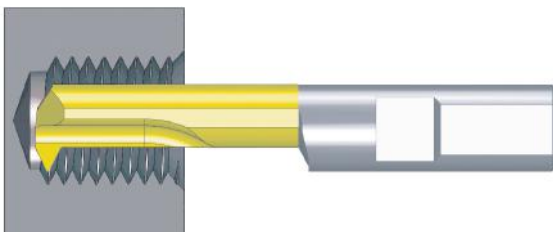
0.6mm~ 8mm.Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

For 60° thread use.

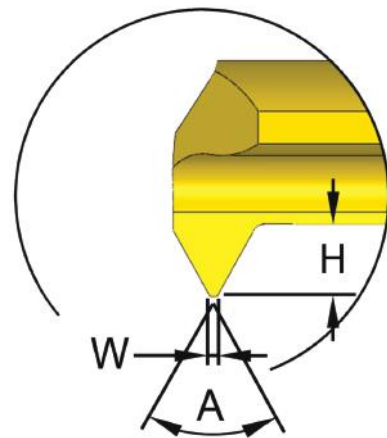
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3□☆○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



A (See Drawing)



V Breaker Groove



Reference Plane 0°



P Flat



Reference Plane 180°

Threading Tool

Item number	D	F	FC	A	H	W	Maximum Pitch	Multiples	L1	Y	Chipbreaker	Reference Plane (degree)	Coating Type
i321-3V1A3								3	8	3			
i321-4V1A3	3	2.1	1.05	60	0.55	0.03	0.6	4	10.4	3	✓	0	S-Fire (TiAlN)
i321-5V1A3								5	13	3			
i326-3V1A3								3	8	3			
i326-4V1A3	3	2.6	1.4	60	0.7	0.04	0.7	4	9.9	3.5	✓	0	S-Fire (TiAlN)
i326-5V1A3								5	13	3			
i435-3V1A3								3	10	3			
i435-4V1A3	4	3.5	1.9	60	0.8	0.05	0.8	4	12.5	4	✓	0	S-Fire (TiAlN)
i435-5V1A3								5	15	5			
i545-3V1A3								3	14	3			
i545-4V1A3	5	4.5	2.4	60	1.2	0.07	1.25	4	16	5	✓	0	S-Fire (TiAlN)
i545-5V1A3								5	18	7			
i659-3V1A3								3	16	3			
i659-4V1A3	6	5.9	2.9	60	1.4	0.11	1.5	4	19	6	✓	0	S-Fire (TiAlN)
i659-5V1A3								5	22	8			
i879-3V1A3								3	21	3			
i879-4V1A3	8	7.9	3.9	60	2.0	0.135	1.75	4	26	6	✓	0	S-Fire (TiAlN)
i879-5V1A3								5	32	8			

- ▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and S-Fire coating. Please inform us if need 180 reference plane, flat, uncoated or TiN coating.
- ▶▶ We do customize the above tool every dimensions including F / FC / L1 / L2 / W / H / A° / ΦD / Tip Radius, according to your requirement besides standard threading tool.
- ▶▶ Can manufacture inch dimension on request.

D Tool

Face Grooving Tool

▶▶ Specification Tool Range

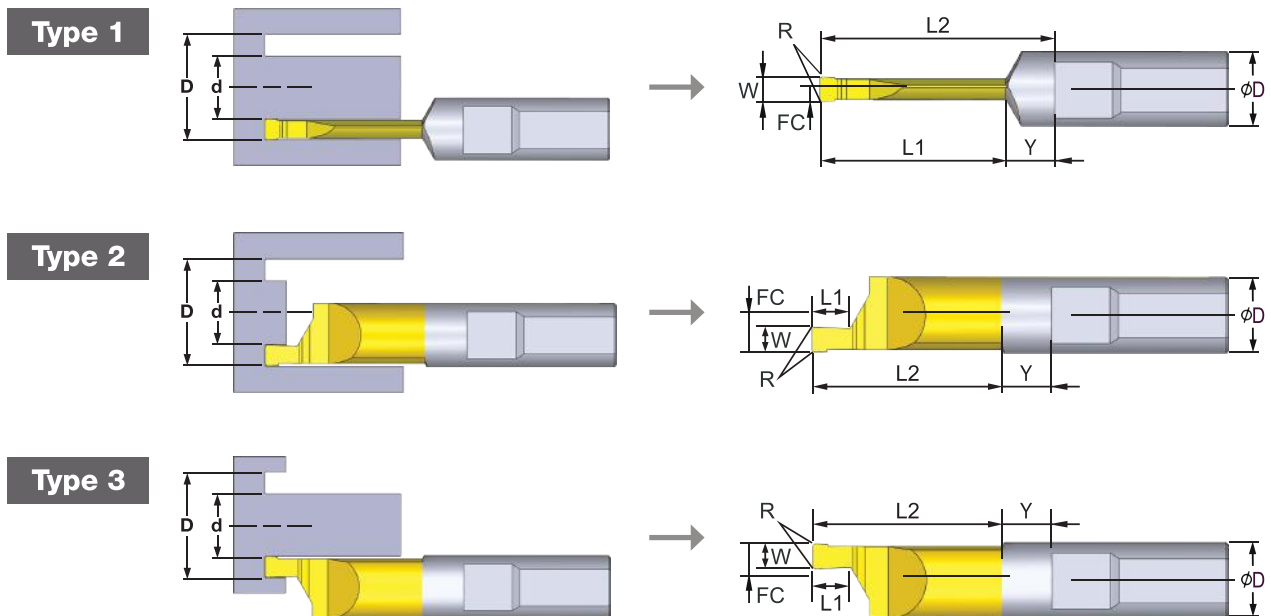
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

▶▶ Feature

Machined workpiece aperture > $\Phi 6$

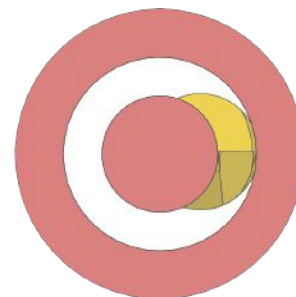
▶▶ Remark

Coated by imported equipment.



Tool Numbering : 3 □ ☆ ○

- 3 : Multiples of F
- : Chipbreaker Type
V=Breaker Groove
P=Flat
- ☆ : Reference Plane
1=0°
3=180°
- : Coating Type
0 =NO Coating
B2=TiN Coating
A3=TiAlN (S-Fire)
B9=DLC Coating



- ▶▶ Front view showcasing that the tool is designed to not interfere during the machining process of the workpiece.

Face Grooving Tool

Type	Item number	D	Minimum Diameter	FC	W	R	L1	L2	Y	Chipbreaker	Reference Plane (degree)	Coating Type
Type 1	D605V-R03-L1.6-1B25	6	7.0	0.25	0.5	0.03	1.6	10	8.4	✓	0	TiN
	D610V-R10-L4-1B25	6	8.0	0.5	1.0	0.1	4	10	6	✓	0	TiN
	D615V-R15-L6-1B25	6	9.0	0.75	1.5	0.15	6	12	6	✓	0	TiN
	D620V-R20-L8-1B25	6	10.0	1.0	2.0	0.2	8	15	7	✓	0	TiN
Type 2	D605RV-R03-L1.2-1B25	6	7.0	2.9	0.5	0.03	1.2	15	4	✓	0	TiN
	D610RV-R10-L1.5-1B25	6	8.0	2.9	1.0	0.1	1.5	15	4	✓	0	TiN
	D615RV-R15-L2.5-1B25	6	9.0	2.9	1.5	0.15	2.5	15	4	✓	0	TiN
	D620RV-R20-L3-1B25	6	10.0	2.9	2.0	0.2	3	15	4	✓	0	TiN
Type 3	D605LV-R03-L1.2-1B25	6	7.0	2.9	0.5	0.03	1.2	15	4	✓	0	TiN
	D610LV-R10-L1.5-1B25	6	8.0	2.9	1.0	0.1	1.5	15	4	✓	0	TiN
	D615LV-R15-L2.5-1B25	6	9.0	2.9	1.5	0.15	2.5	15	4	✓	0	TiN
	D620LV-R20-L3-1B25	6	10.0	2.9	2.0	0.2	3	15	4	✓	0	TiN

▶▶ Above item numbers are 0 degree reference plane, V breaker groove, and TiN coating. Please inform us if need 180 reference plane, flat, uncoated or S-Fire coating.

D Tool

Face Grooving Tool (Customized)

Specification Tool Range

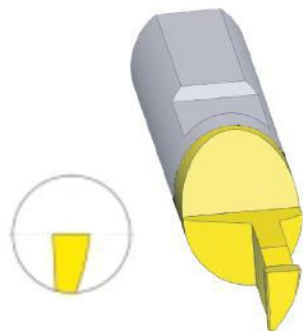
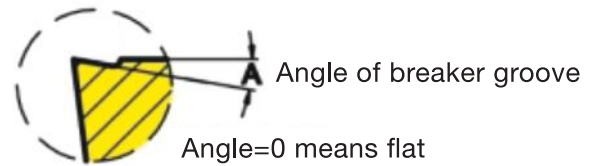
0.6mm~ 8mm. Tungsten carbide materials are imported from Europe and Japan.

Feature

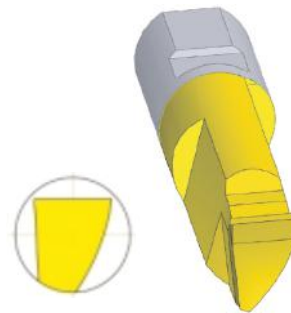
General and heavy-duty type.

Remark

Coated by imported equipment.

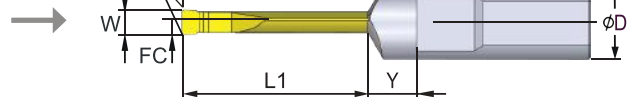
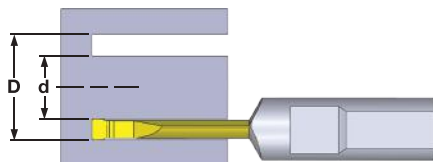


General Type

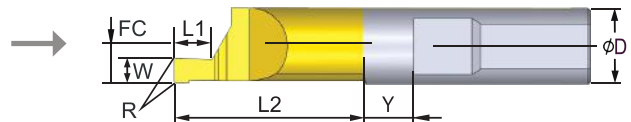
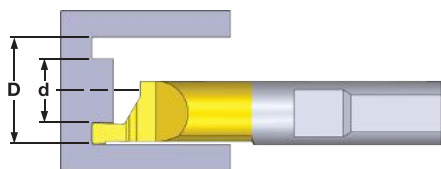


Heavy-duty Type

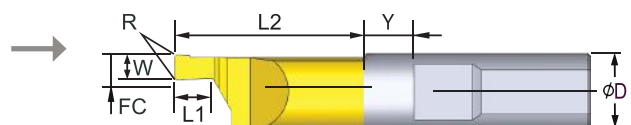
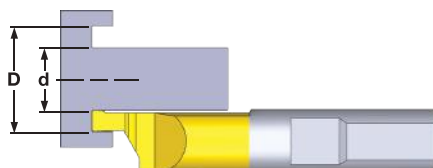
Type 1



Type 2



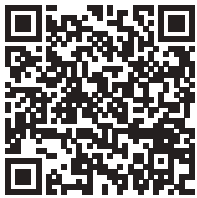
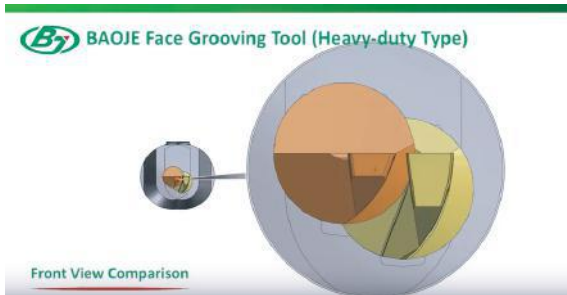
Type 3



We do customize face grooving tool with the above tool every dimensions including FC / L1 / L2 / W / ϕD / Tip Radius, according to your requirement.

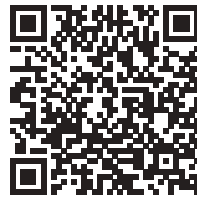
Face Grooving Tool (Customized)

Videos Introduction



Revealing the Design of BAOJE Face Grooving Tool (Heavy-duty Type)

◀ View Full Video on YouTube



Innovative Applications of Special Face Grooving Tool

◀ View Full Video on YouTube

Cases



Holders Classification

Holders Classification

D Type



Direct Toolholders ——— BJA

B Type



Butterfly Toolholders { BJMA (Star)
 BJJ (Star)
 BJR (Star)
 BJN (Nomura)

E Type



Easy Toolholders ——— BJAS

F Type



Flash Toolholders { BJZ
 BJZN (Nomura)

S Type



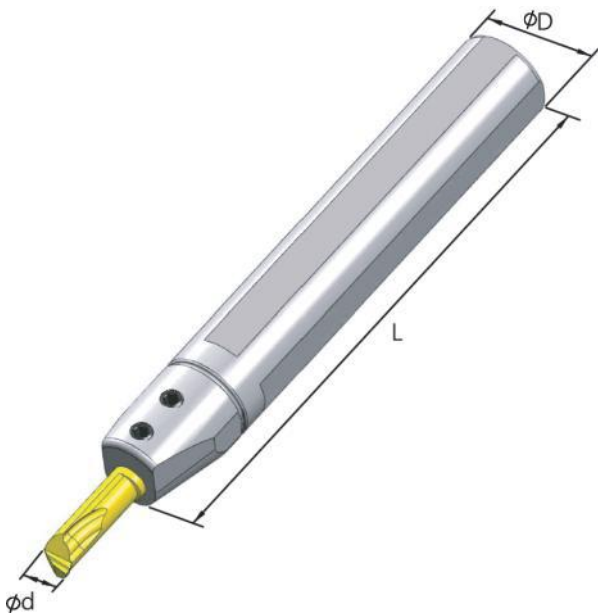
Special Toolholders — Customized upon request



D Type Toolholder Series

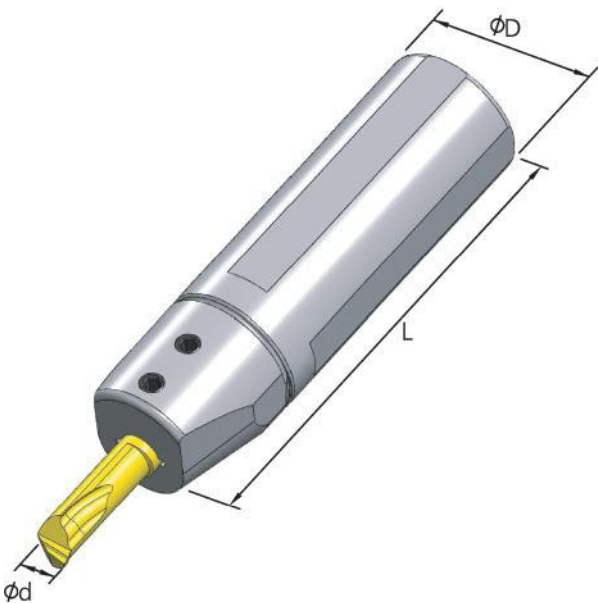
Direct Toolholder (D Type)

►► Specification :



Item number	Specification		
	ØD	Ød	L
BJA-16-03-100WB		3	
BJA-16-04-100WB	16	4	100
BJA-16-05-100WB		5	
BJA-16-06-100WB		6	
BJA-17-03-100WB		3	
BJA-17-04-100WB	17	4	100
BJA-17-05-100WB		5	
BJA-17-06-100WB		6	
BJA-1905-03-95WB		3	
BJA-1905-04-95WB		4	
BJA-1905-05-95WB	19.05	5	95
BJA-1905-06-95WB		6	
BJA-1905-08-95WB		8	

►► Specification :



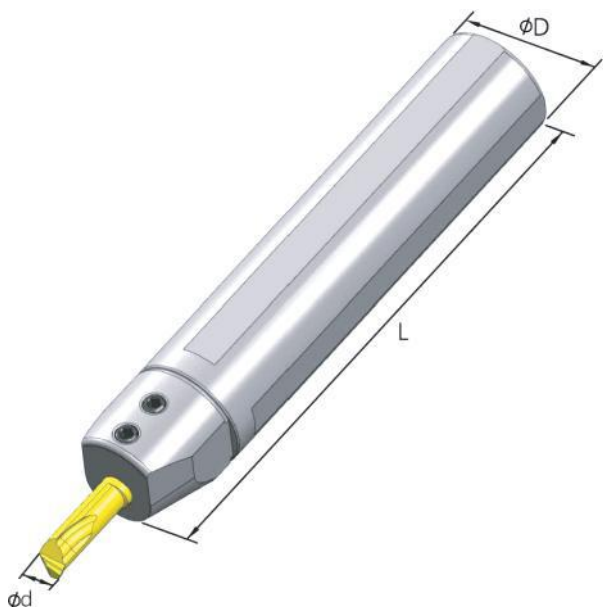
Item number	Specification		
	ØD	Ød	L
BJA-20-03-100WB		3	
BJA-20-04-100WB		4	
BJA-20-05-100WB	20	5	100
BJA-20-06-100WB		6	
BJA-20-08-100WB		8	
BJA-20-03-150WB		3	
BJA-20-04-150WB		4	
BJA-20-05-150WB	20	5	150
BJA-20-06-150WB		6	
BJA-20-08-150WB		8	

Quick Change Tool for first-timer and customized upon your request.

D Type Toolholder Series

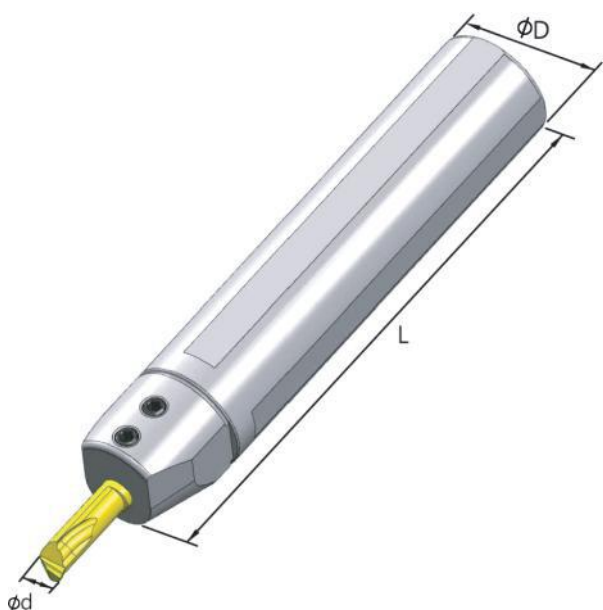
Direct Toolholder (D Type)

►► Specification :



Item number	Specification		
	ϕD	ϕd	L
BJA-22-03-110WB		3	
BJA-22-04-110WB		4	
BJA-22-05-110WB	22	5	110
BJA-22-06-110WB		6	
BJA-22-08-110WB		8	
BJA-22-03-150WB		3	
BJA-22-04-150WB		4	
BJA-22-05-150WB	22	5	150
BJA-22-06-150WB		6	
BJA-22-08-150WB		8	

►► Specification :



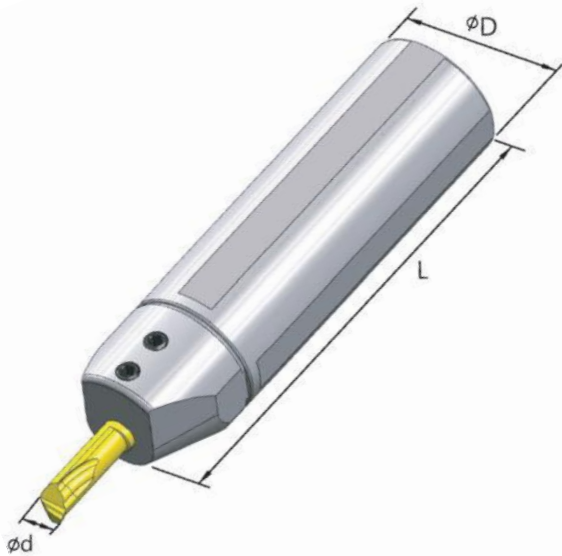
Item number	Specification		
	ϕD	ϕd	L
BJA-23-03-110WB		3	
BJA-23-04-110WB		4	
BJA-23-05-110WB	23	5	110
BJA-23-06-110WB		6	
BJA-23-08-110WB		8	

Quick Change Tool for first-timer and customized upon your request.

D Type Toolholder Series

Direct Toolholder (D Type)

► Specification :



Item number	Specification		
	øD	ød	L
BJA-25-03-90WB		3	
BJA-25-04-90WB		4	
BJA-25-05-90WB	25	5	90
BJA-25-06-90WB		6	
BJA-25-08-90WB		8	
BJA-25-03-150WB		3	
BJA-25-04-150WB		4	
BJA-25-05-150WB	25	5	150
BJA-25-06-150WB		6	
BJA-25-08-150WB		8	
BJA-254-03-90WB		3	
BJA-254-04-90WB		4	
BJA-254-05-90WB	25.4	5	90
BJA-254-06-90WB		6	
BJA-254-08-90WB		8	
BJA-254-03-150WB		3	
BJA-254-04-150WB		4	
BJA-254-05-150WB	25.4	5	150
BJA-254-06-150WB		6	
BJA-254-08-150WB		8	

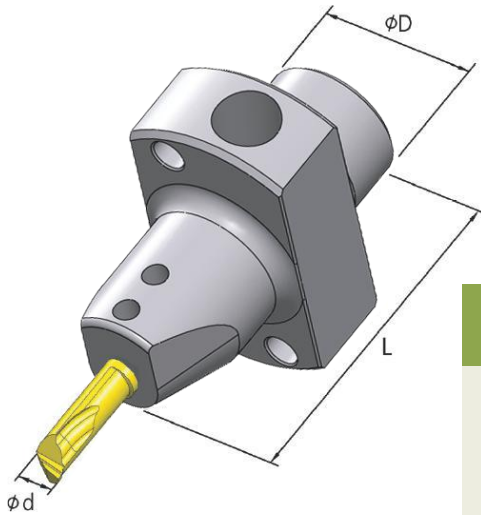
Quick Change Tool for first-timer and customized upon your request.



B Type Toolholder Series

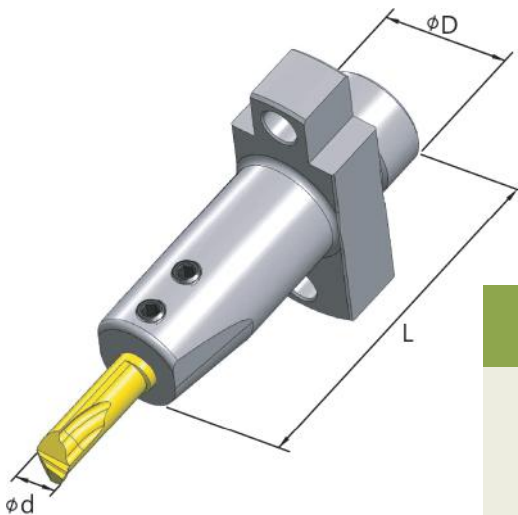
Butterfly Toolholder (B Type)

►► Specification :



Item number	Specification			Type of machine
	ØD	Ød	L	
BJMA-22-03-59WB		3		
BJMA-22-04-59WB		4		
BJMA-22-05-59WB	22	5	59	STAR
BJMA-22-06-59WB		6		
BJMA-22-08-59WB		8		

►► Specification :



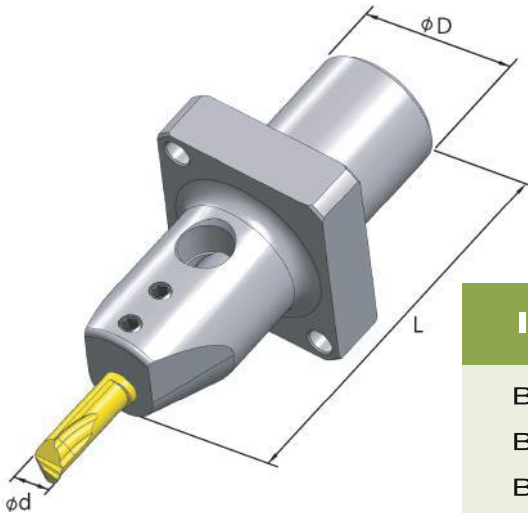
Item number	Specification			Type of machine
	ØD	Ød	L	
BJJ-16-03-53WB		3		
BJJ-16-04-53WB		4		
BJJ-16-05-53WB	16	5	53	STAR 10J
BJJ-16-06-53WB		6		

Quick Change Tool for first-timer and customized upon your request.

B Type Toolholder Series

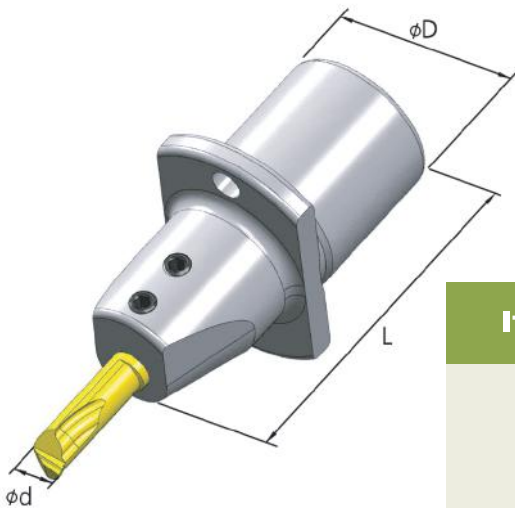
Butterfly Toolholder (B Type)

►► Specification :



Item number	Specification			Type of machine
	ϕD	ϕd	L	
BJR-22-03-69WB		3		
BJR-22-04-69WB		4		
BJR-22-05-69WB	22	5	69	STAR 20RIV
BJR-22-06-69WB		6		
BJR-22-08-69WB		8		

►► Specification :



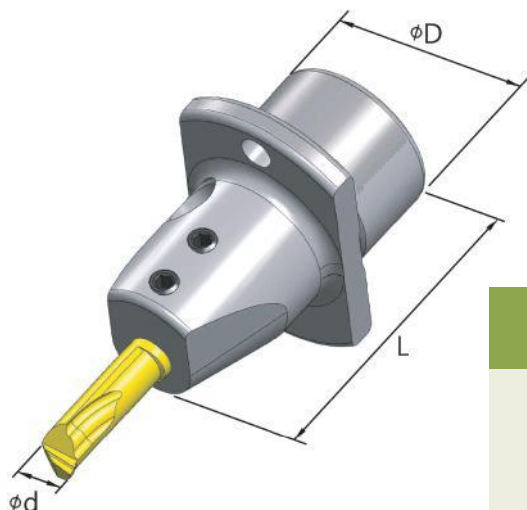
Item number	Specification			Type of machine
	ϕD	ϕd	L	
BJN-23-03-53		3		
BJN-23-04-53		4		
BJN-23-05-53	23	5	53	Nomura
BJN-23-06-53		6		
BJN-23-08-53		8		

Quick Change Tool for first-timer and customized upon your request.

B Type Toolholder Series

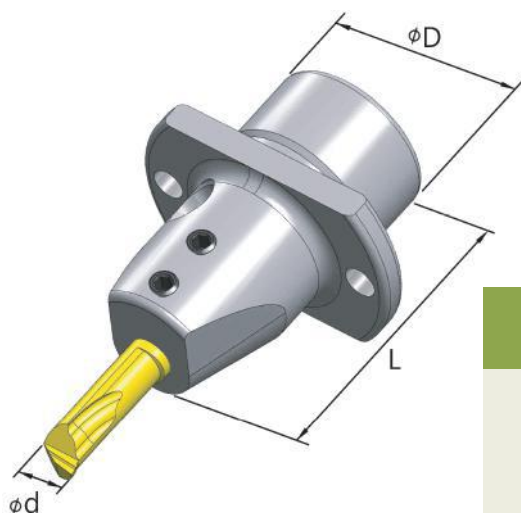
Butterfly Toolholder (B Type)

▶▶ Specification :



Item number	Specification			Type of machine
	ØD	Ød	L	
BJN-E22-03-43WB		3		
BJN-E22-04-43WB		4		
BJN-E22-05-43WB	22	5	43	Nomura
BJN-E22-06-43WB		6		
BJN-E22-08-43WB		8		

▶▶ Specification :



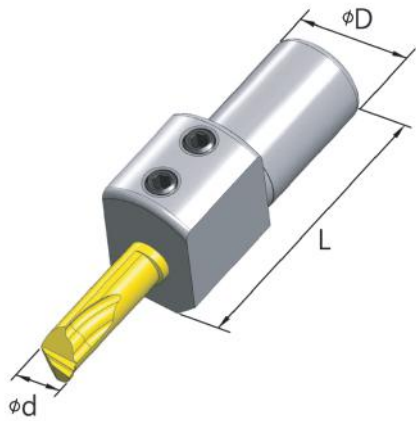
Item number	Specification			Type of machine
	ØD	Ød	L	
BJN-N22-03-43B		3		
BJN-N22-04-43B		4		
BJN-N22-05-43B	22	5	43	Nomura
BJN-N22-06-43B		6		
BJN-N22-08-43B		8		

Quick Change Tool for first-timer and customized upon your request.

E Type Toolholder Series

Easy Toolholder (E Type)

► Specification :



Item number	Specification		
	ØD	Ød	L
BJAS-10-03-36		3	
BJAS-10-04-36	10	4	36
BJAS-10-05-36		5	
BJAS-10-06-36		6	
BJAS-13-03-36		3	
BJAS-13-04-36	13	4	36
BJAS-13-05-36		5	
BJAS-13-06-36		6	

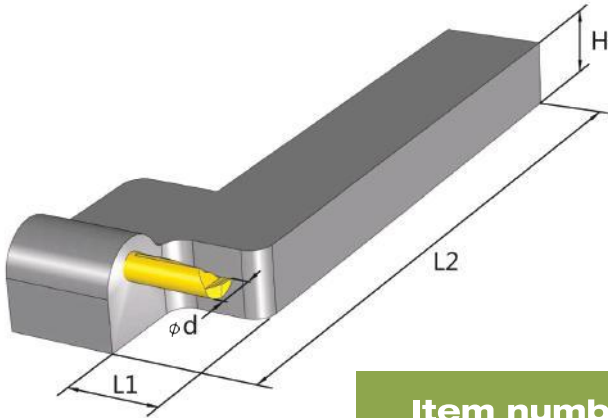
Quick Change Tool for first-timer and customized upon your request.



F Type Toolholder Series

Flash Toolholder (F Type)

►► Specification :



Item number	Specification				Type of machine
	H	Ød	L1	L2	
BJZ-10-03-4	10	3	13.4	100	General
BJZ-10-04-4		4	16.5		
BJZ-12-03-4	12	3	13.4	100	
BJZ-12-04-4		4	16.5		
BJZ-12-05-4		5	21		
BJZN-10-03-4	10	3	13.4	100	Nomura
BJZN-10-04-4		4	16.5		
BJZN-12-03-4	12	3	13.4	100	
BJZN-12-04-4		4	16.5		
BJZN-12-05-4		5	21		

Quick Change Tool for first-timer and customized upon your request.

S Type Toolholder Series

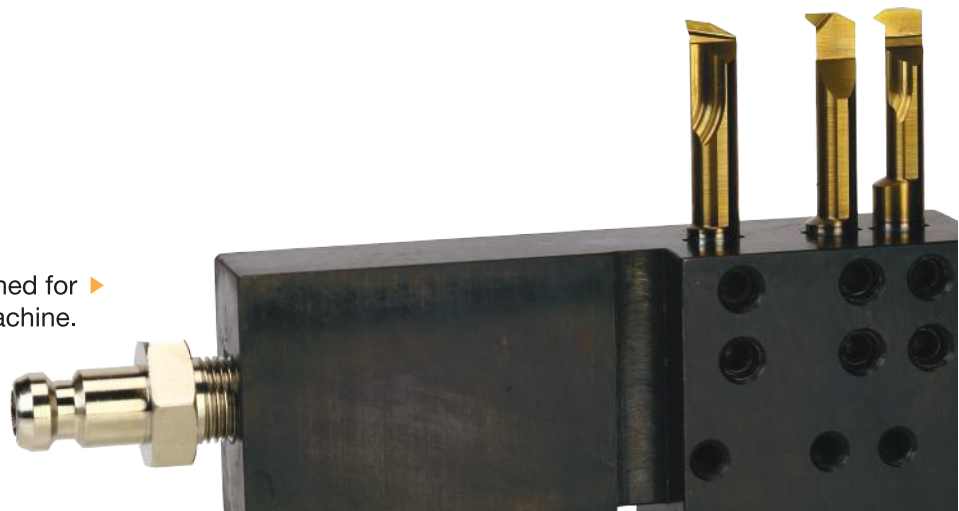
Special Toolholder (S Type)

► Specification :

Based on your machine type, we can design customized holders to meet your demand.



This is a holder designed for ►
use in multi-axis lathe machine.



Quick Change Tool for first-timer and customized upon your request.



BJ Torque Screwdriver Kits

Introduction: BJ Torque Screwdriver

In order to standardize the cutting tool tightening, Baoje systematic cutting tools introduce a torque screwdriver to tighten the cutting tool. For Baoje cutting tool shank different diameters of Ø3, Ø4, Ø5, Ø6, Ø8, different torque screwdrivers are used to tighten the cutting tool. There is a cue sound feature, when the preset torque is reached, a Click sound will be made, which can prevent the operator from using excessive force to break the cutting tool and increase the stability of the cutting tool tightening.

Baoje torque screwdriver is assembled with three parts. First part is the screwdriver handle, which is suitable for various torque applications; the second part is the preset torque adapter. We made different preset torque adapters according to different Baoje cutting tool shank diameters of Ø3, Ø4, Ø5, Ø6, Ø8. And there are color management and important lasered information on the adapter to prevent operator making mistakes; Third part is the screwdriver bit. The screw specifications on the Baoje toolholder are mainly M4 and M5. The required screwdriver bit specifications are H2.0 and H2.5. In addition, we also provide TX8, TX9, TX10, TX15. These screwdriver bit allows customers to tighten the CNC inserts. These three parts can be replaced flexibly, which is very convenient and safe for the operator.

BJ Torque Screwdriver Features



Quick and Flexible
Interchangeable



Reversible
Loosen System



Click Sound



Cutting Tool Tightening
Standardization

■ Introduction: BJ Torque Screwdriver Kit

Baoje systematic cutting tool made five kits for preset torque adapter and bits according to different Baoje cutting tool shank diameters of Ø3, Ø4, Ø5, Ø6, and Ø8 for customers to choose. Torque screwdriver is assembled with three parts.

▶▶ First Part

First part is the screwdriver handle, which is suitable for various torque applications.

▶▶ Second Part

The second part is the preset torque adapter. We made different preset torque adapters according to different Baoje cutting tool shank diameters of Ø3, Ø4, Ø5, Ø6, Ø8. Torque adapter has a cue sound feature, when the preset torque is reached will make a click sound continuously. And there are color management and important lasered information on the adapter to prevent operator making mistakes.

▶▶ Third Part

Third part is the screwdriver bit. The screw specifications on the Baoje toolholder are mainly M4 and M5. The required screwdriver bit specifications are H2.0 and H2.5. In addition, we also provide TX8, TX9, TX10, TX15. These screwdriver bit allows customers to tighten the CNC inserts. These three parts can be replaced flexibly, which is very convenient and safe for the operator, special attention should be paid to when assembling the bit, it is necessary to assemble the corresponding torque adapter, because the smaller specification bit cannot withstand the heavier torque adapter, will easy damage the bit and may cause the bit to fall off.



BJ Torque Screwdriver Kits

BJ Torque Screwdriver Kit

BJ-TSD-NO-3

Handle	BJ-TRF * 1 pc
Adapter	BJ-ADA-NO-3 * 1 pc
Bit H2.0	1 pc
H2.5	2 pcs
TX	TX8 * 2 pcs



BJ-TSD-NO-4

Handle	BJ-TRF * 1 pc
Adapter	BJ-ADA-NO-4 * 1 pc
Bit H2.0	1 pc
H2.5	2 pcs
TX	TX9 * 2 pcs



BJ-TSD-NO-5

Handle	BJ-TRF * 1 pc
Adapter	BJ-ADA-NO-5 * 1 pc
Bit H2.0	1 pc
H2.5	2 pcs
TX	TX10 * 2 pcs



BJ-TSD-NO-6

Handle	BJ-TRF * 1 pc
Adapter	BJ-ADA-NO-6 * 1 pc
Bit H2.0	0
H2.5	3 pcs
TX	TX15 * 2 pcs



BJ Torque Screwdriver Kits

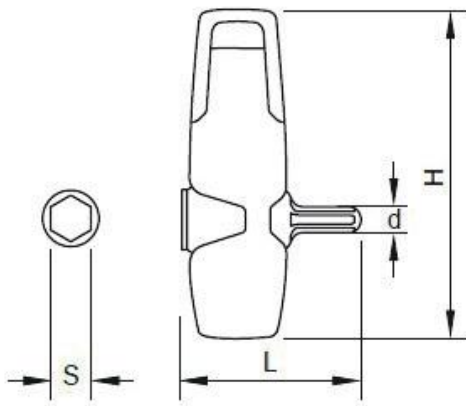
BJ-TSD-NO-8

Handle	BJ-TRF * 1 pc
Adapter	BJ-ADA-NO-8 * 1 pc
Bit H2.0	0
H2.5	3 pcs
TX	TX15 * 2 pcs



BJ Torque Screwdriver Handle

▶▶ Handle item number: BJ-TRF



Item No.	Color	S	L	H	d	N.W.
BJ-TRF	Red	6.35	70.7	37.5	5	25g

BJ Torque Screwdriver Kits

Adapter of Torque Screwdriver Characteristic



Reversible
Loosening System



Torque Adapter
Can Tighten
About 20,000 Times



Torque Adapter
Torque Value Is
With A Tolerance
of +/- 10%



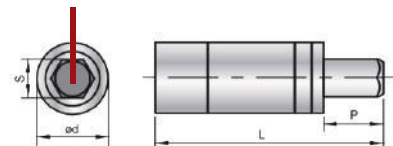
Magnet
Adsorption Design

Please pay special attention: Baoje provided 5 types of torque adapters have different torque values. Each torque adapter needs to be used with a suitable screwdriver bit to avoid damage to the screw or screwdriver bit.

BJ-ADA-NO-3 /



Installed with magnet



Item No.	Suit for BAOJE Tool	Suit for BIT	Nm	Ød	S	P	L	N.W	Contents
BJ-ADA-NO-3	Ø3	H2.0 / H2.5 / TX8	1.2	12	6.35	10	37	80g	1 pc

BJ-ADA-NO-4 /



Item No.	Suit for BAOJE Tool	Suit for BIT	Nm	Ød	S	P	L	N.W	Contents
BJ-ADA-NO-4	Ø3 / Ø4	H2.0 / H2.5 / TX9	1.4	12	6.35	10	37	80g	1 pc

BJ-ADA-NO-5 /



Item No.	Suit for BAOJE Tool	Suit for BIT	Nm	Ød	S	P	L	N.W	Contents
BJ-ADA-NO-5	Ø5 / Ø6	H2.0 / H2.5 / TX10	2.0	12	6.35	10	37	80g	1 pc

BJ Torque Screwdriver Kits

BJ-ADA-NO-6 /



Item No.	Suit for BAOJE Tool	Suit for BIT	Nm	Ød	S	P	L	N.W	Contents
BJ-ADA-NO-6	Ø5 / Ø6	H2.5 / TX15	3.0	12	6.35	10	37	80g	1 pc

▶▶ Please pay special attention: Baoje torque adapter BJ-ADA-NO-6 do not install with the BJ-BIT50-H2.0 screwdriver bit to tighten the M4 screw, because the torque value is too large that might cause the screw and the bit damaged.

BJ-ADA-NO-8 /



Item No.	Suit for BAOJE Tool	Suit for BIT	Nm	Ød	S	P	L	N.W	Contents
BJ-ADA-NO-8	Ø8	H2.5 / TX15	3.5	12	6.35	10	37	80g	1 pc

▶▶ Please pay special attention: Baoje torque adapter BJ-ADA-NO-8 do not install with the BJ-BIT50-H2.0 screwdriver bit to tighten the M4 screw, because the torque value is too large that might cause the screw and the bit damaged.

Bits for Torque Screwdriver Characteristic



Hex Screwdriver Bits Can Tighten BJ Toolholder M4 and M5 Screws



TX Screwdriver Bits Can Tighten CNC Inserts Screw



Simple Operation



Magnetic Design

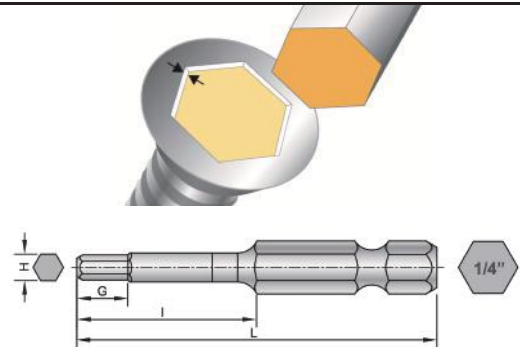


Screwdriver Bit Is Not Loosen During Operation

Please pay special attention: When using the screwdriver bit, it is important to note that the screwdriver bit and screw with relatively small specifications are not suitable for the use of torque adapter with large torque value, because excessive torque will easily damage the screwdriver bit and screw.

BJ Torque Screwdriver Kits

Product Specification - Hex Screwdriver Bit



BJ-BIT50-H2.0

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-H2.0	H2	M4	53g	50	6 pcs

- ▶▶ Baoje toolholder series that uses M4 screw: BJA-16, BJA-17, BJA-1905, BJA-23, BJA32, BJN-23, BJJ-16, BJR-22.
- ▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-3, BJ-ADA-NO-4, BJ-ADA-NO-5.
- ▶▶ Please pay special attention: Baoje screwdriver bit BJ-BIT50-H2.0 can withstand maximum torque of 2.0 Nm, use Torque adapter torque value larger than 2.0 Nm will damage the screwdriver bit and the screw.

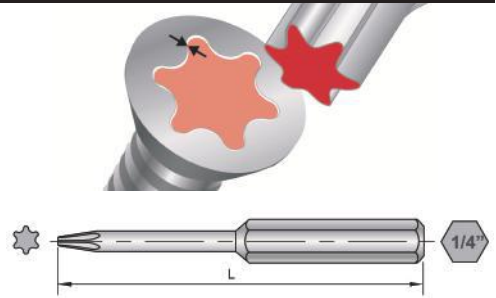
BJ-BIT50-H2.5

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-H2.5	H2.5	M5	58g	50	6 pcs

- ▶▶ Baoje toolholder series that uses M5 screw: BJA-20, BJA-22, BJA-25, BJA-254, BJMA-22.
- ▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-3, BJ-ADA-NO-4, BJ-ADA-NO-5, BJ-ADA-NO-6, BJ-ADA-NO-8.

BJ Torque Screwdriver Kits

Product Specification - TORX® TX Screwdriver Bit



BJ-BIT50- TX8

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-TX8	TX8	TORX®	53g	50	6 pcs

▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-3.

BJ-BIT50- TX9

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-TX9	TX9	TORX®	55g	50	6 pcs

▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-4.

BJ-BIT50- TX10

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-TX10	TX10	TORX®	55g	50	6 pcs

▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-5.

BJ-BIT50- TX15

Item No.	Driver Size	Suit for Screw	N.W	L	Contents
BJ-BIT50-TX15	TX15	TORX®	55g	50	6 pcs

▶▶ Baoje torque adapters to be used with: BJ-ADA-NO-6, BJ-ADA-NO-8.

BJ Torque Screwdriver Kits

BJ Toolholders Screw Specifications Comparison Table

- ▶▶ Baoje toolholder screw specifications are M4 and M5, when toolholder uses M4 screw, then use H2.0 screwdriver bit, when toolholder uses M5 screw, then use H2.5 screwdriver bit.

BAOJE Toolholder Series	Screw
BJA-16	M4
BJA-17	M4
BJA-1905	M4
BJA-20	M5
BJA-22	M5
BJA-23	M4
BJA-25	M5
BJA-254	M5
BJA-32	M4
BJMA-22	M5
BJN-23	M4
BJJ-16	M4
BJR-22	M4 (old) / M5 (new)



BAOJE Industrial Co.,Ltd.

No.188,Niaosong 1st St.,Yongkang Dist.,
Tainan City,Taiwan

TEL 886 6 253 1237

FAX 886 6 211 6567

Email service@baojetoool.com