

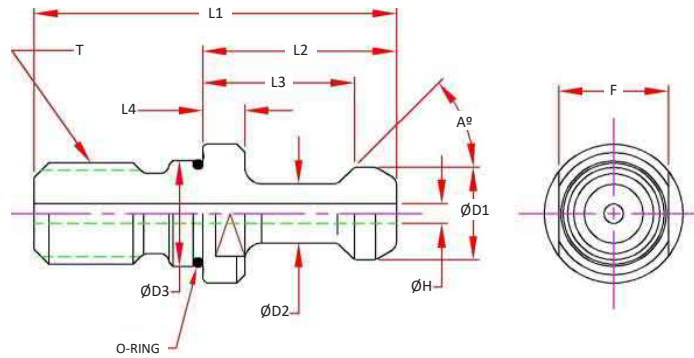
# BT30

## BT30 - High Performance Studs

### Features

- Manufactured to the Industry Standards or machine builders specifications.
- Grind Finish to adhere to machine builder recommendations
- Coolant Knobs include O-ring on the thread side pilot diameter to adhere to builder recommendations

**Note:** It is critical that the correct retention knob is used with each machining center. Please verify all dimensions prior to ordering. Machine specifications will be located in your machine manual or contact the machine manufacturer.



Part Number	A Angle	D1 Head	D2 Neck	D3 Pilot	L1 OAL	L2 Proj.	L3 Pull Loc.	L4 Flange	H Hole	O-Ring	F Flats	T Thread	Socket Wrench	Notes
HPS-016			0.276							-	-			MAS P30T-1
HPS-B30-FANUC-C	45		0.315						0.157	Yes †				MAS P30T-1 FANUC
HPS-016C			0.276						0.098	Yes †				MAS P30T-1
HPS-017		0.433	0.276	0.492	1.693	0.906	0.709	0.197	-	-	13mm	M12	TWS-M13	MAS P30T-2
HPS-B30-BOTHER-C	60		0.295						0.098	Yes †				MAS P30T-2 Brother
HPS-017C			0.276						0.098	Yes †				MAS P30T-2
HPS-B30-KITAMUA-C	75	0.472	0.315		1.693	0.921	0.724		0.157	Yes †				Kitamura Spec

† O-Ring added to Pilot, adheres to machine company changes, remove O-Ring if not required

# BT30 Nose Index

Shrink Fit	PAGE 56
SX Collet Chuck	PAGE 57
MX Collet Chuck	PAGE 58
VX Collet Chuck	PAGE 58
MC Mill Chuck	PAGE 59
ER Collet Chuck	PAGE 60
End Mill Adapters	PAGE 61
Shell Mill	PAGE 62
QC Tapping	PAGE 63
Drill Chucks	PAGE 64
Test / Runout Bars	PAGE 65

CAT40

CAT50

**BT 30**

BT40

HSK 40E

HSK 63A

HSK 100A

STRAIGHT SHANKS

COLLETS

PARTS & ACCESS.

SHRINK MACHINES

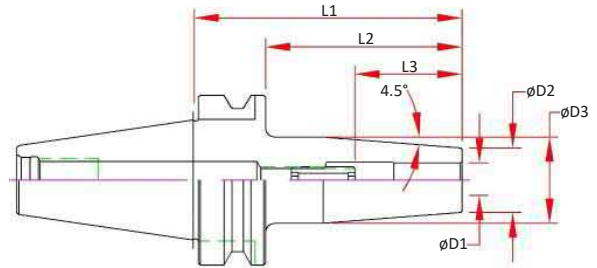
INDEXERS



## BT30 Shrink Fit - Inch

### Features

- 3  $\mu\text{m}$  - 0.0001" Runout Taper to Bore
- Manufactured from ISO-40CrMoV5 (H13) Material, Heat Treated for Optimum Elasticity and Tool Life
- X Jet-Blast Pluggable Coolant Ports
- Tapers are ground better than AT3 for optimal T.I.R.
- Dynamically Balanced for G2.5 @ 25,000 RPM or < 1 gmm
- Preset Screw included for 1/4" & larger for positive stop
- Designed for Carbide Cutting Tools with h6 shank tolerance



### Optional (Order Separately):

- Fine Trim Balance (Sample cutter required for balance compensation)



Dual Contact Spindle Part Number	D1 Bore	D2	D3	L1 Projection	L2	L3 Max Tool Enters	Preset Screw
BT30-SD012-080-B-X	0.1250	0.39	0.77	3.15	2.17	3.72	-
BT30-SD018-080-B-X	0.1875	0.39	0.77	3.15	2.17	3.72	-
BT30-SD025-080-B-X	0.2500	0.83	1.06	3.15	2.17	1.54	SCW-ASC-05-23
BT30-SD031-080-B-X	0.3125	0.83	1.06	3.15	2.17	1.54	SCW-ASC-06-23
BT30-SD037-080-B-X	0.3750	0.94	1.26	3.15	2.17	1.73	SCW-ASC-08-23
BT30-SD050-080-B-X	0.5000	0.94	1.26	3.15	2.17	1.97	SCW-ASC-10-23
BT30-SD062-080-B-X	0.6250	1.06	1.34	3.15	2.17	2.09	SCW-ASC-12-23
BT30-SD075-090-B-X	0.7500	1.30	1.65	3.54	2.56	2.09	SCW-ASC-12-23

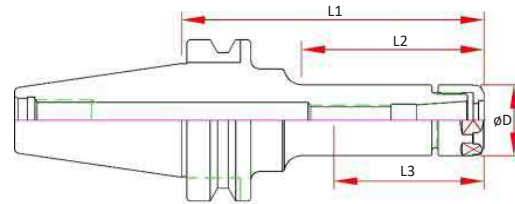
# BT30 SX Collet Chucks

## Features

- 3  $\mu\text{m}$  - 0.0001" Runout Taper to Taper
- Coolant Thru Body
- Dynamically Pre-Balanced G2.5 @ 25,000 RPM or <1gmm
- Tapers are ground better than AT3 for optimal T.I.R.

## Optional (Order Separately):

- Wrench
- Torque Wrench
- Collets
  - 0.005mm (0.0002") Standard
  - 0.003mm (0.0001") Ultra Precision
- Fine Trim Balance (Sample cutter required for balance compensation)



Dual Contact Spindle Part Number	Standard Spindle Part Number	D	L1 Projection	L2	L3 Max. Preset	Collet	Nut	Wrench
BT30-SX06-060-B	BT30-SX06-060	0.77	2.36	1.30	2.15	SX06	SXN-06	SXW-06
BT30-SX06-090-B	BT30-SX06-090		3.54	2.20	2.15			
BT30-SX10-060-B	BT30-SX10-060	1.08	2.36	1.38	2.30	SX10	SXN-10	SXW-10
BT30-SX10-090-B	BT30-SX10-090		3.54	2.56	2.40			
BT30-SX16-060-B	BT30-SX16-060	1.58	2.36	1.46	2.30	SX16	SXN-16	SXW-16
BT30-SX16-090-B	BT30-SX16-090		3.54	2.64	3.03**			
BT30-SX25M-070-B	BT30-SX25M-070	1.97	2.76	2.68	2.42	SX25	SXN-25	50-55 HOOK

\*\* 10MM Tool Shanks & Smaller



CAT40  
CAT50  
**BT 30**  
BT40  
HSK 40E  
HSK 63A  
HSK 100A  
STRAIGHT SHANKS  
COLLETS  
PARTS & ACCESS.  
SHRINK MACHINES  
INDEXERS

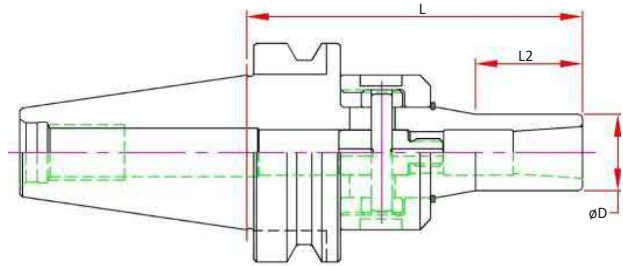
## BT30 VX - Mini Chuck

### Features

- 3  $\mu\text{m}$  - 0.0001" Runout @ 4X Diameter
- Front Locking System
- Coolant Thru
- Dynamically Pre-Balanced G2.5 @ 25,000 RPM or < 1gmm
- Tapers are ground better than AT3 for optimal T.I.R.

### Optional (Order Separately):

- Wrench
- Torque Wrench
- Collets
- DIN-B Flange Coolant
- Fine Trim Balance  
(Sample cutter required for balance compensation)



Dual Contact Spindle Part Number	Collet Range	D	L1 Projection	L2	Collet	Wrench	Locking Torque Max.
BT30-VX06-090-B	0.079 - 0.250	0.50	3.54	1.37	MX06	45-48 PIN	30 ft/lbs
BT30-VX08-092-B	0.125 - 0.394	0.787	3.62	1.21	MX08		

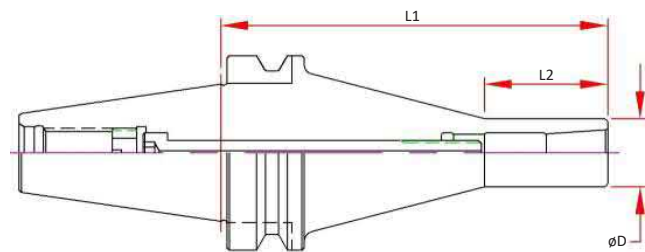
## BT30 MX - Mini Chuck

### Features

- 3  $\mu\text{m}$  - 0.0001" Runout @ 4X Diameter
- Rear Draw Bolt Locking System
- Coolant Thru
- Dynamically Pre-Balanced G2.5 @ 25,000 RPM or < 1gmm
- Tapers are ground better than AT3 for optimal T.I.R.

### Optional (Order Separately):

- Wrench
- Torque Wrench
- Collets, STD and Jet-Blast
- DIN-B Flange Coolant
- Fine Trim Balance  
(Sample cutter required for balance compensation)



Dual Contact Spindle Part Number	Standard Spindle Part Number	Collet Range	D	L1 Projection	L2	Collet	Wrench	Locking Torque Max.
BT30-MX06-090-B	BT30-MX06-090	0.079 - 0.250	0.500	3.54	1.42	MX06		
BT30-MX08-090-B	BT30-MX08-090	0.125 - 0.394	0.787	3.54	1.42	MX08	MXW05	20 ft/lbs
BT30-MX12-105-B	BT30-MX12-105	0.157 - 0.500	1.000	4.13	1.38	MX12		

# BT30 Mill Chucks

## Features

- 5  $\mu\text{m}$  - 0.0002" Runout @ 4 x Cutter Shank Dia.
- Designed for Tool Shanks w/ ISO h6 Class Tolerance
- Tapers are ground better than AT3 for optimal T.I.R.
- Pre-Balanced for use @ 20,000 RPM

## Optional (Order Separately):

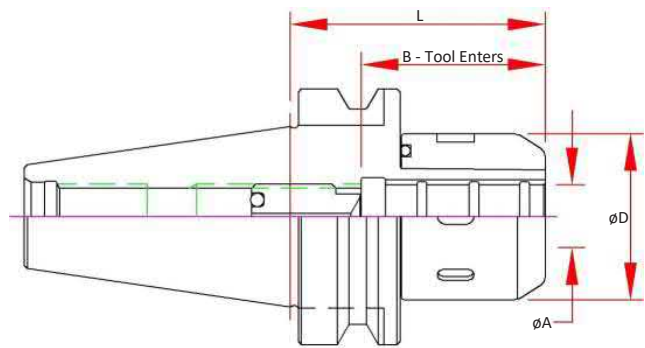
- Wrench
- Nylon Screw Seal for short tool shanks
- DIN-B Flange Coolant



CAT40

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**BT 30**



BT40

HSK 40E

HSK 63A

HSK 100A

STRAIGHT SHANKS

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INDEXERS

Part Number	A Bore	B Max. Tool Enters	D	L Projection	Preset Screw	Collet	Wrench
BT30-MC075-0315	0.7500			3.15		MC075	
BT30-MC075-0335		2.76	2.09	3.35	ASC-12-30		50-55 HOOK
BT30-MC20-080	20mm			3.15		MC20	



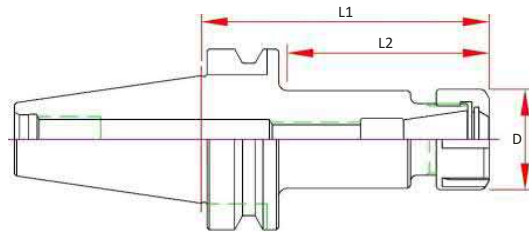
# BT30 ER Collet Chucks

## Features

- 3 μm - 0.0001" Runout Taper to Taper
- Coolant Thru Body
- Dynamically Pre-Balanced G6.3 @ 20,000 RPM or <1gmm
- Tapers are ground better than AT3 for optimal T.I.R.

## Optional (Order Separately):

- Wrench
- Torque Wrench
- Collets
  - 0.010mm (0.0004") Standard
  - 0.005mm (0.0002") Ultra Precision
  - Sealed (Select Sizes)
  - Jet-Blast (Select Sizes)
- Fine Trim Balance (Sample cutter required for balance compensation)



## BT30 MINI NUT

Part Number	Range	D	L1 Projection	L2	Screw	Nut	Wrench
BT30-ER11M-060	.019-.276	0.63	2.36	1.46	ASC-ER11	ERN-11M	ERW-11M
BT30-ER11M-100			3.94	2.95			
BT30-ER16M-070	.019-.394	0.87	2.76	1.86	ASC-ER16	ERN-16M	ERW-16M
BT30-ER16M-100			3.94	3.03			

## BT30 STD NUT

Dual Contact Spindle Part Number	Standard Spindle Part Number	Range	D	L1 Projection	L2	Screw	Nut	Wrench
BT30-ER11H-060-B	BT30-ER11H-060	.019-.276	0.74	2.36	1.46	ASC-ER11	ERN-11H	ERW-11H
BT30-ER11H-100-B	BT30-ER11H-100			3.94	2.95			
BT30-ER16H-060-B	BT30-ER16H-060	.019-.394	1.10	2.36	1.46	ASC-ER16	ERN-16H	ERW-16H
BT30-ER16H-100-B	BT30-ER16H-100			3.94	3.03			
BT30-ER20H-060-B	BT30-ER20H-060	.019-.512	1.33	2.36	1.46	ASC-ER20	ERN-20H	ERW-20H
BT30-ER20H-100-B	BT30-ER20H-100			3.94	3.03			
BT30-ER25-060-B	BT30-ER25-060	.019-.630	1.65	2.36	1.54	ASC-ER25	ERN-25	ERW-25E
BT30-ER25-100-B	BT30-ER25-100			3.94	3.11			
BT30-ER32-060-B	BT30-ER32-060	.039-.787	1.96	2.36	1.54	ASC-ER32	ERN-32	ERW-32E
BT30-ER32-100-B				3.94	1.54			

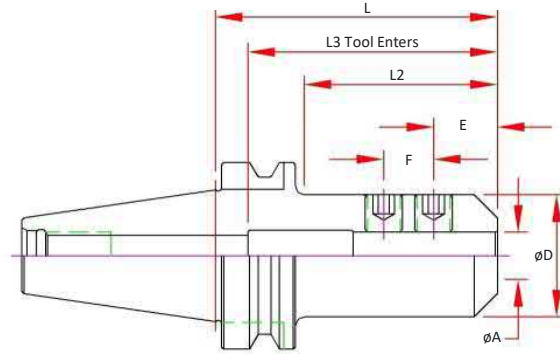
# BT30 End Mill Adapters

## Features

- 3  $\mu\text{m}$  - 0.0001" Bore Runout
- H5 Bore Tolerance or better
- Tapers are ground better than AT3 for optimal T.I.R.
- Coolant Thru
- Pre-Balanced for use @ 20,000 RPM

## Optional (Order Separately):

- Jet-Blast (add "J" to the part number)



	Dual Contact Spindle Part Number	Standard Spindle Part Number	A Bore	D	E	F	L Projection	L2	L3 Max. Tool Enters	Screw Number
1/8	BT30-EM012-0236-B	BT30-EM012-0236	0.1250	0.69	0.38	-	2.36	1.37	3.32	3
	BT30-EM012-0400-B	BT30-EM012-0400					4.00	3.00	4.96	
3/16	BT30-EM018-0236-B	BT30-EM018-0236	0.1875	0.69	0.50	-	2.36	1.37	3.32	4
	BT30-EM018-0400-B	BT30-EM018-0400					4.00	3.00	4.96	
1/4	BT30-EM025-0236-B	BT30-EM025-0236	0.2500	0.78	0.38	-	2.36	1.37	3.32	4
	BT30-EM025-0400-B	BT30-EM025-0400					4.00	3.00	4.96	
5/16	BT30-EM031-0236-B	BT30-EM031-0236	0.3125	0.88	0.60	-	2.36	1.37	3.32	4-BT30
		BT30-EM031-0400					4.00	3.00	2.96	
3/8	BT30-EM037-0236-B	BT30-EM037-0236	0.3750	1.00	0.75	-	2.36	1.37	2.36	5
		BT30-EM037-0400-B					BT30-EM037-0400	4.00	3.00	
1/2	BT30-EM050-0236-B	BT30-EM050-0236	0.5000	1.25	0.88	-	2.36	1.37	2.56	6
		BT30-EM050-0400-B					BT30-EM050-0400	4.00	3.00	
5/8	BT30-EM062-0236-B	BT30-EM062-0236	0.6250	1.50	0.94	-	2.36	1.37	2.25	7
	3/4	BT30-EM075-0236-B					BT30-EM075-0236	0.7500	1.75	
			BT30-EM075-0400	4.00	3.21	2.56				
7/8		BT30-EM087-0354	0.8750	1.75	1.00	0.81	3.54	2.75	3.15	(2) 8
1	BT30-EM100-0275-B	BT30-EM100-0275	1.0000	2.00	1.12	-	2.75	1.96	2.50	10





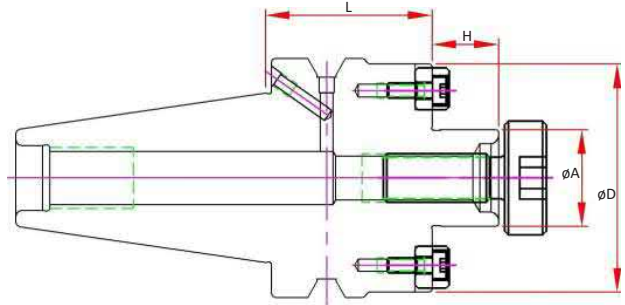
# BT30 Shell Mill Adapters

### Features

- 3 μm - 0.0001" Bore Runout
- H5 Bore Tolerance or better
- Tapers are ground better than AT3 for optimal T.I.R.
- Coolant Thru Body
- Pre-Balanced for use @ 20,000 RPM

### Optional (Order Separately):

- FX Coolant (add "F" to the part number)

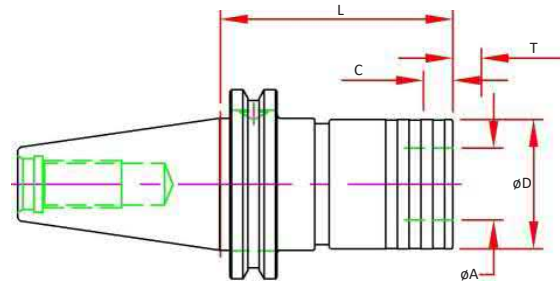


Dual Contact Spindle Part Number	Standard Spindle Part Number	A Pilot	D	H	L Projection	Drive Key Size	Drive Key Number	Mounting Screw Thread	Mounting Screw#
BT30-SM050-0119-B	BT30-SM050-0119				1.19				
BT30-SM050-0200-B		0.50	1.38	0.57	2.00	0.250	DK-SM050	1/4-28	SCW-SM050
BT30-SM050-0400-B					4.00				
BT30-SM075-0119-B	BT30-SM075-0119				1.19				
BT30-SM075-0200-B		0.75	1.75	0.69	2.00	0.312	DK-SM075	3/8-24	SCW-SM075
BT30-SM075-0400-B					4.00				
BT30-SM100-0119-B	BT30-SM100-0119	1.00	1.97	0.69	1.19	0.375	DK-SM100	1/2-20	SCW-SM100

# TC - Tension & Compression Holders

## Features

- Tension and Compression Stroke for improved tap life
- Pressure Point Mechanism to increase the cutting pressure and ensure a positive start
- Size 3 includes pull to release system to prevent damage from over stroke
- TC Holders are not designed for Coolant Thru
- For use with both RA and TC adapters
  - TC for machines with limited "Z" control
- 2 Piece Design is assembled Straight Shank Tap Holder with End Mill Adapter
- Tapers are ground better than AT3 for optimal T.I.R.

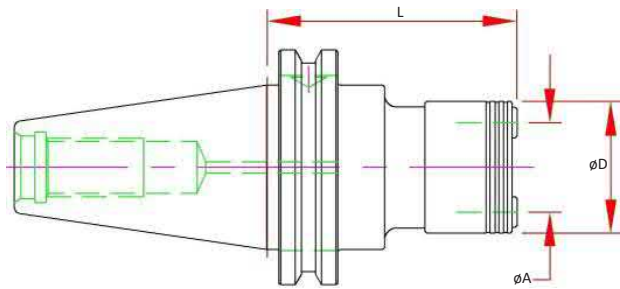


Size	Dual Contact Spindle Part Number	Standard Spindle Part Number	2 Piece Design	Capacity	A	D	L	T Tension	C Comp.
1	BT30-TC1-0433-B	BT30-TC1-0433	Y	#6-9/16	0.75	1.42	4.33	0.30	0.30
2	BT30-TC2-0511-B	BT30-TC2-0511	Y	5/16-7/8	1.22	2.09	5.11	0.49	0.49

# RT - Rigid QC Tap Holders

## Features

- Body - Coolant Thru Center
- Tapers are ground better than AT3 for optimal T.I.R.
- **For use with RA Adapters Only!**



Size	Dual Contact Spindle Part Number	Standard Spindle Part Number	2 Piece Design	Capacity	A	D	L Projection
1	BT30-RT1-0432-B	BT30-RT1-0432	Y	#6-9/16	0.75	1.34	4.32
2	BT30-RT2-0511-B	BT30-RT2-0511	Y	5/16-7/8	1.22	1.93	5.11

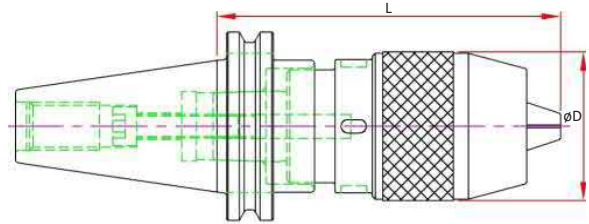


CAT40  
CAT50  
**BT 30**  
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HSK 40E  
HSK 63A  
HSK 100A  
STRAIGHT SHANKS  
COLLETS  
PARTS & ACCESS.  
SHRINK MACHINES  
INDEXERS

## DC - Drill Chuck

**Features:**

- Non Coolant
- Keyless w/ slots for spanner wrench (sold separately)

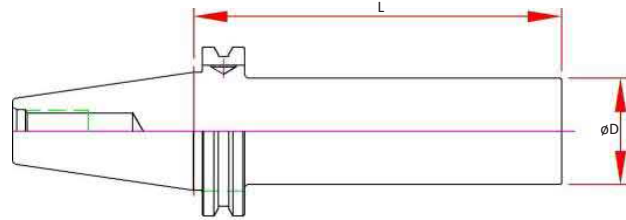


Part Number	Range	D	L Projection	Wrench
BT30-DC13-105	0.04 - 0.50	1.96	4.13	DCW13-BT30

# TB - Test Bar

## Features

- Concentric to Taper within 3µm (0.0001") TIR
- Tapers are ground better than AT3 for optimal T.I.R.
- Hardened & Normalized for consistency
- 100% Individually inspected with Certification Sheet included
- Wood Box Included
- Laser Marked with Actual Diameter and Length



Part Number	Spindle	D	L Projection
BT30-TB32-200-B	STD & Dual Contact BT30	32mm	200mm

CAT40

CAT50

**BT 30**

BT40

HSK 40E

HSK 63A

HSK 100A

STRAIGHT SHANKS

COLLETS

PARTS & ACCESS.

SHRINK MACHINES

INDEXERS

