TECHNIKS SETUP EQUIPMENT

TIGHTENING FIXTURES | WRENCHES | INDICATOR ARMS

ADJUSTABLE TORQUE WRENCHES AND ADAPTERS



Improved "pull-release" locking system makes locking wrench at correct torque more secure.



TIGHTENING FIXTURES

- For CAT, BT, HSK, ISO & PSC tapers
- Change retention knobs from below

ECE INDICATOR ARMS

- **"One Twist" 360˚ adjustable joints**
- **Hydraulic mechanism provides rigid set-up.**
- **Powerful magnetic base**

Indicator Arms are used to check concentricity. Dial Indicators not included.



WRENCHES FOR COLLET NUTS



DNA slotted wrench



ER / TG slotted wrench



ER hex wrench



ER mini wrench

Correct torque on the collet nut reduces collet wear and improves safety by properly securing cutting tool in the holder. Use the torque chart on page 72 for tightening collet nuts. Do not overtighten nuts or you may damage the collet and/or toolholder.



TG hook wrench

DNA SLOTTED WRENCHES

Part No.	Description
DNA11W	DNA11 Wrench
DNA16W	DNA16 Wrench
DNA20W	DNA20 Wrench
DNA32W	DNA32 Wrench
894-22	DNA 16 Mini-Nut Wrench

ER HEX NUT WRENCHES

Part No.	Description
894-36	ER32 SuperRIGID Hex Nut Wrench
04608	ER11 Hex Nut Wrench
04609	ER16 Hex Nut Wrench
04610	ER20 Hex Nut Wrench

ER SLOTTED NUT WRENCHES

Part No.	Description
04613	ER16 Slotted Nut Wrench
04614	ER20 Slotted Nut Wrench
04615	ER25 Slotted Nut Wrench
04616	ER32 Slotted Nut Wrench
04617	ER40 Slotted Nut Wrench
04618	ER50 Slotted Nut Wrench

ER MINI NUT WRENCHES

Part No.	Description
04620	ER8 Mini Nut Wrench
04621	ER11 Mini Nut Wrench
04622	ER16 Mini Nut Wrench
04623	ER20 Mini Nut Wrench
04624	ER25 Mini Nut Wrench

TG & SYOZ WRENCHES

Part No.	Description
04018	TG75 Slotted Nut Wrench
83691	TG100/SYOZ 25 Hook Wrench
22220	SYOZ 20 Hook Wrench

MILLING CHUCK AND DRILL CHUCK WRENCHES

Part No.	Description
83691	1" Milling Chuck Wrench
84193G	1-1/4" Milling Chuck Wrench
82172	Drill Chuck Wrench

ADJUSTABLE TORQUE WRENCHES & COLLET KEY ADAPTERS



TORQUE WRENCH FEATURES

- Factory calibrated and certified accuracy +/- 3%
- Easy read dial for fast adjustments to torque value
- Improved locking system for a more secure lock



Set adjustable dial to specified torque, and tighten nut until wrench "clicks".



Improved "pull-release" locking system makes locking wrench at correct torque more secure.

ADJUSTABLE TORQUE WRENCH

Part No.	Range	Length	Weight	Spigot
50TH	7.5-37.5 ft/lbs	12.5"	1.4 lbs	16mm round
200TH	30-150 ft/lbs	16.5"	1.75 lbs	16mm round
300TH	45-228 ft/lbs	21.5"	2.5 lbs	16mm round



ER Mini



TG Hook



DNA Slotted



ER Hex



ER Slotted



ER Slotted Enclosed

ER MINI-NUT KEY ADAPTERS

Part No.	Size	Type	Torque
04576	ER11 mini	mini	12 ft/lbs
04577	ER16 mini	mini	20 ft/lbs
04578	ER20 mini	mini	22 ft/lbs
04587	ER25 mini	mini	28 ft/lbs

ER HEX NUT KEY ADAPTERS

Part No.	Size	Type	Torque
04581	ER11 hex	hex	12 ft/lbs
04601-16	ER16 hex	hex	42 ft/lbs
04602-20	ER20 hex	hex	59 ft/lbs

TG AND SYOZ NUTS KEY ADAPTERS

Part No.	Size	Type	Torque
04018-TWA	TG 75, 45-50mm	hook	90 ft/lbs
03690-25	TG 100/SYOZ25, 55-60mm	hook	90 ft/lbs
04593	SYOZ-20	hook	40 ft/lbs

ER SLOTTED NUT KEY ADAPTERS

Part No.	Size	Type	Torque
04581	DNA 11	hex	12 ft/lbs
DNA16TWA	DNA 16	slotted	42 ft/lbs
DNA20TWA	DNA 20	slotted	59 ft/lbs
DNA32TWA	DNA 32	slotted	100 ft/lbs
04588-R	ER 32 Enclosed	slotted	100 ft/lbs
04580-16	ER16 slotted	slotted	42 ft/lbs
04580-20	ER20 slotted	slotted	59 ft/lbs
04603-25	ER25 slotted	slotted	77 ft/lbs
04604-32	ER32 slotted	slotted	100 ft/lbs
04605-40	ER40 slotted	slotted	130 ft/lbs

RETENTION KNOB SOCKETS SQUARE DRIVE



Part No.	Size	Flats	Drive	Torque
PSS-30BT	BT30	.535"	3/8"	36 ft/lbs
PSS-30ISO	ISO 30	.535"	3/8"	36 ft/lbs
PSS-40	All 40 taper	.750"	3/8"	76 ft/lbs
PSC-50	CAT50, BT50	1.187"	1/2"	100 ft/lbs

FIXED HEAD SQUARE DRIVES

Part No.	Description	Drive
29828	3/8" square drive	3/8"
29827	1/2" square drive	1/2"



TIGHTENING FIXTURES



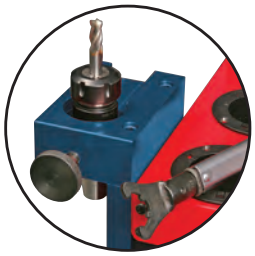
FEATURES

- For CAT, BT, HSK, ISO spindles
- Auto-locking roller bearing design makes tool changes faster and eliminates slippage.

ROLLER BEARING TIGHTENING FIXTURE

Part No.	Taper
17846B	CAT40, BT40, HSK63A/E/F, C6, ISO40
17385B	ISO30, SK30, HSK50
17386B	BT30
17386B-35	BT35
17584B	HSK32
17586B	HSK40
17785B	CAT50, BT50
17786B	HSK100
17387B	HSK85 Weining





NTS SIDE MOUNT TIGHTENING FIXTURES

- For CAT, BT, HSK, ISO spindles
- Change retention knobs from bottom
- Bolts right to workbench

NOTE: a sliding collar engages the wrench flats on HSK and toolholders without drive slots.

NOTE: a large set-screw engages the drive slot in BT and CAT holders.

CAT40 AND BT30 NTS FIXTURES

Part No.	Taper
NTS-40-TAPER	CAT40 or BT40 taper
NTS-BT30-38	BT30 taper - 38mm flats
NTS-BT30-41	BT30 taper - 41mm flats
NTS-BT30-SLOT	BT30 for drive slots

HSK63 NTS FIXTURES

Part No.	Taper
NTS-HSK63A	HSK63A - no flats
NTS-HSK63F-36	HSK63F - 36mm flats
NTS-HSK63F-38	HSK63F - 38mm flats
NTS-HSK63F-41	HSK63F - 41mm flats
NTS-HSK63F-46	HSK63F - 46mm flats

ISO NTS FIXTURES

Part No.	Taper
NTS-ISO20-17	ISO 20 - 17mm flats
NTS-ISO20-22	ISO 20 - 22mm flats
NTS-ISO25-27	ISO 25 - 27mm flats
NTS-ISO30-36	ISO 30 - 36mm flats
NTS-ISO30-38	ISO 30 - 38mm flats
NTS-ISO30-47	ISO 30 - 47mm flats



TOP OR SIDE MOUNT FIXTURES

- For CAT, BT, HSK, spindles
- Change retention knobs from bottom
- Bolts right to workbench

Part No.	Taper
17883	BT30, CAT 30
17884	BT40, CAT40
17885	BT50, CAT50
17893	HSK63A, 63B, 63D

BENCHTOP MOUNT FIXTURE FOR CAT & BT

- Vertical and horizontal tightening fixtures



Part No.	Taper
17852	BT30
17854	BT40
17856	BT50
17870	CAT40
17872	CAT50



FEATURES

- For CAT, BT, ISO, HSK spindles
- Keep spindle and tapers clean

SPINDLE WIPERS

Part No.	Taper	Total Length	Taper Length
17706	30	170	60
17707	40	188	78
17708	50	240	120
38036	HSK63A	165	31
38032	HSK63F	165	31

Real lambskin provides the best cleaning. Use with any type of machine with a taper of 7/24 CAT, BT or DIN 69871.

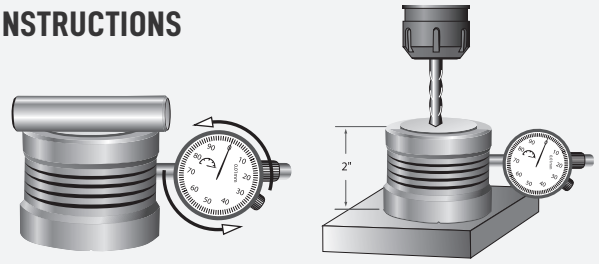


ANALOG AXIAL PRESET GAUGE

Part No.	Description
17906-2	ZSI-50 preset gauge
17906-04	replacement dial

- Accuracy 0.0002"
- Easy to measure tool depth
- Height 2"

INSTRUCTIONS



1. Use the gauge pin included to press down on the spring-loaded center piece as illustrated. Please be sure the gauge pin is placed on the shiny surface.
2. Turn the indicator to read "0", then remove the gauge pin.
3. Put the unit on the workpiece and carefully jog the tool down to make contact with the gauge face. When the gauge reads "0" the tool is 2" above the workpiece.

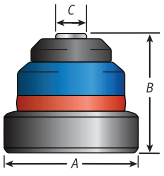


FEATURES

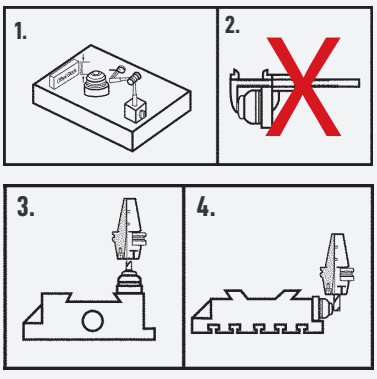
- Accuracy .0002"
- 360˚ light radius
- Height 2"
- Magnetic base (use vertically or horizontally)

TOUCH LAMP AXIAL PRESET GAUGE

Part No.	Description	A	B	C
07905-2	ZOP-50 Gauge	56mm	2"	13.5mm

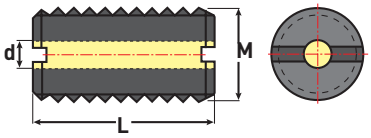


1. Check height of unit with a gauge block and dial indicator. Turn allen screw if adjustment is needed.
2. Do not use calipers for presetting unit, only use gauge block.
3. Move the cutting tool tip towards the sensor button until the lights turns on, reverse direction until light turns off.
4. When presetting diameter, rotate tool slowly for higher precision.



STOP SCREWS & COOLANT PIPES





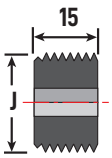


Figure 1

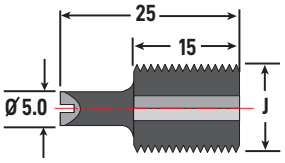


Figure 2

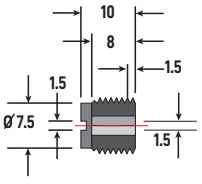
COOLANT PRESET SCREWS

Part No.	T	L (mm)	d (mm)
16080C-20	M5 x 0.8P	20mm	2.5mm
16081C-20	M6 1.0P	20mm	2.5mm
16082C-20	M8 x 1.25P	20mm	4mm
16083C-20	M10 x 1.5P	20mm	4mm
16085C-20	M12 x 1.75P	20mm	4mm
16089C-20	M16 x 2.0P	20mm	5mm
16091C-20	M20 x 2.0P	20mm	5mm
16902C-15	M22 x 1.5P	15mm	5mm

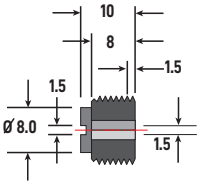
SOLID PRESET SCREWS

Part No.	T	L (mm)	Figure
16081	M6 x 1.0P	15mm	1
16083	M10 X 1.5P	15mm	1
16083-LH	M10 x 1.5P - left handed	15mm	1
16085	M12 X 1.75P	15mm	1
16087	M12 x 1.75P - extended	25mm	2
16088	M8 x 1.25P	16mm	1
16089	M16 x 2.0P	15mm	1
16089-LH	M16 x 2.0P - left handed	15mm	1
16091	M20 x 2.0P	15mm	1
16092	M20 x 2.0P	100mm	2
16092-15	N22 x 1.5P	15mm	1
16093	M24 x 2.0P	15mm	1
16094	M20 x 2.0P	50mm	1
16096	M16 x 2.0P	50mm	1

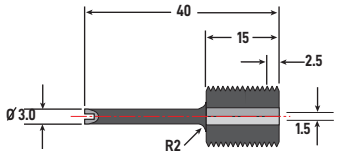




BD-TH-1031



BD-TH-1062



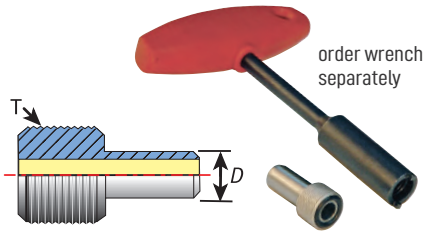
BD-TH-1063

COOLANT PRESET SCREWS FOR STRAIGHT SHANK EXTENSIONS

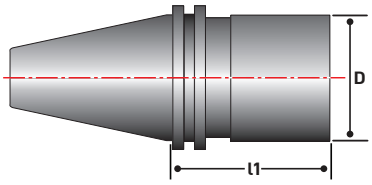
Part No.	Description
BD-TH-1031	For M10 x 1.5 straight shank chuck with coolant – for small diameter tools
BD-TH-1062	For M12 x 1.75 straight shank chuck w/ coolant – for small diameter tools
BD-TH-1063	Long stop for M12 x 1.75 straight shank chuck w/coolant – for small diameter tools

HSK & PSC COOLANT PIPES AND WRENCHES

Part No.	Taper	T	D (mm)	Wrench
92002	HSK40 A/E	M12 x 1P	8	91.11.026.002
92003	HSK50 A/E	M16 x 1P	10	91.11.026.003
92004	HSK63 A/E	M18 x 1P	12	91.11.026.004
92005	HSK100 A/E	M24 x 1.5P	16	91.11.026.005
143.003	PSC 6	M20 x 2.0P	8	91.11.026.002

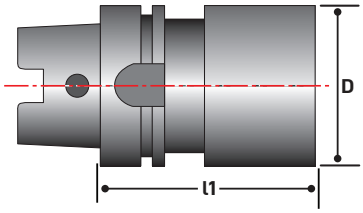






FEATURES

- Made from high carbon chrome alloy steel
- Maximum 0.0001" T.I.R.
- Steep tapers ground to AT2 or better
- Includes detailed calibration certificate
- Packaged in watertight, crushproof, and dust-proof Pelican case



TEST BARS

Part No.	Description	D	L1
P40-20TB12	40 Taper, 2" x 12" Precision Test Bar	2"	12"
P50-20TB12	50 Taper, 2" x 12" Precision Test Bar	2"	12"
H63A-40TB346	HSK63A, 40mm x 346mm Precision Test Bar	40mm	346mm
H100-40TB349	HSK100A, 40mm x 349mm Precision Test Bar	40mm	349mm



CAT & BT ALIGNMENT TOOLS, HSK CALIBRATION TOOLS

Part No.	Description
21000-CAT40-3	CAT 40 Alignment Tool - 3 pcs
21000-CAT50-3	CAT 50 Alignment Tool - 3 pcs
16000-BT30-3	BT 30 Alignment Tool - 3 pcs.
16000-BT40-3	BT40 Alignment Tool - 3 pcs.
171.02.002.000	HSK 63F Calibration Tool - 4.975"

HYDRAULIC INDICATOR ARMS

ECE INDICATOR ARMS FEATURES

- "One Twist" 360˚ adjustable joints
- Hydraulic mechanism provides rigid set-up
- Powerful magnetic base



ADVANTAGES OF HYDRAULIC ARMS

- Hydraulic arms are faster, stronger, and more precise than mechanical joints
- Hydraulic joints make fine adjustments easy because they don't lose position when loosened like mechanical arms



Indicator Arms are used to check concentricity on bench or machine. Dial Indicators not included.



ECE-300 series



ECE-330 series



ECE-340

Part No.	Description	Arm Length	Base Dim. Lmm x Wmm x H	Holding Power	Weight lb.
ECE-300ALL	Precision hydraulic arm, gold	23 1/2"	4 3/4"mm x 2"mm x 2 1/8"	352 lbs.	7.75
ECE-300AL	Precision hydraulic arm, gold	16 3/4"	3 1/8"mm x 2"mm x 2 1/8"	220 lbs.	5.5
ECE-300B	Precision hydraulic arm, gold	13 3/8"	2 3/8"mm x 2"mm x 2 1/8"	176 lbs.	4.5
ECE-330AL	Precision mechanical arm, red	16 3/4"	3 1/8"mm x 2"mm x 2 1/8"	220 lbs.	5.0
ECE-330B	Precision mechanical arm, red	13 3/8"	2 3/8" x 2" x 2 1/8"	176 lbs.	3.75
ECE-340	Standard mechanical arm, red	13 3/8"	2 3/8" x 2" x 2 1/8"	176 lbs.	3.5