



PRECISION COMPONENTS

NOW OFFERING

**HSK &
SHRINK
FIT**



Quality Machine Tools

Precision Components would like to take this opportunity to thank our many loyal distributors and customers on this, **the 44th anniversary**, of our company. You've helped make Precision Components the dominant company in long reach and special tooling. We're number one in quality, we're number one in delivery, and we're number one in diversity of product.

As Precision Components looks ahead for the next **44 years**, we will continue to do these things that have made us successful.

We would also like to take this opportunity to let all our distributors and customers know that we now offer a full line of standard length tooling. It is sold thru our subsidiary BASIC LINE, INC. These super precision standard holders are held to the same high quality standards as Precision Components' tools. For more information, turn to the last page of our catalog.



PRECISION COMPONENTS
TOLL FREE 1-800-525-1373
www.pctooling.com

Table of Contents

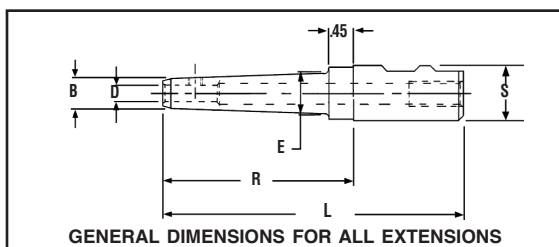
Item	Page
LRM MINI SERIES	2
LRX END MILL EXTENSION	3
EMX END MILL EXTENSION	4
BT-30, BT-45 & CAT-45 END MILL EXT.....	5
BT-40 END MILL EXTENSION	6
CAT-40 END MILL EXTENSION	7
CAT-50 END MILL EXTENSION	8
BT-50 END MILL EXTENSION	9
NMTB-50 END MILL EXTENSION.....	10
R-8 ADAPTER & FACE MILL KEYS.....	11
REPLACEMENT SCREWS & FMS SCREWS	12
FACE/SHELL MILL ADAPT/COMPENSATION.....	13
FACE MILL/SHELL MILL EXTENSION & ADAPTERS.....	14-15
STUB ARBOR.....	16
STUB ARBOR & REPLACEMENT KEYS.....	17
FLANGE MOUNT TOOLING	18-19
CHXF ADAPTER & CUTTER HEAD EXT.	20
CHX ADAPTER / POST / EXTENSIONS	21
ERX EXTENSIONS.....	22
RETENTION KNOBS.....	23
BT-30 & BT-40 TAP DRIVERS	24
CAT-40 TAP DRIVERS	25
CAT-50 TAP DRIVERS	26
STUBBIES.....	27
CAT-40 STANDARDS	28-29
LRM & LRX METRICS	30
CAT-40 METRICS	31
BT-40 METRICS	32
CAT-50 METRICS.....	33
CAT-40 METRIC DIN shank TAP DRIVERS	34
CAT-50 METRIC DIN shank TAP DRIVERS	35
METRIC FACE MILL/SHELL MILL EXTENSIONS	36
CUTTER HEADS	37
CUTTER HEADS & HIGH HELIX CUTTERS.....	38
SHRINK FIT & HSK	39
BLANKS	40
BASIC LINE INFORMATION	41

ALL TOOL HOLDERS ARE AVAILABLE WITH SHINY SHANKS



- Hardened
- Precision Ground
- American Made

LRM Mini Series Extensions have 3/4" and 1" diameter shanks that allow use on a wide variety of CNC, NC, Bridgeports, and duplicating machines. Inside diameters start at 1/8" I.D. for small diameter cutters to reach cores and cavities in tight areas.



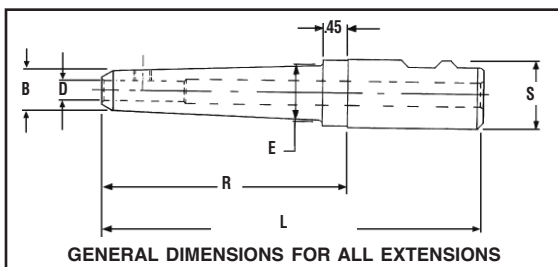
LRM MINI SERIES EXTENSIONS

CATALOG NUMBER	D	L	R	S	B	E	LIST PRICE
LRM-.125-40-3	.125	4.00	2.00	.750	.32	.42	\$122.00
LRM-.125-50-3	.125	5.00	3.00	.750	.32	.49	128.00
LRM-.125-60-3	.125	6.00	4.00	.750	.32	.60	152.00
LRM-.125-70-3	.125	7.00	5.00	.750	.32	.68	162.00
LRM-.156-40-3	.156	4.00	2.00	.750	.35	.46	106.00
LRM-.156-50-3	.156	5.00	3.00	.750	.35	.53	112.00
LRM-.187-40-3	.187	4.00	2.00	.750	.38	.48	106.00
LRM-.187-50-3	.187	5.00	3.00	.750	.38	.54	112.00
LRM-.187-60-3	.187	6.00	4.00	.750	.38	.66	135.00
LRM-.187-70-3	.187	7.00	5.00	.750	.38	.74	146.00
LRM-.218-40-3	.218	4.00	2.00	.750	.41	.52	106.00
LRM-.218-50-3	.218	5.00	3.00	.750	.41	.59	112.00
LRM-.250-40-3	.250	4.00	2.00	.750	.45	.55	106.00
LRM-.250-50-3	.250	5.00	3.00	.750	.45	.62	112.00
LRM-.250-60-3	.250	6.00	4.00	.750	.45	.74	135.00
LRM-.250-70-3	.250	7.00	5.00	.750	.45	.74	146.00
LRM-.312-40-3	.312	4.00	2.00	.750	.51	.61	106.00
LRM-.312-50-3	.312	5.00	3.00	.750	.51	.68	112.00
LRM-.312-60-3	.312	6.00	4.00	.750	.51	.74	135.00
LRM-.375-40-3	.375	4.00	2.00	.750	.63	.73	106.00
LRM-.375-50-3	.375	5.00	3.00	.750	.63	.73	112.00
LRM-.375-60-3	.375	6.00	4.00	.750	.63	.74	135.00
LRM-.125-40-1	.125	4.00	2.00	1.000	.32	.42	129.00
LRM-.125-55-1	.125	5.50	3.50	1.000	.32	.53	135.00
LRM-.125-70-1	.125	7.00	5.00	1.000	.32	.63	140.00
LRM-.187-40-1	.187	4.00	2.00	1.000	.38	.48	113.00
LRM-.187-55-1	.187	5.50	3.50	1.000	.38	.59	119.00
LRM-.187-70-1	.187	7.00	5.00	1.000	.38	.69	124.00
LRM-.250-40-1	.250	4.00	2.00	1.000	.45	.55	113.00
LRM-.250-55-1	.250	5.50	3.50	1.000	.45	.66	119.00
LRM-.250-70-1	.250	7.00	5.00	1.000	.45	.76	124.00
LRM-.312-40-1	.312	4.00	2.00	1.000	.51	.61	113.00
LRM-.312-55-1	.312	5.50	3.50	1.000	.51	.72	119.00
LRM-.312-70-1	.312	7.00	5.00	1.000	.51	.82	124.00
LRM-.375-40-1	.375	4.00	2.00	1.000	.63	.73	113.00
LRM-.375-55-1	.375	5.50	3.50	1.000	.63	.84	119.00
LRM-.375-70-1	.375	7.00	5.00	1.000	.63	.94	124.00
LRM-.437-40-1	.437	4.00	2.00	1.000	.73	.83	113.00
LRM-.437-55-1	.437	5.50	3.50	1.000	.73	.94	119.00
LRM-.437-70-1	.437	7.00	5.00	1.000	.73	.97	124.00
LRM-.500-40-1	.500	4.00	2.00	1.000	.83	.93	113.00
LRM-.500-55-1	.500	5.50	3.50	1.000	.83	.97	119.00
LRM-.500-70-1	.500	7.00	5.00	1.000	.83	.97	124.00

LRX Series End Mill Extensions are designed to give rigidity and strength to small diameter carbide and HSS end mills in hard to reach areas. A clearance hole extends through the entire holder for easy knock out and to accept double end end mills.



- Hardened
- Precision Ground
- American Made



LRX SERIES END MILL EXTENSIONS

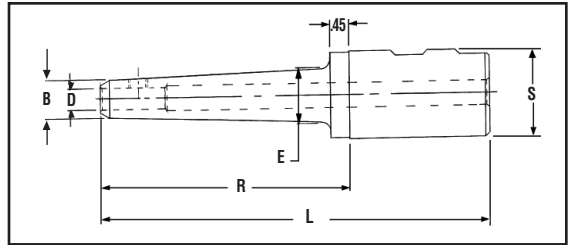
CATALOG NUMBER	D	L	R	S	B	E	LIST PRICE
LRX-.125-5	.125	5.00	2.50	1.250	.32	.46	\$210.00
LRX-.125-7	.125	7.00	4.50	1.250	.32	.60	222.00
LRX-.125-9	.125	9.00	6.50	1.250	.32	.74	235.00
LRX-.187-5	.187	5.00	2.50	1.250	.38	.52	194.00
LRX-.187-7	.187	7.00	4.50	1.250	.38	.66	206.00
LRX-.187-9	.187	9.00	6.50	1.250	.38	.80	219.00
LRX-.250-5	.250	5.00	2.50	1.250	.50	.64	194.00
LRX-.250-7	.250	7.00	4.50	1.250	.50	.78	206.00
LRX-.250-9	.250	9.00	6.50	1.250	.50	.92	219.00
LRX-.312-5	.312	5.00	2.50	1.250	.56	.70	194.00
LRX-.312-7	.312	7.00	4.50	1.250	.56	.84	206.00
LRX-.312-9	.312	9.00	6.50	1.250	.56	.98	219.00
LRX-.375-5	.375	5.00	2.50	1.250	.75	.88	194.00
LRX-.375-7	.375	7.00	4.50	1.250	.75	1.02	206.00
LRX-.375-9	.375	9.00	6.50	1.250	.75	1.16	219.00
LRX-.437-5	.437	5.00	2.50	1.250	.81	.94	194.00
LRX-.437-7	.437	7.00	4.50	1.250	.81	1.08	206.00
LRX-.437-9	.437	9.00	6.50	1.250	.81	1.22	219.00
LRX-.500-5	.500	5.00	2.50	1.250	.87	1.00	194.00
LRX-.500-7	.500	7.00	4.50	1.250	.87	1.14	206.00
LRX-.500-9	.500	9.00	6.50	1.250	.87	1.23	219.00
LRX-.500-11	.500	11.00	8.50	1.250	.87	1.23	243.00
LRX-.625-5	.625	5.00	2.50	1.250	1.06	1.19	194.00
LRX-.625-7	.625	7.00	4.50	1.250	1.06	1.23	206.00
LRX-.625-9	.625	9.00	6.50	1.250	1.06	1.23	219.00
* LRX-.750-5	.750	5.00	2.50	1.250	1.18	1.23	194.00
LRX-.750-7	.750	7.00	4.50	1.250	1.18	1.23	206.00
LRX-.750-9	.750	9.00	6.50	1.250	1.18	1.23	219.00
LRX-.750-11	.750	11.00	8.50	1.250	1.18	1.23	243.00

* Accepts single end end mill only
Metric I.D.'s available on page 30
Replacement screws available on page 12



These Precision Components End Mill Extensions are designed for hard to reach machining applications such as deep cavity and pocket milling. They provide excellent rigidity and accept single and double end mills. Unique features include four flats 90° apart and a through hole.

- Hardened
- Precision Ground
- American Made



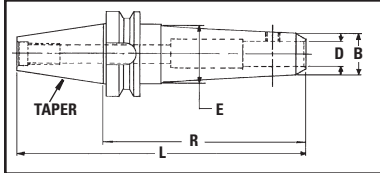
EMX END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	S	B	E	LIST PRICE
EMX-.375-6	.375	6.00	3.00	2.000	.75	.90	\$293.00
EMX-.375-9	.375	9.00	6.00	2.000	.75	1.11	\$311.00
EMX-.375-12	.375	12.00	9.00	2.000	.75	1.32	\$336.00
EMX-.375-15	.375	15.00	12.00	2.000	.75	1.53	\$368.00
EMX-.437-6	.437	6.00	3.00	2.000	.81	.97	\$293.00
EMX-.437-9	.437	9.00	6.00	2.000	.81	1.18	\$311.00
EMX-.437-12	.437	12.00	9.00	2.000	.81	1.39	\$336.00
EMX-.437-15	.437	15.00	12.00	2.000	.81	1.60	\$368.00
EMX-.500-6	.500	6.00	3.00	2.000	.88	1.03	\$293.00
EMX-.500-9	.500	9.00	6.00	2.000	.88	1.24	\$311.00
EMX-.500-12	.500	12.00	9.00	2.000	.88	1.45	\$336.00
EMX-.500-15	.500	15.00	12.00	2.000	.88	1.66	\$368.00
EMX-.625-6	.625	6.00	3.00	2.000	1.06	1.21	\$293.00
EMX-.625-9	.625	9.00	6.00	2.000	1.06	1.42	\$311.00
EMX-.625-12	.625	12.00	9.00	2.000	1.06	1.63	\$336.00
EMX-.625-15	.625	15.00	12.00	2.000	1.06	1.83	\$368.00
EMX-.750-6	.750	6.00	3.00	2.000	1.19	1.34	\$293.00
EMX-.750-9	.750	9.00	6.00	2.000	1.19	1.55	\$311.00
EMX-.750-12	.750	12.00	9.00	2.000	1.19	1.75	\$336.00
EMX-.750-15	.750	15.00	12.00	2.000	1.19	1.96	\$368.00
EMX-.875-6	.875	6.00	3.00	2.000	1.31	1.46	\$293.00
EMX-.875-9	.875	9.00	6.00	2.000	1.31	1.67	\$311.00
EMX-.875-12	.875	12.00	9.00	2.000	1.31	1.87	\$336.00
EMX-.875-15	.875	15.00	12.00	2.000	1.31	1.98	\$368.00
EMX-1.000-6	1.000	6.00	3.00	2.000	1.62	1.76	\$293.00
EMX-1.000-9	1.000	9.00	6.00	2.000	1.62	1.97	\$311.00
EMX-1.000-12	1.000	12.00	9.00	2.000	1.62	1.98	\$336.00
EMX-1.000-15	1.000	15.00	12.00	2.000	1.62	1.98	\$368.00
EMX-1.250-6	1.250	6.00	3.00	2.000	1.75	1.98	\$293.00
EMX-1.250-9	1.250	9.00	6.00	2.000	1.75	1.98	\$311.00
EMX-1.250-12	1.250	12.00	9.00	2.000	1.75	1.98	\$336.00
EMX-1.250-15	1.250	15.00	12.00	2.000	1.75	1.98	\$368.00



- Hardened
- Precision Ground
- American Made

Precision Components' BT-30 tool holders are designed to give you maximum rigidity with extended lengths. They are available in 3-1/2" and 5" projections.



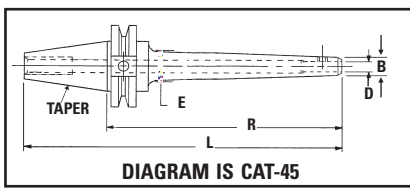
BT-30 FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
BT-30-125-3.5	.125	5.406	3.50	BT-30	.38	.53	\$235.00
BT-30-125-5	.125	6.906	5.00	BT-30	.38	.64	278.00
BT-30-187-3.5	.187	5.406	3.50	BT-30	.44	.59	219.00
BT-30-187-5	.187	6.906	5.00	BT-30	.44	.70	262.00
BT-30-250-3.5	.250	5.406	3.50	BT-30	.50	.65	219.00
BT-30-250-5	.250	6.906	5.00	BT-30	.50	.76	262.00
BT-30-312-3.5	.312	5.406	3.50	BT-30	.56	.71	219.00
BT-30-312-5	.312	6.906	5.00	BT-30	.56	.82	262.00
BT-30-375-3.5	.375	5.406	3.50	BT-30	.75	.89	219.00
BT-30-375-5	.375	6.906	5.00	BT-30	.75	1.00	262.00
BT-30-437-3.5	.437	5.406	3.50	BT-30	.81	.95	219.00
BT-30-437-5	.437	6.906	5.00	BT-30	.81	1.06	262.00
BT-30-500-3.5	.500	5.406	3.50	BT-30	.88	1.02	219.00
BT-30-500-5	.500	6.906	5.00	BT-30	.88	1.13	262.00
BT-30-625-3.5	.625	5.406	3.50	BT-30	1.06	1.25	219.00
BT-30-625-5	.625	6.906	5.00	BT-30	1.06	1.25	262.00
BT-30-750-3.5	.750	5.406	3.50	BT-30	1.19	1.32	219.00
BT-30-750-5	.750	6.906	5.00	BT-30	1.19	1.43	262.00

SEE PAGE 23 FOR RETENTION KNOBS

Precision Components' CAT-45 and BT-45 tooling comes in (2) projections; 6" and 9". They are designed to give maximum rigidity at these extended lengths.

NOTE: When ordering 45 tapered holders, specify whether you want CAT-45 or BT-45. All other dimensions are the same.



CAT-45 / BT-45 V-FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-45-250-6	.250	9.25	6.00	CAT-45/BT-45	.50	.83	\$330.00
CAT-45-250-9	.250	12.25	9.00	CAT-45/BT-45	.50	1.04	380.00
CAT-45-312-6	.312	9.25	6.00	CAT-45/BT-45	.56	.88	330.00
CAT-45-312-9	.312	12.25	9.00	CAT-45/BT-45	.56	1.09	380.00
CAT-45-375-6	.375	9.25	6.00	CAT-45/BT-45	.75	1.07	330.00
CAT-45-375-9	.375	12.25	9.00	CAT-45/BT-45	.75	1.28	380.00
CAT-45-500-6	.500	9.25	6.00	CAT-45/BT-45	.88	1.20	330.00
CAT-45-500-9	.500	12.25	9.00	CAT-45/BT-45	.88	1.41	380.00
CAT-45-625-6	.625	9.25	6.00	CAT-45/BT-45	1.06	1.38	330.00
CAT-45-625-9	.625	12.25	9.00	CAT-45/BT-45	1.06	1.59	380.00
CAT-45-750-6	.750	9.25	6.00	CAT-45/BT-45	1.19	1.51	330.00
CAT-45-750-9	.750	12.25	9.00	CAT-45/BT-45	1.19	1.72	380.00
CAT-45-875-6	.875	9.25	6.00	CAT-45/BT-45	1.31	1.63	330.00
CAT-45-875-9	.875	12.25	9.00	CAT-45/BT-45	1.31	1.84	380.00
CAT-45-1.000-6	1.000	9.25	6.00	CAT-45/BT-45	1.62	1.94	330.00
CAT-45-1.000-9	1.000	12.25	9.00	CAT-45/BT-45	1.62	2.15	380.00
CAT-45-1.250-6	1.250	9.25	6.00	CAT-45/BT-45	1.88	2.20	330.00
CAT-45-1.250-9	1.250	12.25	9.00	CAT-45/BT-45	1.88	2.41	380.00

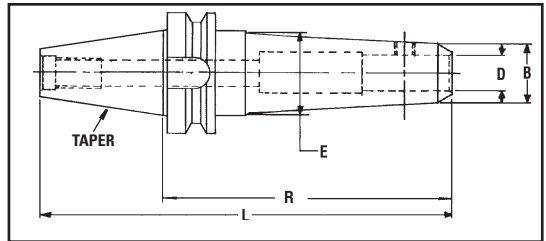
SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on Page 12



- Hardened
- Precision Ground
- American Made

Precision Components BT-40 Flange Tooling is designed to give maximum rigidity at extended lengths. They are available in 4", 6" and 9" projections.

*Available in Dual Contact - (DC)



BT 40 FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
BT-40-.125-4	.125	6.58	4.00	BT-40	.38	.55	\$247.00
BT-40-.125-6	.125	8.58	6.00	BT-40	.38	.69	296.00
BT-40-.125-9	.125	11.58	9.00	BT-40	.38	.90	334.00
BT-40-.187-4	.187	6.58	4.00	BT-40	.44	.61	230.00
BT-40-.187-6	.187	8.58	6.00	BT-40	.44	.75	280.00
BT-40-.187-9	.187	11.58	9.00	BT-40	.44	.96	318.00
BT-40-.250-4	.250	6.58	4.00	BT-40	.50	.67	230.00
BT-40-.250-6	.250	8.58	6.00	BT-40	.50	.81	280.00
BT-40-.250-9	.250	11.58	9.00	BT-40	.50	1.02	318.00
BT-40-.312-4	.312	6.58	4.00	BT-40	.56	.73	230.00
BT-40-.312-6	.312	8.58	6.00	BT-40	.56	.87	280.00
BT-40-.312-9	.312	11.58	9.00	BT-40	.56	1.08	318.00
BT-40-.375-4	.375	6.58	4.00	BT-40	.75	.91	230.00
BT-40-.375-6	.375	8.58	6.00	BT-40	.75	1.05	280.00
BT-40-.375-9	.375	11.58	9.00	BT-40	.75	1.26	318.00
BT-40-.437-4	.437	6.58	4.00	BT-40	.81	.97	230.00
BT-40-.437-6	.437	8.58	6.00	BT-40	.81	1.11	280.00
BT-40-.437-9	.437	11.58	9.00	BT-40	.81	1.32	318.00
BT-40-.500-4	.500	6.58	4.00	BT-40	.88	1.04	230.00
BT-40-.500-6	.500	8.58	6.00	BT-40	.88	1.18	280.00
BT-40-.500-9	.500	11.58	9.00	BT-40	.88	1.39	318.00
BT-40-.562-4	.562	6.58	4.00	BT-40	.94	1.10	230.00
BT-40-.562-6	.562	8.58	6.00	BT-40	.94	1.24	280.00
BT-40-.562-9	.562	11.58	9.00	BT-40	.94	1.45	318.00
BT-40-.625-4	.625	6.58	4.00	BT-40	1.06	1.22	230.00
BT-40-.625-6	.625	8.58	6.00	BT-40	1.06	1.36	280.00
BT-40-.625-9	.625	11.58	9.00	BT-40	1.06	1.56	318.00
BT-40-.750-4	.750	6.58	4.00	BT-40	1.19	1.35	230.00
BT-40-.750-6	.750	8.58	6.00	BT-40	1.19	1.49	280.00
BT-40-.750-9	.750	11.58	9.00	BT-40	1.19	1.69	318.00
BT-40-.875-4	.875	6.58	4.00	BT-40	1.31	1.47	230.00
BT-40-.875-6	.875	8.58	6.00	BT-40	1.31	1.61	280.00
BT-40-.875-9	.875	11.58	9.00	BT-40	1.31	1.75	318.00
BT-40-1.000-4	1.000	6.58	4.00	BT-40	1.62	1.75	230.00
BT-40-1.000-6	1.000	8.58	6.00	BT-40	1.62	1.75	280.00
BT-40-1.000-9	1.000	11.58	9.00	BT-40	1.62	1.75	318.00
BT-40-1.250-4	1.250	6.58	4.00	BT-40	1.88	2.03	230.00
BT-40-1.250-6	1.250	8.58	6.00	BT-40	1.88	2.17	280.00
BT-40-1.250-9	1.250	11.58	9.00	BT-40	1.88	2.38	318.00

SEE PAGE 23 FOR RETENTION KNOBS

Metric I.D.'s available on page 32

Replacement screws available on page 12



PRECISION COMPONENTS TOLL FREE 1-800-525-1373

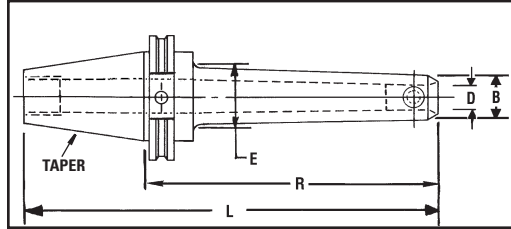
COOLANT THROUGH DINS & MAHO KNOTCHES AVAILABLE UPON REQUEST



- Hardened
- Precision Ground
- American Made

Precision Components CAT-40 V-Flange Tooling is designed to give maximum rigidity at extended lengths. They are available in 4", 6" and 9" projections.

*Available in Dual Contact - (DC)



CAT-40 V-FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-.125-4	.125	6.68	4.00	CAT-40	.38	.56	\$247.00
CAT-40-.125-6	.125	8.68	6.00	CAT-40	.38	.70	296.00
CAT-40-.125-9	.125	11.68	9.00	CAT-40	.38	.91	334.00
CAT-40-.187-4	.187	6.68	4.00	CAT-40	.44	.62	230.00
CAT-40-.187-6	.187	8.68	6.00	CAT-40	.44	.76	280.00
CAT-40-.187-9	.187	11.68	9.00	CAT-40	.44	.97	318.00
CAT-40-.250-4	.250	6.68	4.00	CAT-40	.50	.68	230.00
CAT-40-.250-6	.250	8.68	6.00	CAT-40	.50	.82	280.00
CAT-40-.250-9	.250	11.68	9.00	CAT-40	.50	1.03	318.00
CAT-40-.312-4	.312	6.68	4.00	CAT-40	.56	.74	230.00
CAT-40-.312-6	.312	8.68	6.00	CAT-40	.56	.88	280.00
CAT-40-.312-9	.312	11.68	9.00	CAT-40	.56	1.09	318.00
CAT-40-.375-4	.375	6.68	4.00	CAT-40	.75	.92	230.00
CAT-40-.375-6	.375	8.68	6.00	CAT-40	.75	1.06	280.00
CAT-40-.375-9	.375	11.68	9.00	CAT-40	.75	1.27	318.00
CAT-40-.437-4	.437	6.68	4.00	CAT-40	.81	.98	230.00
CAT-40-.437-6	.437	8.68	6.00	CAT-40	.81	1.12	280.00
CAT-40-.437-9	.437	11.68	9.00	CAT-40	.81	1.33	318.00
CAT-40-.500-4	.500	6.68	4.00	CAT-40	.88	1.05	230.00
CAT-40-.500-6	.500	8.68	6.00	CAT-40	.88	1.19	280.00
CAT-40-.500-9	.500	11.68	9.00	CAT-40	.88	1.40	318.00
CAT-40-.562-4	.562	6.68	4.00	CAT-40	.94	1.11	230.00
CAT-40-.562-6	.562	8.68	6.00	CAT-40	.94	1.25	280.00
CAT-40-.562-9	.562	11.68	9.00	CAT-40	.94	1.46	318.00
CAT-40-.625-4	.625	6.68	4.00	CAT-40	1.06	1.23	230.00
CAT-40-.625-6	.625	8.68	6.00	CAT-40	1.06	1.37	280.00
CAT-40-.625-9	.625	11.68	9.00	CAT-40	1.06	1.58	318.00
CAT-40-.750-4	.750	6.68	4.00	CAT-40	1.19	1.36	230.00
CAT-40-.750-6	.750	8.68	6.00	CAT-40	1.19	1.50	280.00
CAT-40-.750-9	.750	11.68	9.00	CAT-40	1.19	1.71	318.00
CAT-40-.875-4	.875	6.68	4.00	CAT-40	1.31	1.48	230.00
CAT-40-.875-6	.875	8.68	6.00	CAT-40	1.31	1.62	280.00
CAT-40-.875-9	.875	11.68	9.00	CAT-40	1.31	1.75	318.00
CAT-40-1.000-4	1.000	6.68	4.00	CAT-40	1.62	1.75	230.00
CAT-40-1.000-6	1.000	8.68	6.00	CAT-40	1.62	1.75	280.00
CAT-40-1.000-9	1.000	11.68	9.00	CAT-40	1.62	1.75	318.00
CAT-40-1.250-4	1.250	6.68	4.00	CAT-40	1.75	2.04	230.00
CAT-40-1.250-6	1.250	8.68	6.00	CAT-40	1.75	2.18	280.00
CAT-40-1.250-9	1.250	11.68	9.00	CAT-40	1.75	2.39	318.00

SEE PAGE 23 FOR RETENTION KNOBS

Metric I.D.'s available on page 31.

Some NMTB-40 projections available.

Replacement screws available on page 12

PRECISION COMPONENTS TOLL FREE 1-800-525-1373

CAT 40 V FLANGE EXTENSIONS

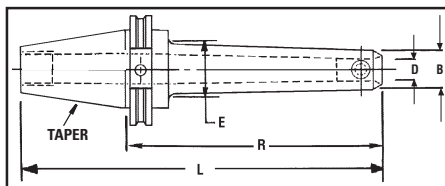
**COOLANT THROUGH DINS & MAHO KNOTCHES
AVAILABLE UPON REQUEST**

Precision Components CAT-50 V-Flange Tooling is designed to give maximum rigidity at extended lengths of 6", 9", 12" and 15" projections.



- Hardened
- Precision Ground
- American Made

***Available in
Dual Contact - (DC)**



CAT-50 V-FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-50-125-6	.125	10.00	6.00	CAT-50	.39	.71	\$438.00
CAT-50-125-9	.125	13.00	9.00	CAT-50	.39	.92	503.00
CAT-50-187-6	.187	10.00	6.00	CAT-50	.44	.76	422.00
CAT-50-187-9	.187	13.00	9.00	CAT-50	.44	.99	486.00
CAT-50-250-6	.250	10.00	6.00	CAT-50	.50	.82	422.00
CAT-50-250-9	.250	13.00	9.00	CAT-50	.50	1.03	486.00
CAT-50-250-12	.250	16.00	12.00	CAT-50	.50	1.24	499.00
CAT-50-250-15	.250	19.00	15.00	CAT-50	.70	1.62	532.00
CAT-50-312-6	.312	10.00	6.00	CAT-50	.56	.88	422.00
CAT-50-312-9	.312	13.00	9.00	CAT-50	.56	1.09	486.00
CAT-50-312-12	.312	16.00	12.00	CAT-50	.56	1.30	499.00
CAT-50-312-15	.312	19.00	15.00	CAT-50	.76	1.67	532.00
CAT-50-375-6	.375	10.00	6.00	CAT-50	.75	1.06	422.00
CAT-50-375-9	.375	13.00	9.00	CAT-50	.75	1.27	486.00
CAT-50-375-12	.375	16.00	12.00	CAT-50	.75	1.48	499.00
CAT-50-375-15	.375	19.00	15.00	CAT-50	.75	1.69	532.00
CAT-50-437-6	.437	10.00	6.00	CAT-50	.81	1.13	422.00
CAT-50-437-9	.437	13.00	9.00	CAT-50	.81	1.34	486.00
CAT-50-437-12	.437	16.00	12.00	CAT-50	.81	1.55	499.00
CAT-50-437-15	.437	19.00	15.00	CAT-50	.81	1.76	532.00
CAT-50-500-6	.500	10.00	6.00	CAT-50	.88	1.19	422.00
CAT-50-500-9	.500	13.00	9.00	CAT-50	.88	1.40	486.00
CAT-50-500-12	.500	16.00	12.00	CAT-50	.88	1.61	499.00
CAT-50-500-15	.500	19.00	15.00	CAT-50	.88	1.82	532.00
CAT-50-625-6	.625	10.00	6.00	CAT-50	1.06	1.37	422.00
CAT-50-625-9	.625	13.00	9.00	CAT-50	1.06	1.58	486.00
CAT-50-625-12	.625	16.00	12.00	CAT-50	1.06	1.79	499.00
CAT-50-625-15	.625	19.00	15.00	CAT-50	1.06	2.00	532.00
CAT-50-750-6	.750	10.00	6.00	CAT-50	1.19	1.50	422.00
CAT-50-750-9	.750	13.00	9.00	CAT-50	1.19	1.71	486.00
CAT-50-750-12	.750	16.00	12.00	CAT-50	1.19	1.92	499.00
CAT-50-750-15	.750	19.00	15.00	CAT-50	1.19	2.13	532.00
CAT-50-875-6	.875	10.00	6.00	CAT-50	1.43	1.62	422.00
CAT-50-875-9	.875	13.00	9.00	CAT-50	1.43	1.83	486.00
CAT-50-875-12	.875	16.00	12.00	CAT-50	1.43	2.04	499.00
CAT-50-875-15	.875	19.00	15.00	CAT-50	1.43	2.25	532.00
CAT-50-1.000-6	1.000	10.00	6.00	CAT-50	1.62	1.93	422.00
CAT-50-1.000-9	1.000	13.00	9.00	CAT-50	1.62	2.13	486.00
CAT-50-1.000-12	1.000	16.00	12.00	CAT-50	1.62	2.34	499.00
CAT-50-1.000-15	1.000	19.00	15.00	CAT-50	1.62	2.55	532.00
CAT-50-1.250-6	1.250	10.00	6.00	CAT-50	1.88	2.19	422.00
CAT-50-1.250-9	1.250	13.00	9.00	CAT-50	1.88	2.39	486.00
CAT-50-1.250-9-STR	1.250	13.00	9.00	CAT-50	1.90	1.90	486.00
CAT-50-1.250-12	1.250	16.00	12.00	CAT-50	1.88	2.60	499.00
CAT-50-1.250-15	1.250	19.00	15.00	CAT-50	1.88	2.75	532.00
CAT-50-1.500-6	1.500	10.00	6.00	CAT-50	2.25	2.55	422.00
CAT-50-1.500-9	1.500	13.00	9.00	CAT-50	2.25	2.75	486.00
CAT-50-1.500-12	1.500	16.00	12.00	CAT-50	2.25	2.96	499.00
CAT-50-1.500-15	1.500	19.00	15.00	CAT-50	2.25	3.17	532.00
CAT-50-2.000-6	2.000	10.00	6.00	CAT-50	3.19	3.46	422.00
CAT-50-2.000-9	2.000	13.00	9.00	CAT-50	3.19	3.66	486.00
CAT-50-2.000-12	2.000	16.00	12.00	CAT-50	3.19	3.86	499.00
CAT-50-2.000-15	2.000	19.00	15.00	CAT-50	3.19	3.86	532.00
CAT-50-2.500-7	2.500	11.00	7.00	CAT-50	4.50	4.50	493.00

SEE PAGE 23 FOR RETENTION KNOBS

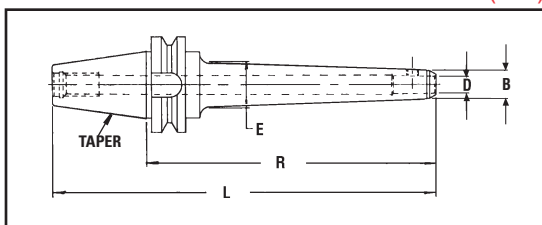
Metric I.D.'s available on page 33

Replacement screws available on page 12

Precision Components BT 50 Flange Tooling is designed to give maximum rigidity at extended lengths. They are available in 6", 9", 12" and 15" projections.

- Hardened
- Precision Ground
- American Made

*Available in Dual Contact - (DC)



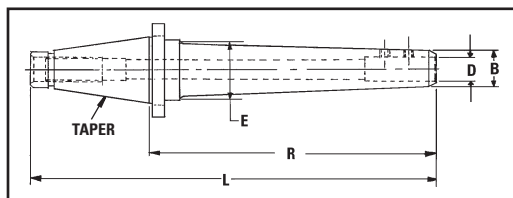
BT 50 FLANGE END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
BT-50-250-6	.250	10.00	6.00	BT-50	.50	.78	\$422.00
BT-50-250-9	.250	13.00	9.00	BT-50	.50	.99	486.00
BT-50-250-12	.250	16.00	12.00	BT-50	.50	1.20	499.00
BT-50-250-15	.250	19.00	15.00	BT-50	.70	1.57	532.00
BT-50-375-6	.375	10.00	6.00	BT-50	.75	1.02	422.00
BT-50-375-9	.375	13.00	9.00	BT-50	.75	1.23	486.00
BT-50-375-12	.375	16.00	12.00	BT-50	.75	1.44	499.00
BT-50-375-15	.375	19.00	15.00	BT-50	.75	1.65	532.00
BT-50-437-6	.437	10.00	6.00	BT-50	.82	1.10	422.00
BT-50-500-6	.500	10.00	6.00	BT-50	.88	1.15	422.00
BT-50-500-9	.500	13.00	9.00	BT-50	.88	1.36	486.00
BT-50-500-12	.500	16.00	12.00	BT-50	.88	1.57	499.00
BT-50-500-15	.500	19.00	15.00	BT-50	.88	1.78	532.00
BT-50-625-6	.625	10.00	6.00	BT-50	1.06	1.33	422.00
BT-50-625-9	.625	13.00	9.00	BT-50	1.06	1.54	486.00
BT-50-625-12	.625	16.00	12.00	BT-50	1.06	1.75	499.00
BT-50-625-15	.625	19.00	15.00	BT-50	1.06	1.96	532.00
BT-50-750-6	.750	10.00	6.00	BT-50	1.19	1.46	422.00
BT-50-750-9	.750	13.00	9.00	BT-50	1.19	1.67	486.00
BT-50-750-12	.750	16.00	12.00	BT-50	1.19	1.88	499.00
BT-50-750-15	.750	19.00	15.00	BT-50	1.19	2.09	532.00
BT-50-875-6	.875	10.00	6.00	BT-50	1.43	1.58	422.00
BT-50-875-9	.875	13.00	9.00	BT-50	1.43	1.79	486.00
BT-50-875-12	.875	16.00	12.00	BT-50	1.43	2.00	499.00
BT-50-875-15	.875	19.00	15.00	BT-50	1.43	2.21	532.00
BT-50-1.000-6	1.000	10.00	6.00	BT-50	1.62	1.89	422.00
BT-50-1.000-9	1.000	13.00	9.00	BT-50	1.62	2.09	486.00
BT-50-1.000-12	1.000	16.00	12.00	BT-50	1.62	2.30	499.00
BT-50-1.000-15	1.000	19.00	15.00	BT-50	1.62	2.51	532.00
BT-50-1.250-6	1.250	10.00	6.00	BT-50	1.88	2.15	422.00
BT-50-1.250-9	1.250	13.00	9.00	BT-50	1.88	2.35	486.00
BT-50-1.250-12	1.250	16.00	12.00	BT-50	1.88	2.56	499.00
BT-50-1.250-15	1.250	19.00	15.00	BT-50	1.88	2.75	532.00
BT-50-1.500-6	1.500	10.00	6.00	BT-50	2.25	2.51	422.00
BT-50-1.500-9	1.500	13.00	9.00	BT-50	2.25	2.75	486.00
BT-50-1.500-12	1.500	16.00	12.00	BT-50	2.25	2.92	499.00
BT-50-1.500-15	1.500	19.00	15.00	BT-50	2.25	3.13	532.00
BT-50-2.000-6	2.000	10.00	6.00	BT-50	3.19	3.42	422.00
BT-50-2.000-9	2.000	13.00	9.00	BT-50	3.19	3.62	486.00
BT-50-2.000-12	2.000	16.00	12.00	BT-50	3.19	3.82	499.00
BT-50-2.000-15	2.000	19.00	15.00	BT-50	3.19	3.82	532.00



- Hardened
- Precision Ground
- American Made

Precision Components NMTB 50 Taper Holders are designed to give maximum rigidity at extended lengths of 4", 6", 9", 12" and 15". They can be used with standard draw bar or retention knobs.



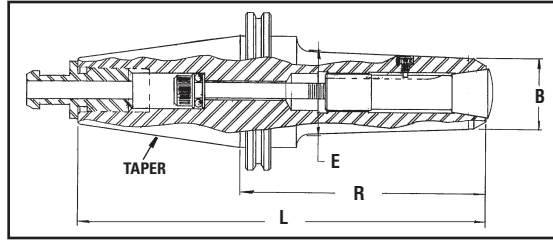
NMTB 50 TAPER END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
NMTB-50-250-4	.250	9.00	4.00	NMTB-50	.50	.69	\$370.00
NMTB-50-250-6	.250	11.00	6.00	NMTB-50	.50	.83	422.00
NMTB-50-250-9	.250	14.00	9.00	NMTB-50	.50	1.04	477.00
NMTB-50-250-12	.250	17.00	12.00	NMTB-50	.50	1.25	490.00
NMTB-50-250-15	.250	20.00	15.00	NMTB-50	.70	1.63	545.00
NMTB-50-375-4	.375	9.00	4.00	NMTB-50	.75	.93	370.00
NMTB-50-375-6	.375	11.00	6.00	NMTB-50	.75	1.07	422.00
NMTB-50-375-9	.375	14.00	9.00	NMTB-50	.75	1.28	477.00
NMTB-50-375-12	.375	17.00	12.00	NMTB-50	.75	1.49	490.00
NMTB-50-375-15	.375	20.00	15.00	NMTB-50	.75	1.70	545.00
NMTB-50-500-4	.500	9.00	4.00	NMTB-50	.88	1.06	370.00
NMTB-50-500-6	.500	11.00	6.00	NMTB-50	.88	1.20	422.00
NMTB-50-500-9	.500	14.00	9.00	NMTB-50	.88	1.41	477.00
NMTB-50-500-12	.500	17.00	12.00	NMTB-50	.88	1.62	490.00
NMTB-50-500-15	.500	20.00	15.00	NMTB-50	.88	1.83	545.00
NMTB-50-625-4	.625	9.00	4.00	NMTB-50	1.06	1.24	370.00
NMTB-50-625-6	.625	11.00	6.00	NMTB-50	1.06	1.38	422.00
NMTB-50-625-9	.625	14.00	9.00	NMTB-50	1.06	1.59	477.00
NMTB-50-625-12	.625	17.00	12.00	NMTB-50	1.06	1.80	490.00
NMTB-50-625-15	.625	20.00	15.00	NMTB-50	1.06	2.01	545.00
NMTB-50-750-4	.750	9.00	4.00	NMTB-50	1.19	1.37	370.00
NMTB-50-750-6	.750	11.00	6.00	NMTB-50	1.19	1.51	422.00
NMTB-50-750-9	.750	14.00	9.00	NMTB-50	1.19	1.72	477.00
NMTB-50-750-12	.750	17.00	12.00	NMTB-50	1.19	1.93	490.00
NMTB-50-750-15	.750	20.00	15.00	NMTB-50	1.19	2.14	545.00
NMTB-50-875-4	.875	9.00	4.00	NMTB-50	1.43	1.49	370.00
NMTB-50-875-6	.875	11.00	6.00	NMTB-50	1.43	1.63	422.00
NMTB-50-875-9	.875	14.00	9.00	NMTB-50	1.43	1.84	477.00
NMTB-50-875-12	.875	17.00	12.00	NMTB-50	1.43	2.05	490.00
NMTB-50-875-15	.875	20.00	15.00	NMTB-50	1.43	2.26	545.00
NMTB-50-1.000-4	1.000	9.00	4.00	NMTB-50	1.62	1.80	370.00
NMTB-50-1.000-6	1.000	11.00	6.00	NMTB-50	1.62	1.94	422.00
NMTB-50-1.000-9	1.000	14.00	9.00	NMTB-50	1.62	2.15	477.00
NMTB-50-1.000-12	1.000	17.00	12.00	NMTB-50	1.62	2.36	490.00
NMTB-50-1.000-15	1.000	20.00	15.00	NMTB-50	1.62	2.57	545.00
NMTB-50-1.250-4	1.250	9.00	4.00	NMTB-50	1.88	2.06	370.00
NMTB-50-1.250-6	1.250	11.00	6.00	NMTB-50	1.88	2.20	422.00
NMTB-50-1.250-9	1.250	14.00	9.00	NMTB-50	1.88	2.40	477.00
NMTB-50-1.250-9-STR	1.250	14.00	9.00	NMTB-50	1.90	1.90	477.00
NMTB-50-1.250-12	1.250	17.00	12.00	NMTB-50	1.88	2.61	490.00
NMTB-50-1.250-15	1.250	20.00	15.00	NMTB-50	1.88	2.75	545.00
NMTB-50-1.500-4	1.500	9.00	4.00	NMTB-50	2.25	2.41	370.00
NMTB-50-1.500-6	1.500	11.00	6.00	NMTB-50	2.25	2.56	422.00
NMTB-50-1.500-9	1.500	14.00	9.00	NMTB-50	2.25	2.76	477.00
NMTB-50-1.500-12	1.500	17.00	12.00	NMTB-50	2.25	2.97	490.00
NMTB-50-1.500-15	1.500	20.00	15.00	NMTB-50	2.25	3.18	545.00
NMTB-50-2.000-4	2.000	9.00	4.00	NMTB-50	3.19	3.33	370.00
NMTB-50-2.000-6	2.000	11.00	6.00	NMTB-50	3.19	3.47	422.00
NMTB-50-2.000-9	2.000	14.00	9.00	NMTB-50	3.19	3.68	477.00
NMTB-50-2.000-12	2.000	17.00	12.00	NMTB-50	3.19	3.75	490.00
NMTB-50-2.000-15	2.000	20.00	15.00	NMTB-50	3.19	3.75	545.00

- Hardened
- Precision Ground
- American Made



Precision Components' New R-8 adapters come in either CAT-50, NMTB-50, or BT-50 and are available in 6,9,12 and 15 inch projections. These holders have drawbar positive locking, taper to taper fit, hole through retention stud to access drawbar, a large variety of available tooling, and a proven collet system without a large nut to cause interference.



R-8 ADAPTERS

CATALOG NUMBER	L	R	TAPER	B	E	LIST PRICE
CAT-50-R8-6	10.00	6.00	CAT-50	1.75	2.06	\$450.00
CAT-50-R8-9	13.00	9.00	CAT-50	1.75	2.27	522.00
CAT-50-R8-12	16.00	12.00	CAT-50	1.75	2.48	534.00
CAT-50-R8-15	19.00	15.00	CAT-50	1.75	2.69	570.00
BT-50-R8-6	10.00	6.00	BT-50	1.75	2.04	450.00
BT-50-R8-9	13.00	9.00	BT-50	1.75	2.25	522.00
BT-50-R8-12	16.00	12.00	BT-50	1.75	2.46	534.00
BT-50-R8-15	19.00	15.00	BT-50	1.75	2.67	570.00
NMTB-50-R8-6	11.00	6.00	NMTB-50	1.75	2.09	450.00
NMTB-50-R8-9	14.00	9.00	NMTB-50	1.75	2.30	522.00
NMTB-50-R8-12	17.00	12.00	NMTB-50	1.75	2.51	534.00
NMTB-50-R8-15	20.00	15.00	NMTB-50	1.75	2.72	570.00

Replacement screws available on page 12



Precision Components replacement key with screw for face mill / shell mill holders.

REPLACEMENT KEY & SCREW FOR FACE MILL / SHELL MILL EXTENSION

CATALOG NUMBER	PILOT SIZE	LIST PRICE
.250 x .70 KEY & SCREW	.500 FMX	\$19.50
.312 x .76 KEY & SCREW	.750 FMX	19.50
.375 x .62 KEY & SCREW	1.000 FMX	19.50
** .500 x .75 KEY & SCREW	1.250 FMX	32.50
* .500 x 1.10 KEY & SCREW	1.250 FMX	32.50
.625 x 1.14 KEY & SCREW	1.500 FMX	32.50
* .750 x .88 KEY & SCREW	2.000 FMX	32.50
** .750 x 1.10 KEY & SCREW	2.000 FMX	32.50
1.000 x 1.19 KEY & SCREW	2.500 FMX	32.50
8MM x .76 KEY & SCREW	16MM FMX	19.50
10MM x .87 KEY & SCREW	22MM FMX	19.50
12MM x 1.07 KEY & SCREW	27MM FMX	32.50

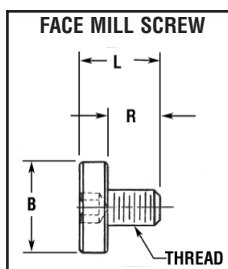
* TO FIT ALL 40 TAPERS
 ** TO FIT ALL 50 TAPERS

PRECISION COMPONENTS REPLACEMENT SCREWS FOR END MILL HOLDERS AND TAP DRIVERS



CATALOG NUMBER	ENDMILL HOLDER I.D. SIZE	LIST PRICE
#6-32 x 3/32	.125, 3MM	¢.72
#8-32 x 7/64	.156, 4MM	.72
#10-32 x 1/8	.187, .218, .250, 5, 6, 7MM	.58
1/4 - 28 x 1/8	.312, 8MM	.58
5/16 - 24 x 5/32	.375, 9, 10MM	.67
3/8 - 24 x 3/16	.437, 11MM	.76
7/16 - 20 x 7/32	.500, 12, 13MM	\$1.42
1/2 - 20 x 1/4	.562, .625, .750	1.53
1/2 - 20 x 1/4	14, 15, 16, 17, 18, 19, 20, 21MM	1.53
5/8 - 18 x 5/16	.875, 1.000, 1.250	2.40
5/8 - 18 x 5/16	22, 23, 24, 25, 28, 32MM	2.40
3/4 - 16 x 3/8	1.500	3.14
1 - 14 x 3/4	2.000, 2.500	8.13

CATALOG NUMBER	TAP DRIVER HOLDER TAP SIZE	LIST PRICE
#6-32 x 3/16	#0-6TD, M2-M2.5, M3-M3.5TD	¢.72
#8-32 x 1/4	#8TD, M4TD	.72
#10-32 x 1/4	#10, #12 1/4TD, M4.5-M6, M10TD	.58
1/4 - 28 x 1/4	5/16 TD, 1/16-1/8PTD, M8TD	.58
5/16 - 24 x 5/16	3/8, 7/16, 1/2, 9/16TD, 1/16-1/8PTD	.67
5/16 - 24 x 5/16	M10, M12TD	.67
3/8 - 24 x 5/16	5/8TD, 1/4PTD, M14, M16, M18TD	.76
7/16 - 20 x 3/8	3/8PTD	\$1.42
1/2 - 20 x 3/8	3/4, 13/16, 7/8 TD, 1/2, 3/4, 1 PTD	1.53
1/2 - 20 x 3/8	M20, M22, M24TD	1.53
5/8 - 18 x 1/2	1.000, 1.062-1.125, 1.187-1.250TD	2.40
5/8 - 18 x 1/2	1.250PTD, M27, M30, M33TD	2.40
3/4 - 16 x 5/8	1.312-1.375, 1.437-1.500TD	3.14
3/4 - 16 x 5/8	M36, M42, M45, M48, M52TD	3.14



Precision Components replacement screws for face mill / shell mill holders.

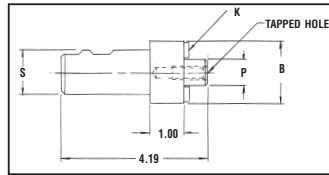
REPLACEMENT FACE MILL / SHELL MILL SCREWS

CATALOG NUMBER	PILOT SIZE	B	THREAD	L	R	LIST PRICE
FMS 1/4 - 28 SHCS	.500	.38	1/4 - 28	1.25	1.00	\$1.42
FMS 3/8 - 24	.750	.87	3/8 - 24	1.06	.69	12.35
FMS 1/2 - 20	1.000	1.18	1/2 - 20	1.07	.69	12.35
FMS 5/8 - 18	1.250	1.49	5/8 - 18	1.37	.87	14.65
FMS 3/4 - 16	1.500	1.87	3/4 - 16	1.43	.93	16.25
FMS 1 - 14	2.000	2.50	1-14	2.00	1.50	17.85

Precision Components LRM-LRX Face / Shell Mill Adapters comes with 1" and 1-1/4" shanks, making it easy to adapt shell / face mills to a variety of Precision Components extensions.



- Hardened
- Precision Ground
- American Made



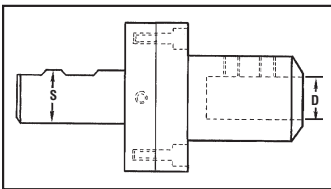
LRM-LRX FACE MILL / SHELL MILL ADAPTERS

CATALOG NUMBER	FLATS	P	K	TAPPED HOLE	S	B	LIST PRICE
LRM-FMX-500	Y	.500	.250	1/4-28	1.000	1.25	\$140.00
LRM-FMX-500-NF	N	.500	.250	1/4-28	1.000	1.25	140.00
LRM-FMX-750	Y	.750	.312	3/8-24	1.000	1.75	140.00
LRM-FMX-750-NF	N	.750	.312	3/8-24	1.000	1.75	140.00
LRM-FMX-1.000	Y	1.000	.375	1/2-20	1.000	2.40	140.00
LRM-FMX-1.000-NF	N	1.000	.375	1/2-20	1.000	2.40	140.00
LRM-FMX-1.250	Y	1.250	.500	5/8-18	1.000	2.90	181.00
LRM-FMX-1.250-NF	N	1.250	.500	5/8-18	1.000	2.90	181.00
LRX-FMX-500	Y	.500	.250	1/4-28	1.250	1.25	156.00
LRX-FMX-500-NF	N	.500	.250	1/4-28	1.250	1.25	156.00
LRX-FMX-750	Y	.750	.312	3/8-24	1.250	1.75	156.00
LRX-FMX-750-NF	N	.750	.312	3/8-24	1.250	1.75	156.00
LRX-FMX-1.000	Y	1.000	.375	1/2-20	1.250	2.40	156.00
LRX-FMX-1.000-NF	N	1.000	.375	1/2-20	1.250	2.40	156.00
LRX-FMX-1.250	Y	1.250	.500	5/8-18	1.250	2.90	181.00
LRX-FMX-1.500	Y	1.500	.625	3/4-16	1.250	3.90	206.00

Precision Components LRX-FMX Adapters are also available with Metric Pilots, making it easy to adapt Face/Shell Mills to a variety of Precision Components extensions.

LRX-FMX METRIC PILOT FACE MILL / SHELL MILL ADAPTERS

CATALOG NUMBER	FLATS	P	K	TAPPED HOLE	S	B	LIST PRICE
LRX-FMX-16MM	Y	16MM	8MM	5/16-24	1.250	34MM	\$156.00
LRX-FMX-16MM-NF	N	16MM	8MM	5/16-24	1.250	34MM	156.00
LRX-FMX-22MM	Y	22MM	10MM	3/8-24	1.250	44MM	156.00
LRX-FMX-22MM-NF	N	22MM	10MM	3/8-24	1.250	44MM	156.00
LRX-FMX-27MM	Y	27MM	12MM	1/2-20	1.250	53MM	156.00
LRX-FMX-27MM-NF	N	27MM	12MM	1/2-20	1.250	53MM	156.00



The Compensator was originally developed for the mold industry, but now it has a dual purpose. Not only can the Compensator put your tools on dead zero run out, it also off sets your indexable drills in your CNC mill to achieve sizes not offered. Example: your 1" indexable drill can be off set with the Compensator to 1.010, 1.015, 1.020 etc. Thus eliminating secondary boring or reaming operations.

COMPENSATORS

CATALOG NUMBER	S	D	LIST PRICE
CMP-.750-.750	.750 O.D.	.750	\$363.00
CMP-1.000-.750	1.000 O.D.	.750	363.00
CMP-1.000-1.000	1.000 O.D.	1.000	363.00
CMP-1.250-1.000	1.250 O.D.	1.000	403.00
CMP-1.250-1.250	1.250 O.D.	1.250	403.00
CMP-2.000-1.250	2.000 O.D.	1.250	535.00
CMP-2.000-2.000	2.000 O.D.	2.000	535.00
CMP-R8-1.000	R-8	1.000	420.00
CMP-R8-1.250	R-8	1.250	420.00
CMP-40-.750	CAT-40	.750	489.00
CMP-40-1.000	CAT-40	1.000	489.00
CMP-40-1.250	CAT-40	1.250	489.00
CMP-50-1.250	CAT-50	1.250	558.00
CMP-50-2.000	CAT-50	2.000	558.00

SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on page 12

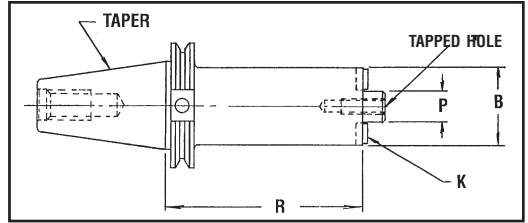
Precision Components
Face Mill / Shell Mill Extensions
allow milling of hard to reach areas
while maintaining rigidity at extended lengths.
4" thru 15" projections available.

*Available in Dual Contact - (DC)



- Hardened
- Precision Ground
- American Made

**INCLUDES KEYS &
FACE MILL SCREW**



FACE MILL / SHELL MILL EXTENSIONS

CATALOG NUMBER	P	K	TAPPED HOLE	R	TAPER	B	LIST PRICE
CAT-40-.500FMX-5	.500	.250	1/4-28	5.00	CAT-40	1.25	\$303.00
CAT-40-.500FMX-8	.500	.250	1/4-28	8.00	CAT-40	1.25	336.00
CAT-40-.750FMX-4S	.750	.312	3/8-24	4.00	CAT-40	1.40	274.00
CAT-40-.750FMX-6S	.750	.312	3/8-24	6.00	CAT-40	1.40	323.00
CAT-40-.750FMX-9S	.750	.312	3/8-24	9.00	CAT-40	1.40	361.00
CAT-40-.750FMX-4W	.750	.312	3/8-24	4.00	CAT-40	1.90	274.00
CAT-40-.750FMX-6W	.750	.312	3/8-24	6.00	CAT-40	1.90	323.00
CAT-40-.750FMX-9W	.750	.312	3/8-24	9.00	CAT-40	1.90	361.00
CAT-40-1.000FMX-4	1.000	.375	1/2-20	4.00	CAT-40	2.40	280.00
CAT-40-1.000FMX-6	1.000	.375	1/2-20	6.00	CAT-40	2.40	330.00
CAT-40-1.000FMX-9	1.000	.375	1/2-20	9.00	CAT-40	2.40	368.00
CAT-40-1.250FMX-4	1.250	.500	5/8-18	4.00	CAT-40	2.90	287.00
CAT-40-1.250FMX-6	1.250	.500	5/8-18	6.00	CAT-40	2.90	336.00
CAT-40-1.250FMX-9	1.250	.500	5/8-18	9.00	CAT-40	2.90	373.00
CAT-40-1.500FMX-4	1.500	.625	3/4-16	4.00	CAT-40	3.88	298.00
CAT-40-2.000FMX-3.25	2.000	.750	1-14	3.25	CAT-40	4.00	318.00
BT-40-.750FMX-4S	.750	.312	3/8-24	4.00	BT-40	1.40	274.00
BT-40-.750FMX-6S	.750	.312	3/8-24	6.00	BT-40	1.40	323.00
BT-40-.750FMX-9S	.750	.312	3/8-24	9.00	BT-40	1.40	361.00
BT-40-.750FMX-4W	.750	.312	3/8-24	4.00	BT-40	1.90	274.00
BT-40-.750FMX-6W	.750	.312	3/8-24	6.00	BT-40	1.90	323.00
BT-40-.750FMX-9W	.750	.312	3/8-24	9.00	BT-40	1.90	361.00
BT-40-1.000FMX-4	1.000	.375	1/2-20	4.00	BT-40	2.40	280.00
BT-40-1.000FMX-6	1.000	.375	1/2-20	6.00	BT-40	2.40	330.00
BT-40-1.000FMX-9	1.000	.375	1/2-20	9.00	BT-40	2.40	368.00
BT-40-1.250FMX-4	1.250	.500	5/8-18	4.00	BT-40	2.90	287.00
BT-40-1.250FMX-6	1.250	.500	5/8-18	6.00	BT-40	2.90	336.00
BT-40-1.250FMX-9	1.250	.500	5/8-18	9.00	BT-40	2.90	373.00
BT-40-1.500FMX-4	1.500	.625	3/4-16	4.00	BT-40	3.88	298.00
BT-40-2.000FMX-3.50	2.000	.750	1-14	3.50	BT-40	4.00	318.00

FACE MILL / SHELL MILL EXTENSIONS

CATALOG NUMBER	P	K	TAPPED HOLE	R	TAPER	B	LIST PRICE
CAT-50-.500FMX-6	.500	.250	1/4-28	6.00	CAT-50	1.25	\$473.00
CAT-50-.750FMX-4	.750	.312	3/8-24	4.00	CAT-50	1.90	460.00
CAT-50-.750FMX-6	.750	.312	3/8-24	6.00	CAT-50	1.90	473.00
CAT-50-.750FMX-9	.750	.312	3/8-24	9.00	CAT-50	1.90	499.00
CAT-50-.750FMX-12	.750	.312	3/8-24	12.00	CAT-50	1.90	512.00
CAT-50-.750FMX-15	.750	.312	3/8-24	15.00	CAT-50	1.90	604.00
CAT-50-1.000FMX-5	1.000	.375	1/2-20	5.00	CAT-50	2.40	467.00
CAT-50-1.000FMX-7	1.000	.375	1/2-20	7.00	CAT-50	2.40	480.00
CAT-50-1.000FMX-10	1.000	.375	1/2-20	10.00	CAT-50	2.40	506.00
CAT-50-1.000FMX-12	1.000	.375	1/2-20	12.00	CAT-50	2.40	512.00
CAT-50-1.000FMX-15	1.000	.375	1/2-20	15.00	CAT-50	2.40	604.00
CAT-50-1.250FMX-6	1.250	.500	5/8-18	6.00	CAT-50	2.90	473.00
CAT-50-1.250FMX-9	1.250	.500	5/8-18	9.00	CAT-50	2.90	499.00
CAT-50-1.250FMX-12	1.250	.500	5/8-18	12.00	CAT-50	2.90	512.00
CAT-50-1.250FMX-15	1.250	.500	5/8-18	15.00	CAT-50	2.90	604.00
CAT-50-1.500FMX-5	1.500	.625	3/4-16	5.00	CAT-50	3.88	473.00
CAT-50-1.500FMX-8	1.500	.625	3/4-16	8.00	CAT-50	3.88	486.00
CAT-50-1.500FMX-12	1.500	.625	3/4-16	12.00	CAT-50	3.88	512.00
CAT-50-1.500FMX-15	1.500	.625	3/4-16	15.00	CAT-50	3.88	604.00
CAT-50-2.000FMX-6	2.000	.750	1-14	6.00	CAT-50	4.38	603.00
CAT-50-2.000FMX-12	2.000	.750	1-14	12.00	CAT-50	4.38	642.00
CAT-50-2.500FMX-4	2.500	1.000	5/8-18 4" BHC	4.00	CAT-50	4.90	629.00
CAT-50-2.500FMX-8	2.500	1.000	5/8-18 4" BHC	8.00	CAT-50	4.90	655.00
BT-50-.750FMX-4	.750	.312	3/8-24	4.00	BT-50	1.90	\$460.00
BT-50-.750FMX-6	.750	.312	3/8-24	6.00	BT-50	1.90	473.00
BT-50-.750FMX-9	.750	.312	3/8-24	9.00	BT-50	1.90	499.00
BT-50-1.000FMX-5	1.000	.375	1/2-20	5.00	BT-50	2.40	467.00
BT-50-1.000FMX-7	1.000	.375	1/2-20	7.00	BT-50	2.40	480.00
BT-50-1.000FMX-10	1.000	.375	1/2-20	10.00	BT-50	2.40	506.00
BT-50-1.250FMX-6	1.250	.500	5/8-18	6.00	BT-50	2.90	473.00
BT-50-1.250FMX-9	1.250	.500	5/8-18	9.00	BT-50	2.90	499.00
BT-50-1.250FMX-12	1.250	.500	5/8-18	12.00	BT-50	2.90	512.00
BT-50-1.500FMX-5	1.500	.625	3/4-16	5.00	BT-50	3.88	477.00
BT-50-1.500FMX-8	1.500	.625	3/4-16	8.00	BT-50	3.88	486.00
BT-50-1.500FMX-12	1.500	.625	3/4-16	12.00	BT-50	3.88	512.00
BT-50-2.000FMX-6	2.000	.750	1-14	6.00	BT-50	4.38	603.00
BT-50-2.000FMX-12	2.000	.750	1-14	12.00	BT-50	4.38	642.00
BT-50-2.500FMX-4	2.500	1.000	5/8-18 4" BHC	4.00	BT-50	4.90	629.00
BT-50-2.500FMX-8	2.500	1.000	5/8-18 4" BHC	8.00	BT-50	4.90	655.00
NMTB-50-.750FMX-4	.750	.312	3/8-24	4.00	NMTB-50	1.90	460.00
NMTB-50-.750FMX-6	.750	.312	3/8-24	6.00	NMTB-50	1.90	473.00
NMTB-50-.750FMX-9	.750	.312	3/8-24	9.00	NMTB-50	1.90	499.00
NMTB-50-1.000FMX-5	1.000	.375	1/2-20	5.00	NMTB-50	2.40	467.00
NMTB-50-1.000FMX-7	1.000	.375	1/2-20	7.00	NMTB-50	2.40	480.00
NMTB-50-1.000FMX-10	1.000	.375	1/2-20	10.00	NMTB-50	2.40	506.00
NMTB-50-1.250FMX-6	1.250	.500	5/8-18	6.00	NMTB-50	2.90	473.00
NMTB-50-1.250FMX-9	1.250	.500	5/8-18	9.00	NMTB-50	2.90	499.00
NMTB-50-1.250FMX-12	1.250	.500	5/8-18	12.00	NMTB-50	2.90	512.00
NMTB-50-1.500FMX-6	1.500	.625	3/4-16	6.00	NMTB-50	3.88	480.00
NMTB-50-1.500FMX-8	1.500	.625	3/4-16	8.00	NMTB-50	3.88	486.00
NMTB-50-1.500FMX-12	1.500	.625	3/4-16	12.00	NMTB-50	3.88	512.00
NMTB-50-2.000FMX-6	2.000	.750	1-14	6.00	NMTB-50	4.38	603.00
NMTB-50-2.000FMX-12	2.000	.750	1-14	12.00	NMTB-50	4.38	642.00
NMTB-50-2.500FMX-4	2.500	1.000	5/8-18 4" BHC	4.00	NMTB-50	4.90	629.00
NMTB-50-2.500FMX-8	2.500	1.000	5/8-18 4" BHC	8.00	NMTB-50	4.90	655.00

FACE MILL - SHELL MILL EXT

SEE PAGE 23 FOR RETENTION KNOBS
Metric Pilots available on page 36
Replacement screws available on page 12



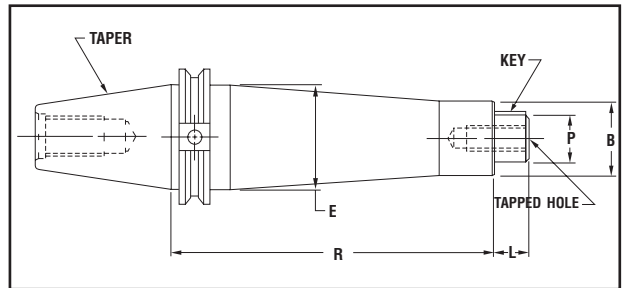
PRECISION COMPONENTS TOLL FREE 1-800-525-1373



Precision Components Stub Arbors come in four pilot sizes and a multitude of lengths. They give you maximum rigidity in extended lengths. By being made in a one piece construction they virtually eliminate run-out and increase rigidity.

- Hardened
- Precision Ground
- American Made

KEY SUPPLIED



STUB ARBOR

CATALOG NUMBER	TAPER	R	P	KEY	L	B	E	TAPPED HOLE	LIST PRICE
CAT-40-.750-SA-2	CAT-40	2.00	.750	.187	.375	1.25	1.75	3/8-24	\$260.00
CAT-40-.750-SA-4	CAT-40	4.00	.750	.187	.375	1.25	1.75	3/8-24	275.00
CAT-40-.750-SA-6	CAT-40	6.00	.750	.187	.375	1.25	1.75	3/8-24	293.00
CAT-40-.750-SA-8	CAT-40	8.00	.750	.187	.375	1.25	1.75	3/8-24	330.00
CAT-40-1.000-SA-2	CAT-40	2.00	1.000	.250	.485	1.50	1.75	1/2-20	260.00
CAT-40-1.000-SA-4	CAT-40	4.00	1.000	.250	.485	1.50	1.75	1/2-20	275.00
CAT-40-1.000-SA-6	CAT-40	6.00	1.000	.250	.485	1.50	1.75	1/2-20	293.00
CAT-40-1.000-SA-8	CAT-40	8.00	1.000	.250	.485	1.50	1.75	1/2-20	330.00
CAT-40-1.250-SA-2	CAT-40	2.00	1.250	.312	.715	1.75	1.75	5/8-18	260.00
CAT-40-1.250-SA-4	CAT-40	4.00	1.250	.312	.715	1.75	1.75	5/8-18	275.00
CAT-40-1.250-SA-6	CAT-40	6.00	1.250	.312	.715	1.75	1.75	5/8-18	293.00
CAT-40-1.250-SA-8	CAT-40	8.00	1.250	.312	.715	1.75	1.75	5/8-18	330.00
CAT-40-1.500-SA-2	CAT-40	2.00	1.500	.375	.975	2.12	2.12	3/4-16	260.00
CAT-40-1.500-SA-4	CAT-40	4.00	1.500	.375	.975	2.12	2.12	3/4-16	275.00
CAT-40-1.500-SA-6	CAT-40	6.00	1.500	.375	.975	2.12	2.12	3/4-16	293.00
CAT-40-1.500-SA-8	CAT-40	8.00	1.500	.375	.975	2.12	2.12	3/4-16	330.00
BT-40-.750-SA-6	BT-40	6.00	.750	.187	.375	1.25	1.75	3/8-24	293.00
BT-40-.750-SA-8	BT-40	8.00	.750	.187	.375	1.25	1.75	3/8-24	330.00
BT-40-1.000-SA-6	BT-40	6.00	1.000	.250	.485	1.50	1.75	1/2-20	293.00
BT-40-1.000-SA-8	BT-40	8.00	1.000	.250	.485	1.50	1.75	1/2-20	330.00
BT-40-1.250-SA-6	BT-40	6.00	1.250	.312	.715	1.75	1.75	5/8-18	293.00
BT-40-1.250-SA-8	BT-40	8.00	1.250	.312	.715	1.75	1.75	5/8-18	330.00
BT-40-1.500-SA-6	BT-40	6.00	1.500	.375	.975	2.12	2.12	3/4-16	293.00
BT-40-1.500-SA-8	BT-40	8.00	1.500	.375	.975	2.12	2.12	3/4-16	330.00

STUB ARBOR

CATALOG NUMBER	TAPER	R	P	KEY	L	B	E	TAPPED HOLE	LIST PRICE
CAT-50-.750-SA-2	CAT-50	2.00	.750	.187	.375	1.25	1.25	3/8-24	\$355.00
CAT-50-.750-SA-4	CAT-50	4.00	.750	.187	.375	1.25	1.25	3/8-24	375.00
CAT-50-1.000-SA-2	CAT-50	2.00	1.000	.250	.485	1.50	1.50	1/2-20	355.00
CAT-50-1.000-SA-4	CAT-50	4.00	1.000	.250	.485	1.50	1.50	1/2-20	375.00
CAT-50-1.000-SA-9	CAT-50	9.00	1.000	.250	.485	1.50	2.75	1/2-20	486.00
CAT-50-1.000-SA-12	CAT-50	12.00	1.000	.250	.485	1.50	2.75	1/2-20	499.00
CAT-50-1.000-SA-15	CAT-50	15.00	1.000	.250	.485	1.50	2.75	1/2-20	532.00
CAT-50-1.250-SA-2	CAT-50	2.00	1.250	.312	.715	1.75	1.75	5/8-18	355.00
CAT-50-1.250-SA-4	CAT-50	4.00	1.250	.312	.715	1.75	1.75	5/8-18	375.00
CAT-50-1.250-SA-9	CAT-50	9.00	1.250	.312	.715	1.75	2.75	5/8-18	486.00
CAT-50-1.250-SA-12	CAT-50	12.00	1.250	.312	.715	1.75	2.75	5/8-18	499.00
CAT-50-1.250-SA-15	CAT-50	15.00	1.250	.312	.715	1.75	2.75	5/8-18	532.00
CAT-50-1.500-SA-2	CAT-50	2.00	1.500	.375	.975	2.12	2.12	3/4-16	355.00
CAT-50-1.500-SA-4	CAT-50	4.00	1.500	.375	.975	2.12	2.12	3/4-16	375.00
CAT-50-1.500-SA-9	CAT-50	9.00	1.500	.375	.975	2.12	2.75	3/4-16	486.00
CAT-50-1.500-SA-12	CAT-50	12.00	1.500	.375	.975	2.12	2.75	3/4-16	499.00
CAT-50-1.500-SA-15	CAT-50	15.00	1.500	.375	.975	2.12	2.75	3/4-16	532.00
BT-50-1.000-SA-9	BT-50	9.00	1.000	.250	.485	1.50	2.75	1/2-20	486.00
BT-50-1.000-SA-12	BT-50	12.00	1.000	.250	.485	1.50	2.75	1/2-20	499.00
BT-50-1.000-SA-15	BT-50	15.00	1.000	.250	.485	1.50	2.75	1/2-20	532.00
BT-50-1.250-SA-9	BT-50	9.00	1.250	.312	.715	1.75	2.75	5/8-18	486.00
BT-50-1.250-SA-12	BT-50	12.00	1.250	.312	.715	1.75	2.75	5/8-18	499.00
BT-50-1.250-SA-15	BT-50	15.00	1.250	.312	.715	1.75	2.75	5/8-18	532.00
BT-50-1.500-SA-9	BT-50	9.00	1.500	.375	.975	2.12	2.75	3/4-16	486.00
BT-50-1.500-SA-12	BT-50	12.00	1.500	.375	.975	2.12	2.75	3/4-16	499.00
BT-50-1.500-SA-15	BT-50	15.00	1.500	.375	.975	2.12	2.75	3/4-16	532.00
NMTB-50-1.000-SA-9	NMTB-50	9.00	1.000	.250	.485	1.50	2.75	1/2-20	486.00
NMTB-50-1.000-SA-12	NMTB-50	12.00	1.000	.250	.485	1.50	2.75	1/2-20	499.00
NMTB-50-1.000-SA-15	NMTB-50	15.00	1.000	.250	.485	1.50	2.75	1/2-20	532.00
NMTB-50-1.250-SA-9	NMTB-50	9.00	1.250	.312	.715	1.75	2.75	5/8-18	486.00
NMTB-50-1.250-SA-12	NMTB-50	12.00	1.250	.312	.715	1.75	2.75	5/8-18	499.00
NMTB-50-1.250-SA-15	NMTB-50	15.00	1.250	.312	.715	1.75	2.75	5/8-18	532.00
NMTB-50-1.500-SA-9	NMTB-50	9.00	1.500	.375	.975	2.12	2.75	3/4-16	486.00
NMTB-50-1.500-SA-12	NMTB-50	12.00	1.500	.375	.975	2.12	2.75	3/4-16	499.00
NMTB-50-1.500-SA-15	NMTB-50	15.00	1.500	.375	.975	2.12	2.75	3/4-16	532.00

SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on page 12

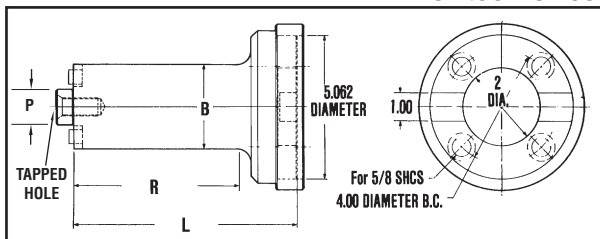
REPLACEMENT KEYS FOR STUB ARBOR

CATALOG NUMBER	PILOT SIZE	LIST PRICE
.187 KEY	.750 SA	\$19.50
.250 KEY	1.000 SA	19.50
.312 KEY	1.250 SA	19.50
.375 KEY	1.500 SA	19.50



- Hardened
- Precision Ground
- American Made

Precision Components Face Mill / Shell Mill Extensions provide the rigidity required to mill deep cavities and pockets. Flange Mount Extensions are available in sixteen sizes.



FLANGE MOUNT FACE MILL / SHELL MILL EXTENSIONS

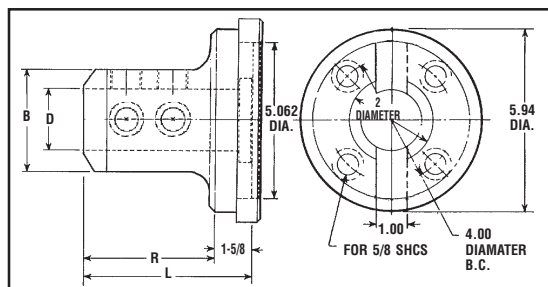
CATALOG NUMBER	P	B	TAPPED HOLE	L	R	LIST PRICE
FMX-305	1.250	2.90	5/8-18	5.00	2.87	\$681.00
FMX-308	1.250	2.90	5/8-18	8.00	5.87	778.00
FMX-310	1.250	2.90	5/8-18	10.00	7.87	1005.00
FMX-312	1.250	2.90	5/8-18	12.00	9.87	1070.00
FMX-315	1.250	2.90	5/8-18	15.00	12.87	1206.00
FMX-405	1.500	3.90	3/4-16	5.00	2.87	681.00
FMX-408	1.500	3.90	3/4-16	8.00	5.87	778.00
FMX-410	1.500	3.90	3/4-16	10.00	7.87	1005.00
FMX-412	1.500	3.90	3/4-16	12.00	9.87	1070.00
FMX-415	1.500	3.90	3/4-16	15.00	12.87	1206.00
FMX-417	1.500	3.90	3/4-16	17.00	14.87	1309.00
FMX-420	1.500	3.90	3/4-16	20.00	17.87	1458.00
FMX-425	1.500	3.90	3/4-16	25.00	22.87	1847.00
FMX-605	2.000	5.00	1-14	5.00	2.87	700.00
FMX-805	2.500	5.90	5/8-18 4" BHC	6.00	3.87	810.00
FMX-808	2.500	5.90	5/8-18 4" BHC	8.00	5.87	1199.00

Replacement screws available on page 12
See page 11 for replacement keys



- Hardened
- Precision Ground
- American Made

Precision Components Flange Mount 2" I.D. End Mill Extensions provide a rigid and stable base for end mills and EMX End Mill Extensions. They have an improved feature of neck down body with (4) Set-Screws 90° apart.



FEX FLANGE MOUNT END MILL EXTENSIONS

CATALOG NUMBER	D	L	R	B	LIST PRICE
FEX-2-5.250	2.000	5.25	3.12	3.50	\$694.00
FEX-2-5.250-W	2.000	5.25	3.12	5.13	733.00
FEX-2-8.000	2.000	8.00	5.87	3.50	778.00
FEX-2-12.000	2.000	12.00	9.87	3.50	836.00
FEX-2.500-6.00	2.500	6.00	3.87	5.13	700.00

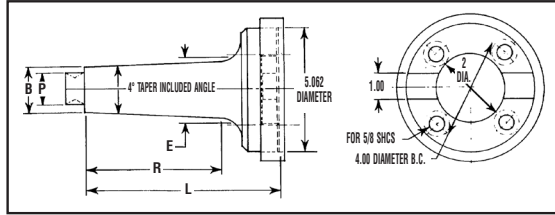
Replacement screws available on page 12

- Hardened
- Precision Ground
- American Made

The Precision Components Cutter Head Extensions provide the rigidity required to mill deep cavities and pockets. These Flange Mount Extensions are available in eleven lengths. Straight body Flange Mount Extensions are also available.



FLANGE MOUNT CUTTER HEAD EXTENSIONS



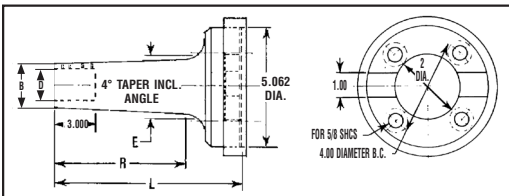
FLANGE MOUNT CUTTER HEAD EXTENSIONS

CATALOG NUMBER	P	L	R	B	E	LIST PRICE
CHX-206	1.250	6.75	3.87	1.88	2.16	\$713.00
CHX-206-STR	1.250	6.75	3.87	1.90	1.90	713.00
CHX-208	1.250	8.75	5.87	1.88	2.30	746.00
CHX-208-STR	1.250	8.75	5.87	1.90	1.90	746.00
CHX-210	1.250	10.75	7.87	1.88	2.44	778.00
CHX-210-STR	1.250	10.75	7.87	1.90	1.90	778.00
CHX-212	1.250	12.75	9.87	1.88	2.58	810.00
CHX-212-STR	1.250	12.75	9.87	1.90	1.90	810.00
CHX-214	1.250	14.75	11.87	1.88	2.72	875.00
CHX-214-STR	1.250	14.75	11.87	1.90	1.90	875.00
CHX-216	1.250	16.75	13.87	1.88	2.86	940.00
CHX-218	1.250	18.75	15.87	1.88	2.99	1037.00
CHX-220	1.250	20.75	17.87	1.88	3.13	1167.00
CHX-222	1.250	22.75	19.87	1.88	3.27	1329.00
CHX-224	1.250	24.75	21.87	1.88	3.41	1491.00
CHX-226	1.250	26.75	23.87	1.88	3.55	1750.00

Replacement screws available on page 12

NOTE: Precision Components' Hi-Tork™ Locking system is described on page 37.

FLANGE MOUNT BMX 1-1/4 I.D. EXTENSIONS



These BMX Style Extensions are available in 11 lengths ranging from 4" to 24". They feature a 1-1/4" I.D. to accept all 1-1/4" Shank Tooling.

CATALOG NUMBER	D	L	R	B	E	LIST PRICE
BMX-1.250-4	1.250	4.00	1.87	1.88	2.02	\$681.00
BMX-1.250-6	1.250	6.00	3.87	1.88	2.16	720.00
BMX-1.250-8	1.250	8.00	5.87	1.88	2.30	765.00
BMX-1.250-10	1.250	10.00	7.87	1.88	2.44	817.00
BMX-1.250-12	1.250	12.00	9.87	1.88	2.58	856.00
BMX-1.250-14	1.250	14.00	11.87	1.88	2.72	921.00
BMX-1.250-16	1.250	16.00	13.87	1.88	2.86	985.00
BMX-1.250-18	1.250	18.00	15.87	1.88	2.99	1083.00
BMX-1.250-20	1.250	20.00	17.87	1.88	3.13	1212.00
BMX-1.250-22	1.250	22.00	19.87	1.88	3.27	1374.00
BMX-1.250-24	1.250	24.00	21.87	1.88	3.41	1536.00

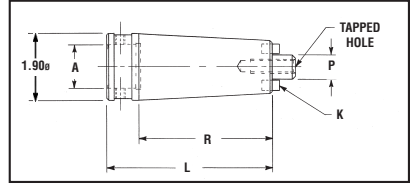
Replacement screws available on page 12

PRECISION COMPONENTS TOLL FREE 1-800-525-1373



Precision Components' CHXF Adapters are designed to mount directly to Precision Components' Hi-Tork™ Cutter Head Extensions, making it easy to adapt shell mills to these holders.

- Hardened
- Precision Ground
- American Made



CHXF ADAPTERS

CATALOG NUMBER	P	K	TAPPED HOLE	L	R	A	LIST PRICE
CHXF-.750FMX-1.4	.750	.312	3/8-24	1.40	.53	CHX-1.250	\$199.00
CHXF-.750FMX-2.0	.750	.312	3/8-24	2.00	1.13	CHX-1.250	212.00
CHXF-.750FMX-4.0	.750	.312	3/8-24	4.00	3.13	CHX-1.250	224.00

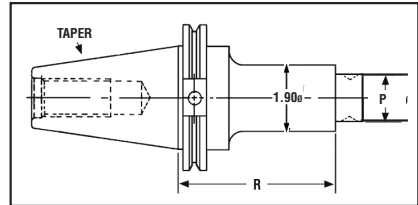
See page 11 for replacement keys



These Cutter Head Extensions have a straight body of 1.90" so that a 2.00" button cutter can machine deep cavities and walls without interference.

CAT-50 DIAGRAM SHOWN
BT-40, CAT-40, QSX, and NMTB Also Available

- Hardened
- Precision Ground
- American Made



CUTTER HEAD EXTENSIONS

CATALOG NUMBER	TAPER	R	P	TAPERED	LIST PRICE
BT-40-CHX-1.19	BT-40	1.19	1.250	NO	\$243.00
BT-40-CHX-03	BT-40	3.00	1.250	NO	268.00
BT-40-CHX-05	BT-40	5.00	1.250	NO	293.00
BT-40-CHX-07	BT-40	7.00	1.250	NO	318.00
CAT-40-CHX-1.38	CAT-40	1.38	1.250	NO	243.00
CAT-40-CHX-1.63	CAT-40	1.63	1.250	NO	243.00
CAT-40-CHX-03	CAT-40	3.00	1.250	NO	268.00
CAT-40-CHX-05	CAT-40	5.00	1.250	NO	293.00
CAT-40-CHX-07	CAT-40	7.00	1.250	NO	318.00
CAT-40-CHX-10	CAT-40	10.00	1.250	NO	336.00
CAT-50-CHX-.88	CAT-50	.88	1.250	NO	324.00
CAT-50-CHX-04	CAT-50	4.00	1.250	NO	422.00
CAT-50-CHX-06	CAT-50	6.00	1.250	NO	441.00
CAT-50-CHX-06-T	CAT-50	6.00	1.250	YES	441.00
CAT-50-CHX-08	CAT-50	8.00	1.250	NO	473.00
CAT-50-CHX-08-T	CAT-50	8.00	1.250	YES	473.00
NMTB-50-CHX-.75	NMTB-50	.75	1.250	NO	324.00
NMTB-50-CHX-04	NMTB-50	4.00	1.250	NO	422.00
NMTB-50-CHX-06	NMTB-50	6.00	1.250	NO	441.00
NMTB-50-CHX-06-T	NMTB-50	6.00	1.250	YES	441.00
NMTB-50-CHX-08	NMTB-50	8.00	1.250	NO	473.00
NMTB-50-CHX-08-T	NMTB-50	8.00	1.250	YES	473.00

NOTE: Precision Components' Hi-Tork™ holding system described on page 37.

SEE PAGE 23 FOR RETENTION KNOBS



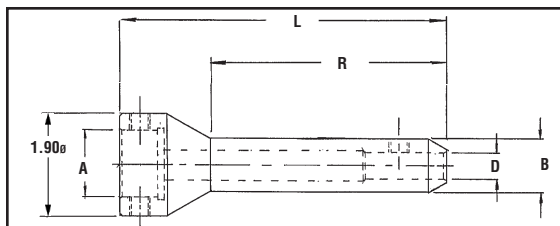
PRECISION COMPONENTS TOLL FREE 1-800-525-1373



CHXA

- Hardened
- Precision Ground
- American Made

Precision Components' CHX accessories are designed to mount directly to Precision Components' Hi-Tork™ cutter head locking system. Used whenever a tool change calls for converting a CHX 1.250" pilot, or just adding a couple of inches of reach to an existing CHX holder, these hardened and precision ground accessories significantly reduce tooling change over time.



CHXA I.D. ADAPTER

CATALOG NUMBER	D	L	R	A	B	LIST PRICE
CHXA-.250-35	.250	3.50	1.95	CHX-1.250	.56	\$262.00
CHXA-.250-60	.250	6.00	4.45	CHX-1.250	.56	287.00
CHXA-.375-35	.375	3.50	2.07	CHX-1.250	.81	262.00
CHXA-.375-60	.375	6.00	4.57	CHX-1.250	.81	287.00
CHXA-.500-35	.500	3.50	2.14	CHX-1.250	.94	262.00
CHXA-.500-60	.500	6.00	4.64	CHX-1.250	.94	287.00
CHXA-.625-35	.625	3.50	2.23	CHX-1.250	1.12	262.00
CHXA-.625-60	.625	6.00	4.73	CHX-1.250	1.12	287.00
CHXA-.750-35	.750	3.50	2.30	CHX-1.250	1.25	262.00
CHXA-.750-60	.750	6.00	4.80	CHX-1.250	1.25	287.00
CHXA-1.000-35	1.000	3.50	2.51	CHX-1.250	1.68	262.00
CHXA-1.000-60	1.000	6.00	5.01	CHX-1.250	1.68	287.00
CHXA-1.250-35	1.250	3.50	3.50	CHX-1.250	1.90	262.00
CHXA-1.250-60	1.250	6.00	6.00	CHX-1.250	1.90	287.00

Replacement screws available on page 12

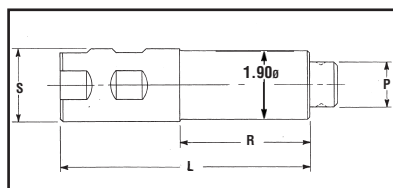


CHXS



CHXE

- Hardened
- Precision Ground
- American Made



Precision Components' CHXS adapter post converts a 1.250" and 2.000" end mill holder to a Hi-Tork™ cutter head mount.

CHXS ADAPTER POST

CATALOG NUMBER	P	L	R	S	LIST PRICE
CHXS	1.250	2.75	.50	1.250	\$181.00
CHXS-2.000-4	1.250	4.00	.75	2.000	298.00
CHXS-2.000-6	1.250	6.00	2.75	2.000	323.00
CHXS-2.000-8	1.250	8.00	4.75	2.000	348.00
CHXS-2.000-10	1.250	10.00	6.75	2.000	373.00
CHXS-2.000-12	1.250	12.00	8.75	2.000	398.00
CHXS-2.000-14	1.250	14.00	10.75	2.000	423.00

CHXE CUTTER HEAD EXTENSIONS

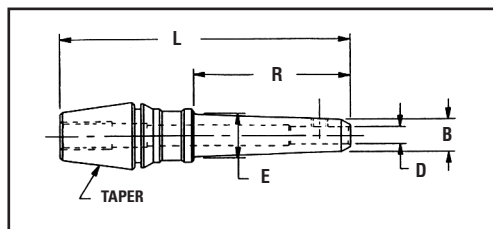
CATALOG NUMBER	R	LIST PRICE
CHXE-2-2	2.00	\$230.00
CHXE-2-3	3.00	243.00

NOTE: Precision Components' Hi-Tork™ fastening system is described on page 37.



Precision Components ER Solid Extensions eliminate stack-up and run-out. The solid design helps decrease cycle time and deflection problems with unmatched, reliable, and consistent results. They are available in 2" and 4" projections.

- Hardened
- Precision Ground
- American Made



#25 TAPER ER SOLID EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
ERX-25-125-2	.125	4.09	2.00	#25	.38	.51	\$235.00
ERX-25-125-4	.125	6.09	4.00	#25	.38	.65	247.00
ERX-25-187-2	.187	4.09	2.00	#25	.44	.57	219.00
ERX-25-187-4	.187	6.09	4.00	#25	.44	.71	230.00
ERX-25-250-2	.250	4.09	2.00	#25	.50	.63	219.00
ERX-25-250-4	.250	6.09	4.00	#25	.50	.75	230.00
ERX-25-312-2	.312	4.09	2.00	#25	.56	.75	219.00
ERX-25-312-4	.312	6.09	4.00	#25	.56	.75	230.00
ERX-25-375-2	.375	4.09	2.00	#25	.74	.75	219.00
ERX-25-375-4	.375	6.09	4.00	#25	.74	.75	230.00
ERX-25-437-2	.437	4.09	2.00	#25	.78	.78	219.00
ERX-25-437-4	.437	6.09	4.00	#25	.78	.78	230.00
ERX-25-500-2	.500	4.09	2.00	#25	.78	.78	219.00
ERX-25-500-4	.500	6.09	4.00	#25	.78	.78	230.00

#32 TAPER ER SOLID EXTENSIONS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
ERX-32-125-2	.125	4.38	2.00	#32	.38	.51	\$235.00
ERX-32-125-4	.125	6.38	4.00	#32	.38	.65	247.00
ERX-32-187-2	.187	4.38	2.00	#32	.44	.57	219.00
ERX-32-187-4	.187	6.38	4.00	#32	.44	.71	230.00
ERX-32-250-2	.250	4.38	2.00	#32	.50	.63	219.00
ERX-32-250-4	.250	6.38	4.00	#32	.50	.77	230.00
ERX-32-312-2	.312	4.38	2.00	#32	.56	.69	219.00
ERX-32-312-4	.312	6.38	4.00	#32	.56	.83	230.00
ERX-32-375-2	.375	4.38	2.00	#32	.75	.88	219.00
ERX-32-375-4	.375	6.38	4.00	#32	.75	1.00	230.00
ERX-32-437-2	.437	4.38	2.00	#32	.81	.94	219.00
ERX-32-437-4	.437	6.38	4.00	#32	.81	1.00	230.00
ERX-32-500-2	.500	4.38	2.00	#32	.88	1.00	219.00
ERX-32-500-4	.500	6.38	4.00	#32	.88	1.00	230.00

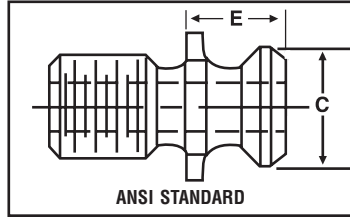


Precision Components' Retention Knobs fit most American and imported machining centers. Please specify machine make and tool holder shank style when ordering knobs. We also stock many more standards and specials where not listed below. When in doubt, please call our toll free number for assistance.

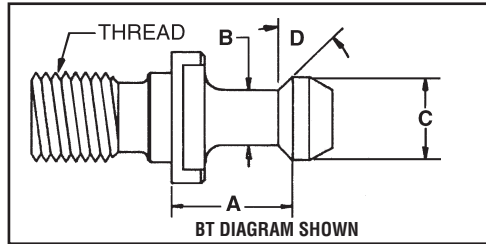
• American Made

STANDARD RETENTION KNOBS

CATALOG NUMBER	C	E	THD.SIZE	LIST PRICE
CAT-30-ANSI	.52	.46	1/2-13	\$13.50
CAT-40-ANSI	.74	.64	5/8-11	13.50
CAT-45-ANSI	.94	.82	3/4-10	15.25
CAT-50-ANSI	1.14	1.00	1-8	15.50



• American Made



RETENTION KNOBS

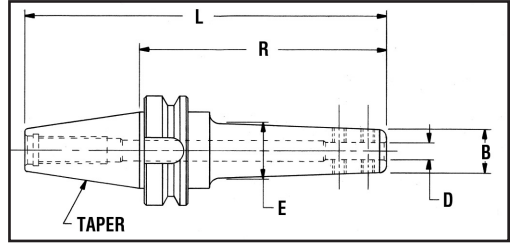
CATALOG NUMBER	TAPER	A	B	C	D	THREAD	LIST PRICE
BT-30-45-71	BT-30	.71	.28	.43	45°	M12-1.75	\$13.50
BT-30-30-71	BT-30	.71	.28	.43	30°	M12-1.75	13.50
CAT-40-45-.99	CAT-40	.99	.39	.59	45°	5/8-11	13.50
CAT-40-30-.99	CAT-40	.99	.39	.59	30°	5/8-11	13.50
CAT-40-0-.99	CAT-40	.99	.39	.59	0°	5/8-11	13.50
BT-40-45-1.10	BT-40	1.10	.39	.59	45°	M16-2	13.50
BT-40-30-1.10	BT-40	1.10	.39	.59	30°	M16-2	13.50
BT-40-0-1.10	BT-40	1.10	.39	.59	0°	M16-2	13.50
BT-45-45-1.22	BT-45	1.22	.55	.75	45°	M20-2.5	15.25
BT-45-30-1.22	BT-45	1.22	.55	.75	30°	M20-2.5	15.25
BT-45-0-1.22	BT-45	1.22	.55	.75	0°	M20-2.5	15.25
CAT-45-45-1.22	CAT-45	1.22	.55	.75	45°	3/4-10	15.25
CAT-45-30-1.22	CAT-45	1.22	.55	.75	30°	3/4-10	15.25
CAT-45-0-1.22	CAT-45	1.22	.55	.75	0°	3/4-10	15.25
CAT-50-45-1.38	CAT-50	1.38	.67	.91	45°	1"-8	15.50
*CAT-50-45-1.38-C	CAT-50	1.38	.67	.91	45°	1"-8	27.50
CAT-50-30-1.38	CAT-50	1.38	.67	.91	30°	1"-8	15.50
CAT-50-0-1.38	CAT-50	1.38	.67	.91	0°	1"-8	15.50
BT-50-45-1.38	BT-50	1.38	.67	.91	45°	M24-3	15.50
BT-50-30-1.38	BT-50	1.38	.67	.91	30°	M24-3	15.50
BT-50-0-1.38	BT-50	1.38	.67	.91	0°	M24-3	15.50

* With Coolant Thru



These BT-30 and BT-40 Rigid Tap Drivers are designed for use on machining centers with a synchronized tapping control. Their slim design allows for easy clearance of fixtures, clamps, superspacers and other causes of interference while also allowing coolant to be delivered directly to the tap. NOTE: Your machining center must have a synchronized tapping control.

- Hardened
- Precision Ground
- American Made



TAP DRIVERS

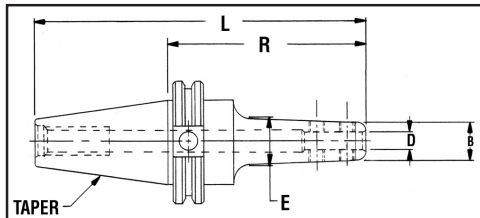
CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
BT-30-#0-#6TD-4	.141	5.906	4.00	BT-30	.52	.71	\$240.00
BT-30-#8TD-4	.168	5.906	4.00	BT-30	.54	.72	240.00
BT-30-#10TD-4	.194	5.906	4.00	BT-30	.57	.75	224.00
BT-30-#12TD-4	.220	5.906	4.00	BT-30	.60	.79	224.00
BT-30-1/4TD-4	.255	5.906	4.00	BT-30	.63	.81	224.00
BT-30-5/16TD-4	.318	5.906	4.00	BT-30	.74	.92	224.00
BT-30-3/8TD-4	.381	5.906	4.00	BT-30	.80	.98	224.00
BT-30-7/16TD-4	.323	5.906	4.00	BT-30	.74	.92	224.00
BT-30-1/2TD-4	.367	5.906	4.00	BT-30	.79	.97	224.00
BT-30-1/16-1/8PTD-4S	.312	5.906	4.00	BT-30	.69	.87	224.00
BT-30-1/16-1/8PTD-4L	.437	5.906	4.00	BT-30	.86	1.04	224.00
BT-30-1/4PTD-4	.562	5.906	4.00	BT-30	1.06	1.25	224.00
BT-30-3/8PTD-4	.700	5.906	4.00	BT-30	1.32	1.50	224.00
BT-30-1/2PTD-4	.688	5.906	4.00	BT-30	1.31	1.49	224.00
BT-40-#0-#6TD-4	.141	6.58	4.00	BT-40	.52	.71	247.00
BT-40-#0-#6TD-6	.141	8.58	6.00	BT-40	.52	.84	278.00
BT-40-#8TD-4	.168	6.58	4.00	BT-40	.54	.72	247.00
BT-40-#8TD-6	.168	8.58	6.00	BT-40	.54	.86	278.00
BT-40-#10TD-4	.194	6.58	4.00	BT-40	.57	.75	230.00
BT-40-#10TD-6	.194	8.58	6.00	BT-40	.57	.90	262.00
BT-40-#12TD-4	.220	6.58	4.00	BT-40	.60	.77	230.00
BT-40-#12TD-6	.220	8.58	6.00	BT-40	.60	.91	262.00
BT-40-1/4TD-4	.255	6.58	4.00	BT-40	.63	.81	230.00
BT-40-1/4TD-6	.255	8.58	6.00	BT-40	.63	.96	262.00
BT-40-5/16TD-4	.318	6.58	4.00	BT-40	.74	.92	230.00
BT-40-5/16TD-6	.318	8.58	6.00	BT-40	.74	1.07	262.00
BT-40-3/8TD-4	.381	6.58	4.00	BT-40	.80	.98	230.00
BT-40-3/8TD-6	.381	8.58	6.00	BT-40	.80	1.13	262.00
BT-40-7/16TD-4	.323	6.58	4.00	BT-40	.74	.92	230.00
BT-40-7/16TD-6	.323	8.58	6.00	BT-40	.74	1.07	262.00
BT-40-1/2TD-4	.367	6.58	4.00	BT-40	.79	.97	230.00
BT-40-1/2TD-6	.367	8.58	6.00	BT-40	.79	1.12	262.00
BT-40-9/16TD-4	.429	6.58	4.00	BT-40	.93	1.02	230.00
BT-40-9/16TD-6	.429	8.58	6.00	BT-40	.93	1.27	262.00
BT-40-5/8TD-4	.480	6.58	4.00	BT-40	.98	1.20	230.00
BT-40-5/8TD-6	.480	8.58	6.00	BT-40	.98	1.31	262.00
BT-40-3/4TD-4	.590	6.58	4.00	BT-40	1.10	1.33	230.00
BT-40-3/4TD-6	.590	8.58	6.00	BT-40	1.10	1.43	262.00
BT-40-7/8TD-4	.697	6.58	4.00	BT-40	1.32	1.49	230.00
BT-40-7/8TD-6	.697	8.58	6.00	BT-40	1.32	1.64	262.00
BT-40-1.000TD-4	.800	6.58	4.00	BT-40	1.55	1.75	230.00
BT-40-1.000TD-6	.800	8.58	6.00	BT-40	1.55	1.86	262.00
BT-40-1/16-1/8PTD-4S	.312	6.58	4.00	BT-40	.69	.87	230.00
BT-40-1/16-1/8PTD-6S	.312	8.58	6.00	BT-40	.69	1.01	262.00
BT-40-1/16-1/8PTD-4L	.437	6.58	4.00	BT-40	.86	1.04	230.00
BT-40-1/16-1/8PTD-6L	.437	8.58	6.00	BT-40	.86	1.18	262.00
BT-40-1/4PTD-4	.562	6.58	4.00	BT-40	1.06	1.25	230.00
BT-40-1/4PTD-6	.562	8.58	6.00	BT-40	1.06	1.38	262.00
BT-40-3/8PTD-4	.700	6.58	4.00	BT-40	1.32	1.50	230.00
BT-40-3/8PTD-6	.700	8.58	6.00	BT-40	1.32	1.64	262.00
BT-40-1/2PTD-4	.688	6.58	4.00	BT-40	1.31	1.49	230.00
BT-40-1/2PTD-6	.688	8.58	6.00	BT-40	1.31	1.63	262.00

COOLANT THROUGH DIN'S & MAHO KNOTCHES AVAILABLE UPON REQUEST

Precision Components' Rigid Tap Drivers eliminate the bushings and collets associated with most systems. With the slim design, hard to reach areas can be tapped with a minimum of interference. NOTE: Your machining center must have synchronized tapping in the control.



- Hardened
- Precision Ground
- American Made



TAP DRIVERS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-#0-#6TD-4	.141	6.68	4.00	CAT-40	.52	.71	\$247.00
CAT-40-#0-#6TD-6	.141	8.68	6.00	CAT-40	.52	.84	278.00
CAT-40-#8TD-4	.168	6.68	4.00	CAT-40	.54	.72	247.00
CAT-40-#8TD-6	.168	8.68	6.00	CAT-40	.54	.86	278.00
CAT-40-#10TD-4	.194	6.68	4.00	CAT-40	.57	.75	230.00
CAT-40-#10TD-6	.194	8.68	6.00	CAT-40	.57	.90	262.00
CAT-40-#12TD-4	.220	6.68	4.00	CAT-40	.60	.78	230.00
CAT-40-#12TD-6	.220	8.68	6.00	CAT-40	.60	.92	262.00
CAT-40-1/4TD-4	.255	6.68	4.00	CAT-40	.63	.81	230.00
CAT-40-1/4TD-6	.255	8.68	6.00	CAT-40	.63	.96	262.00
CAT-40-5/16TD-4	.318	6.68	4.00	CAT-40	.74	.92	230.00
CAT-40-5/16TD-6	.318	8.68	6.00	CAT-40	.74	1.07	262.00
CAT-40-3/8TD-4	.381	6.68	4.00	CAT-40	.80	.98	230.00
CAT-40-3/8TD-6	.381	8.68	6.00	CAT-40	.80	1.13	262.00
CAT-40-7/16TD-4	.323	6.68	4.00	CAT-40	.74	.92	230.00
CAT-40-7/16TD-6	.323	8.68	6.00	CAT-40	.74	1.07	262.00
CAT-40-1/2TD-4	.367	6.68	4.00	CAT-40	.79	.97	230.00
CAT-40-1/2TD-6	.367	8.68	6.00	CAT-40	.79	1.12	262.00
CAT-40-9/16TD-4	.429	6.68	4.00	CAT-40	.93	1.12	230.00
CAT-40-9/16TD-6	.429	8.68	6.00	CAT-40	.93	1.26	262.00
CAT-40-5/8TD-4	.480	6.68	4.00	CAT-40	.98	1.16	230.00
CAT-40-5/8TD-6	.480	8.68	6.00	CAT-40	.98	1.30	262.00
CAT-40-3/4TD-4	.590	6.68	4.00	CAT-40	1.10	1.28	230.00
CAT-40-3/4TD-6	.590	8.68	6.00	CAT-40	1.10	1.42	262.00
CAT-40-7/8TD-4	.697	6.68	4.00	CAT-40	1.32	1.50	230.00
CAT-40-7/8TD-6	.697	8.68	6.00	CAT-40	1.32	1.64	262.00
CAT-40-1.000TD-4	.800	6.68	4.00	CAT-40	1.55	1.75	230.00
CAT-40-1.000TD-6	.800	8.68	6.00	CAT-40	1.55	1.75	262.00
CAT-40-1/16-1/8PTD-4S	.312	6.68	4.00	CAT-40	.69	.87	230.00
CAT-40-1/16-1/8PTD-6S	.312	8.68	6.00	CAT-40	.69	1.01	262.00
CAT-40-1/16-1/8PTD-4L	.437	6.68	4.00	CAT-40	.86	1.04	230.00
CAT-40-1/16-1/8PTD-6L	.437	8.68	6.00	CAT-40	.86	1.18	262.00
CAT-40-1/4PTD-4	.562	6.68	4.00	CAT-40	1.06	1.25	230.00
CAT-40-1/4PTD-6	.562	8.68	6.00	CAT-40	1.06	1.38	262.00
CAT-40-3/8PTD-4	.700	6.68	4.00	CAT-40	1.32	1.50	230.00
CAT-40-3/8PTD-6	.700	8.68	6.00	CAT-40	1.32	1.64	262.00
CAT-40-1/2PTD-4	.688	6.68	4.00	CAT-40	1.31	1.49	230.00
CAT-40-1/2PTD-6	.688	8.68	6.00	CAT-40	1.31	1.63	262.00
CAT-40-3/4PTD-4	.906	6.68	4.00	CAT-40	1.66	1.84	230.00
CAT-40-3/4PTD-6	.906	8.68	6.00	CAT-40	1.66	1.98	262.00
CAT-40-1.000PTD-4	1.125	6.68	4.00	CAT-40	2.13	2.31	230.00
CAT-40-1.000PTD-6	1.125	8.68	6.00	CAT-40	2.13	2.45	262.00

SEE PAGE 23 FOR RETENTION KNOBS
METRIC I.D.'S AVAILABLE ON PAGE 34
Replacement screws available on page 12



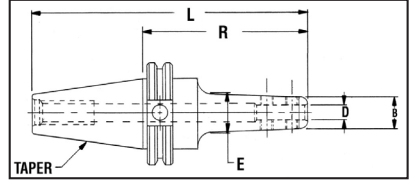
PRECISION COMPONENTS TOLL FREE 1-800-525-1373



COOLANT THROUGH DIN'S & MAHO KNOTCHES AVAILABLE UPON REQUEST

Precision Components' Rigid Tap Drivers eliminate the bushings and collets associated with most systems. The slim design allows hard to reach areas to be tapped with minimum interference. NOTE: Your machining center must have a synchronized tapping control.

- Hardened
- Precision Ground
- American Made



TAP DRIVERS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-50-#0-#6TD-6	.141	10.00	6.00	CAT-50	.52	.84	\$438.00
CAT-50-#0-#6TD-9	.141	13.00	9.00	CAT-50	.52	1.05	503.00
CAT-50-#8TD-6	.168	10.00	6.00	CAT-50	.54	.86	438.00
CAT-50-#8TD-9	.168	13.00	9.00	CAT-50	.54	1.07	503.00
CAT-50-#10TD-6	.194	10.00	6.00	CAT-50	.57	.90	422.00
CAT-50-#10TD-9	.194	13.00	9.00	CAT-50	.57	1.11	486.00
CAT-50-#12TD-6	.220	10.00	6.00	CAT-50	.60	.92	422.00
CAT-50-#12TD-9	.220	13.00	9.00	CAT-50	.60	1.13	486.00
CAT-50-1/4TD-6	.255	10.00	6.00	CAT-50	.63	.96	422.00
CAT-50-1/4TD-9	.255	13.00	9.00	CAT-50	.63	1.17	486.00
CAT-50-5/16TD-6	.318	10.00	6.00	CAT-50	.74	1.07	422.00
CAT-50-5/16TD-9	.318	13.00	9.00	CAT-50	.74	1.28	486.00
CAT-50-3/8TD-6	.381	10.00	6.00	CAT-50	.80	1.13	422.00
CAT-50-3/8TD-9	.381	13.00	9.00	CAT-50	.80	1.34	486.00
CAT-50-7/16TD-6	.323	10.00	6.00	CAT-50	.74	1.07	422.00
CAT-50-7/16TD-9	.323	13.00	9.00	CAT-50	.74	1.27	486.00
CAT-50-1/2TD-6	.367	10.00	6.00	CAT-50	.79	1.12	422.00
CAT-50-1/2TD-9	.367	13.00	9.00	CAT-50	.79	1.33	486.00
CAT-50-9/16TD-6	.429	10.00	6.00	CAT-50	.93	1.27	422.00
CAT-50-9/16TD-9	.429	13.00	9.00	CAT-50	.93	1.47	486.00
CAT-50-5/8TD-6	.480	10.00	6.00	CAT-50	.98	1.31	422.00
CAT-50-5/8TD-9	.480	13.00	9.00	CAT-50	.98	1.52	486.00
CAT-50-3/4TD-6	.590	10.00	6.00	CAT-50	1.10	1.43	422.00
CAT-50-3/4TD-9	.590	13.00	9.00	CAT-50	1.10	1.63	486.00
CAT-50-7/8TD-6	.697	10.00	6.00	CAT-50	1.32	1.64	422.00
CAT-50-7/8TD-9	.697	13.00	9.00	CAT-50	1.32	1.85	486.00
CAT-50-1.000TD-6	.800	10.00	6.00	CAT-50	1.55	1.86	422.00
CAT-50-1.000TD-9	.800	13.00	9.00	CAT-50	1.55	2.07	486.00
CAT-50-1.062-1.125TD-6	.896	10.00	6.00	CAT-50	1.65	1.96	422.00
CAT-50-1.062-1.125TD-9	.896	13.00	9.00	CAT-50	1.65	2.17	486.00
CAT-50-1.187-1.250TD-6	1.021	10.00	6.00	CAT-50	1.90	2.22	422.00
CAT-50-1.187-1.250TD-9	1.021	13.00	9.00	CAT-50	1.90	2.43	486.00
CAT-50-1.312-1.375TD-6	1.108	10.00	6.00	CAT-50	2.11	2.43	422.00
CAT-50-1.312-1.375TD-9	1.108	13.00	9.00	CAT-50	2.11	2.64	486.00
CAT-50-1.437-1.500TD-6	1.233	10.00	6.00	CAT-50	2.24	2.54	422.00
CAT-50-1.437-1.500TD-9	1.233	13.00	9.00	CAT-50	2.24	2.75	486.00
CAT-50-2.000TD-6	1.644	10.00	6.00	CAT-50	3.00	3.30	422.00
CAT-50-2.000TD-9	1.644	13.00	9.00	CAT-50	3.00	3.50	486.00
CAT-50-1/16-1/8PTD-6S	.312	10.00	6.00	CAT-50	.69	1.02	422.00
CAT-50-1/16-1/8PTD-9S	.312	13.00	9.00	CAT-50	.69	1.23	486.00
CAT-50-1/16-1/8PTD-6L	.437	10.00	6.00	CAT-50	.86	1.19	422.00
CAT-50-1/16-1/8PTD-9L	.437	13.00	9.00	CAT-50	.86	1.40	486.00
CAT-50-1/4PTD-6	.562	10.00	6.00	CAT-50	1.06	1.38	422.00
CAT-50-1/4PTD-9	.562	13.00	9.00	CAT-50	1.06	1.59	486.00
CAT-50-3/8PTD-6	.700	10.00	6.00	CAT-50	1.32	1.64	422.00
CAT-50-3/8PTD-9	.700	13.00	9.00	CAT-50	1.32	1.85	486.00
CAT-50-1/2PTD-6	.688	10.00	6.00	CAT-50	1.31	1.63	422.00
CAT-50-1/2PTD-9	.688	13.00	9.00	CAT-50	1.31	1.84	486.00
CAT-50-3/4PTD-6	.906	10.00	6.00	CAT-50	1.66	1.98	422.00
CAT-50-3/4PTD-9	.906	13.00	9.00	CAT-50	1.66	2.19	486.00
CAT-50-1.000PTD-6	1.125	10.00	6.00	CAT-50	2.13	2.45	422.00
CAT-50-1.000PTD-9	1.125	13.00	9.00	CAT-50	2.13	2.66	486.00
CAT-50-1.250PTD-6	1.312	10.00	6.00	CAT-50	2.31	2.62	422.00
CAT-50-1.250PTD-9	1.312	13.00	9.00	CAT-50	2.31	2.75	486.00

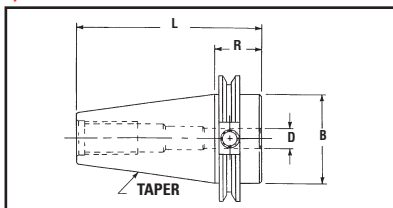
SEE PAGE 23 FOR RETENTION KNOBS
SOME BT-50 TAPERS AVAILABLE
METRIC I.D.'S AVAILABLE ON PAGE 35
Replacement screws available on page 12

STUBBY tool holders give maximum rigidity, minimum deflection, and allows you to machine parts that are normally too tall for your Z axis.

*40 & 50 Tapers available in Dual Contact



- Hardened
- Precision Ground
- American Made



STUBBY HOLDERS

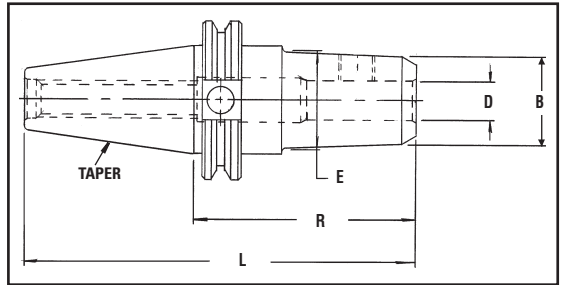
CATALOG NUMBER	D	R	TAPER	B	L	LIST PRICE
BT-30-250-STUBBY	.250	1.375	BT-30	1.25	3.28	\$149.00
BT-30-312-STUBBY	.312	1.375	BT-30	1.25	3.28	149.00
BT-30-375-STUBBY	.375	1.375	BT-30	1.25	3.28	149.00
BT-30-500-STUBBY	.500	1.375	BT-30	1.25	3.28	149.00
BT-30-625-STUBBY	.625	1.375	BT-30	1.25	3.28	149.00
BT-30-750-STUBBY	.750	1.375	BT-30	1.25	3.28	149.00
BT-40-250-STUBBY	.250	1.69	BT-40	1.75	4.26	156.00
BT-40-375-STUBBY	.375	1.69	BT-40	1.75	4.26	156.00
BT-40-500-STUBBY	.500	1.69	BT-40	1.75	4.26	156.00
BT-40-625-STUBBY	.625	1.69	BT-40	1.75	4.26	156.00
BT-40-750-STUBBY	.750	1.69	BT-40	1.75	4.26	156.00
BT-40-875-STUBBY	.875	1.69	BT-40	1.75	4.26	156.00
BT-40-1.000-STUBBY	1.000	1.69	BT-40	1.75	4.26	156.00
CAT-40-250-STUBBY	.250	1.375	CAT-40	1.75	4.06	156.00
CAT-40-375-STUBBY	.375	1.375	CAT-40	1.75	4.06	156.00
CAT-40-500-STUBBY	.500	1.375	CAT-40	1.75	4.06	156.00
CAT-40-625-STUBBY	.625	1.375	CAT-40	1.75	4.06	156.00
CAT-40-750-STUBBY	.750	1.375	CAT-40	1.75	4.06	156.00
CAT-40-875-STUBBY	.875	1.375	CAT-40	1.75	4.06	156.00
CAT-40-1.000-STUBBY	1.000	1.375	CAT-40	1.75	4.06	156.00
BT-45-250-STUBBY	.250	1.92	BT-45	2.25	5.18	174.00
BT-45-375-STUBBY	.375	1.92	BT-45	2.25	5.18	174.00
BT-45-500-STUBBY	.500	1.92	BT-45	2.25	5.18	174.00
BT-45-625-STUBBY	.625	1.92	BT-45	2.25	5.18	174.00
BT-45-750-STUBBY	.750	1.92	BT-45	2.25	5.18	174.00
BT-45-875-STUBBY	.875	1.92	BT-45	2.25	5.18	174.00
BT-45-1.000-STUBBY	1.000	1.92	BT-45	2.25	5.18	174.00
BT-45-1.250-STUBBY	1.250	1.92	BT-45	2.25	5.18	174.00
CAT-45-250-STUBBY	.250	1.375	CAT-45	2.25	4.62	174.00
CAT-45-375-STUBBY	.375	1.375	CAT-45	2.25	4.62	174.00
CAT-45-500-STUBBY	.500	1.375	CAT-45	2.25	4.62	174.00
CAT-45-625-STUBBY	.625	1.375	CAT-45	2.25	4.62	174.00
CAT-45-750-STUBBY	.750	1.375	CAT-45	2.25	4.62	174.00
CAT-45-875-STUBBY	.875	1.375	CAT-45	2.25	4.62	174.00
CAT-45-1.000-STUBBY	1.000	1.375	CAT-45	2.25	4.62	174.00
CAT-45-1.250-STUBBY	1.250	1.375	CAT-45	2.25	4.62	174.00
BT-50-250-STUBBY	.250	2.12	BT-50	2.75	6.13	188.00
BT-50-375-STUBBY	.375	2.12	BT-50	2.75	6.13	188.00
BT-50-500-STUBBY	.500	2.12	BT-50	2.75	6.13	188.00
BT-50-625-STUBBY	.625	2.12	BT-50	2.75	6.13	188.00
BT-50-750-STUBBY	.750	2.12	BT-50	2.75	6.13	188.00
BT-50-875-STUBBY	.875	2.12	BT-50	2.75	6.13	188.00
BT-50-1.000-STUBBY	1.000	2.12	BT-50	2.75	6.13	188.00
BT-50-1.250-STUBBY	1.250	2.12	BT-50	2.75	6.13	188.00
BT-50-1.500-STUBBY	1.500	2.12	BT-50	2.75	6.13	188.00
CAT-50-250-STUBBY	.250	1.375	CAT-50	2.75	5.38	188.00
CAT-50-375-STUBBY	.375	1.375	CAT-50	2.75	5.38	188.00
CAT-50-500-STUBBY	.500	1.375	CAT-50	2.75	5.38	188.00
CAT-50-625-STUBBY	.625	1.375	CAT-50	2.75	5.38	188.00
CAT-50-750-STUBBY	.750	1.375	CAT-50	2.75	5.38	188.00
CAT-50-875-STUBBY	.875	1.375	CAT-50	2.75	5.38	188.00
CAT-50-1.000-STUBBY	1.000	1.375	CAT-50	2.75	5.38	188.00
CAT-50-1.250-STUBBY	1.250	1.375	CAT-50	2.75	5.38	188.00
CAT-50-1.500-STUBBY	1.500	1.375	CAT-50	2.75	5.38	188.00

**COOLANT THROUGH DINS & MAHO KNOTCHES
AVAILABLE UPON REQUEST**



- Hardened
- Precision Ground
- American Made

Precision Components “STANDARDS” are designed to replace the old standard length tooling. All holders are high speed balanced, have coolant thru, and are slim in design, which cause less interference and better coolant contact at cutting edge. All fraction sizes are in stock, eliminating bulky drill chucks, collets, and special tooling.



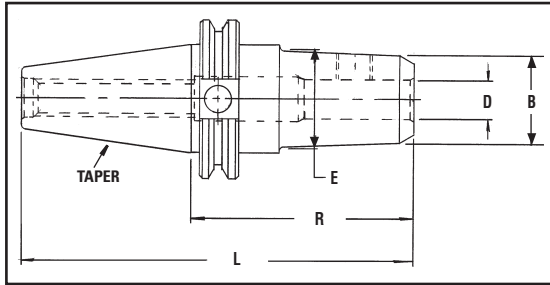
CAT-40 STD BALANCED TO 12,000 RPM

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-.1250-STD	.1250	4.94	2.25	CAT-40	.44	.50	\$174.00
CAT-40-.1406-STD	.1406	4.94	2.25	CAT-40	.44	.50	209.00
CAT-40-.1562-STD	.1562	4.94	2.25	CAT-40	.47	.53	194.00
CAT-40-.1719-STD	.1719	4.94	2.25	CAT-40	.47	.53	194.00
CAT-40-.1875-STD	.1875	4.94	2.25	CAT-40	.53	.59	159.00
CAT-40-.2031-STD	.2031	4.94	2.25	CAT-40	.53	.59	194.00
CAT-40-.2187-STD	.2187	4.94	2.25	CAT-40	.56	.62	194.00
CAT-40-.2344-STD	.2344	4.94	2.25	CAT-40	.56	.62	194.00
CAT-40-.2500-STD	.2500	5.19	2.50	CAT-40	.62	.70	159.00
CAT-40-.2656-STD	.2656	5.19	2.50	CAT-40	.62	.70	194.00
CAT-40-.2812-STD	.2812	5.19	2.50	CAT-40	.65	.73	194.00
CAT-40-.2969-STD	.2969	5.19	2.50	CAT-40	.65	.73	194.00
CAT-40-.3125-STD	.3125	5.19	2.50	CAT-40	.68	.76	159.00
CAT-40-.3281-STD	.3281	5.19	2.50	CAT-40	.68	.76	194.00
CAT-40-.3438-STD	.3438	5.19	2.50	CAT-40	.71	.79	194.00
CAT-40-.3594-STD	.3594	5.19	2.50	CAT-40	.71	.79	194.00
CAT-40-.3750-STD	.3750	5.44	2.75	CAT-40	.88	.98	159.00
CAT-40-.3908-STD	.3908	5.44	2.75	CAT-40	.88	.98	194.00
CAT-40-.4062-STD	.4062	5.44	2.75	CAT-40	.91	1.01	194.00
CAT-40-.4219-STD	.4219	5.44	2.75	CAT-40	.91	1.01	194.00
CAT-40-.4375-STD	.4375	5.44	2.75	CAT-40	.94	1.04	159.00
CAT-40-.4531-STD	.4531	5.44	2.75	CAT-40	.94	1.04	194.00
CAT-40-.4688-STD	.4688	5.44	2.75	CAT-40	.97	1.07	194.00
CAT-40-.4847-STD	.4847	5.44	2.75	CAT-40	.97	1.07	194.00
CAT-40-.5000-STD	.5000	5.44	2.75	CAT-40	1.12	1.22	159.00
CAT-40-.5156-STD	.5156	5.69	3.00	CAT-40	1.12	1.24	194.00
CAT-40-.5312-STD	.5312	5.69	3.00	CAT-40	1.15	1.27	194.00
CAT-40-.5469-STD	.5469	5.69	3.00	CAT-40	1.15	1.27	194.00
CAT-40-.5625-STD	.5625	5.69	3.00	CAT-40	1.18	1.30	194.00
CAT-40-.5781-STD	.5781	5.69	3.00	CAT-40	1.18	1.30	194.00
CAT-40-.5938-STD	.5938	5.69	3.00	CAT-40	1.21	1.34	194.00

COOLANT THROUGH DIN5 & MAYHO KNOTCHES AVAILABLE UPON REQUEST



Precision Components "STANDARDS" are designed to replace the old standard length tooling. All holders are high speed balanced, have coolant thru, and are slim in design, which cause less interference and better coolant contact at cutting edge. All fraction sizes are in stock, eliminating bulky drill chucks, collets, and special tooling.



- Hardened
- Precision Ground
- American Made

CAT-40 STD BALANCED TO 12,000 RPM

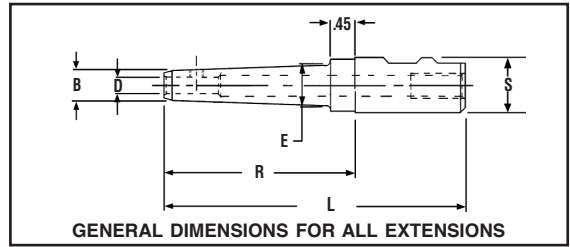
CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-.6094-STD	.6094	5.69	3.00	CAT-40	1.21	1.34	\$194.00
CAT-40-.6250-STD	.6250	6.19	3.50	CAT-40	1.38	1.53	159.00
CAT-40-.6406-STD	.6406	6.19	3.50	CAT-40	1.38	1.53	194.00
CAT-40-.6563-STD	.6563	6.19	3.50	CAT-40	1.41	1.56	194.00
CAT-40-.6719-STD	.6719	6.19	3.50	CAT-40	1.41	1.56	194.00
CAT-40-.6875-STD	.6875	6.19	3.50	CAT-40	1.44	1.59	194.00
CAT-40-.7031-STD	.7031	6.19	3.50	CAT-40	1.44	1.59	194.00
CAT-40-.7188-STD	.7188	6.19	3.50	CAT-40	1.47	1.62	194.00
CAT-40-.7344-STD	.7344	6.19	3.50	CAT-40	1.47	1.62	194.00
CAT-40-.7500-STD	.7500	6.19	3.50	CAT-40	1.62	1.75	159.00
CAT-40-.7656-STD	.7656	6.19	3.50	CAT-40	1.62	1.75	194.00
CAT-40-.7813-STD	.7813	6.19	3.50	CAT-40	1.65	1.75	194.00
CAT-40-.7969-STD	.7969	6.19	3.50	CAT-40	1.65	1.75	194.00
CAT-40-.8125-STD	.8125	6.19	3.50	CAT-40	1.68	1.75	194.00
CAT-40-.8281-STD	.8281	6.19	3.50	CAT-40	1.68	1.75	194.00
CAT-40-.8438-STD	.8438	6.19	3.50	CAT-40	1.71	1.75	194.00
CAT-40-.8594-STD	.8594	6.19	3.50	CAT-40	1.71	1.75	194.00
CAT-40-.8750-STD	.8750	6.69	4.00	CAT-40	1.75	1.75	159.00
CAT-40-.8906-STD	.8906	5.19	2.50	CAT-40	1.75	1.75	194.00
CAT-40-.9063-STD	.9063	5.19	2.50	CAT-40	1.78	1.78	194.00
CAT-40-.9219-STD	.9219	5.19	2.50	CAT-40	1.78	1.78	194.00
CAT-40-.9375-STD	.9375	5.19	2.50	CAT-40	1.81	1.81	194.00
CAT-40-.9531-STD	.9531	5.19	2.50	CAT-40	1.81	1.81	194.00
CAT-40-.9688-STD	.9688	5.19	2.50	CAT-40	1.84	1.84	194.00
CAT-40-.9844-STD	.9844	5.19	2.50	CAT-40	1.84	1.84	194.00
CAT-40-1.000-STD	1.000	6.94	4.25	CAT-40	2.25	2.25	159.00
CAT-40-1.250-STD	1.250	6.94	4.25	CAT-40	2.50	2.50	159.00
CAT-40-1.500-STD	1.500	7.30	4.62	CAT-40	2.75	2.75	202.00
CAT-40-2.000-STD	2.000	8.69	6.00	CAT-40	3.75	3.75	225.00

CAT 40 STANDARDS BALANCED



LRM and LRX Extensions with METRIC I.D.'s are designed to give maximum rigidity at extended lengths with clearance hole through to accept carbide blanks and double end end mills.

- Hardened
- Precision Ground
- American Made



LRM & LRX METRICS

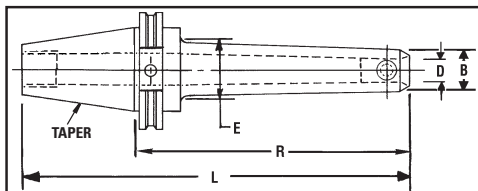
CATALOG NUMBER	D	L	R	S	B	E	LIST PRICE
LRM-3MM-40-1	3MM	4.00	2.00	1.000	.32	.42	\$129.00
LRX-3MM-7	3MM	7.00	4.50	1.250	.32	.60	222.00
LRM-4MM-40-1	4MM	4.00	2.00	1.000	.36	.46	113.00
LRX-4MM-7	4MM	7.00	4.50	1.250	.36	.64	206.00
LRM-5MM-40-1	5MM	4.00	2.00	1.000	.40	.50	113.00
LRX-5MM-7	5MM	7.00	4.50	1.250	.40	.68	206.00
LRM-6MM-40-1	6MM	4.00	2.00	1.000	.44	.54	113.00
LRX-6MM-7	6MM	7.00	4.50	1.250	.49	.77	206.00
LRM-7MM-40-1	7MM	4.00	2.00	1.000	.48	.58	113.00
LRX-7MM-7	7MM	7.00	4.50	1.250	.53	.81	206.00
LRM-8MM-40-1	8MM	4.00	2.00	1.000	.52	.62	113.00
LRX-8MM-7	8MM	7.00	4.50	1.250	.57	.85	206.00
LRM-9MM-40-1	9MM	4.00	2.00	1.000	.61	.71	113.00
LRX-9MM-7	9MM	7.00	4.50	1.250	.73	1.00	206.00
LRM-10MM-40-1	10MM	4.00	2.00	1.000	.65	.75	113.00
LRX-10MM-7	10MM	7.00	4.50	1.250	.77	1.04	206.00
LRM-11MM-40-1	11MM	4.00	2.00	1.000	.73	.83	113.00
LRX-11MM-7	11MM	7.00	4.50	1.250	.81	1.08	206.00
LRM-12MM-40-1	12MM	4.00	2.00	1.000	.80	.90	113.00
LRX-12MM-7	12MM	7.00	4.50	1.250	.85	1.12	206.00
LRX-13MM-7	13MM	7.00	4.50	1.250	.89	1.23	206.00
LRM-14MM-40-1	14MM	4.00	2.00	1.000	.88	.97	113.00
LRX-14MM-7	14MM	7.00	4.50	1.250	.93	1.23	206.00
LRX-15MM-7	15MM	7.00	4.50	1.250	1.03	1.23	206.00
LRX-16MM-7	16MM	7.00	4.50	1.250	1.07	1.23	206.00
LRX-17MM-7	17MM	7.00	4.50	1.250	1.11	1.23	206.00
LRX-18MM-7	18MM	7.00	4.50	1.250	1.14	1.23	206.00
LRX-19MM-7	19MM	7.00	4.50	1.250	1.18	1.23	206.00
LRX-20MM-7	20MM	7.00	4.50	1.250	1.22	1.23	206.00

COOLANT THROUGH DINS & MAHO KNOTCHES AVAILABLE UPON REQUEST

- Hardened
- Precision Ground
- American Made

Precision Components CAT-40 tooling is designed to give maximum rigidity at extended lengths with metric I.D.'s ranging from 3mm - 32mm.

*Available in
Dual Contact



CAT-40 METRICS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-3MM-4	3MM	6.68	4.00	CAT-40	.39	.56	\$247.00
CAT-40-3MM-6	3MM	8.68	6.00	CAT-40	.39	.70	296.00
CAT-40-4MM-4	4MM	6.68	4.00	CAT-40	.41	.59	230.00
CAT-40-4MM-6	4MM	8.68	6.00	CAT-40	.41	.73	280.00
CAT-40-5MM-4	5MM	6.68	4.00	CAT-40	.45	.63	230.00
CAT-40-5MM-6	5MM	8.68	6.00	CAT-40	.45	.77	280.00
CAT-40-6MM-4	6MM	6.68	4.00	CAT-40	.49	.67	230.00
CAT-40-6MM-6	6MM	8.68	6.00	CAT-40	.49	.81	280.00
CAT-40-7MM-4	7MM	6.68	4.00	CAT-40	.53	.71	230.00
CAT-40-7MM-6	7MM	8.68	6.00	CAT-40	.53	.85	280.00
CAT-40-8MM-4	8MM	6.68	4.00	CAT-40	.57	.74	230.00
CAT-40-8MM-6	8MM	8.68	6.00	CAT-40	.57	.88	280.00
CAT-40-9MM-4	9MM	6.68	4.00	CAT-40	.73	.90	230.00
CAT-40-9MM-6	9MM	8.68	6.00	CAT-40	.73	1.04	280.00
CAT-40-10MM-4	10MM	6.68	4.00	CAT-40	.77	.94	230.00
CAT-40-10MM-6	10MM	8.68	6.00	CAT-40	.77	1.08	280.00
CAT-40-11MM-4	11MM	6.68	4.00	CAT-40	.81	.98	230.00
CAT-40-11MM-6	11MM	8.68	6.00	CAT-40	.81	1.12	280.00
CAT-40-12MM-4	12MM	6.68	4.00	CAT-40	.85	1.02	230.00
CAT-40-12MM-6	12MM	8.68	6.00	CAT-40	.85	1.16	280.00
CAT-40-13MM-4	13MM	6.68	4.00	CAT-40	.89	1.06	230.00
CAT-40-13MM-6	13MM	8.68	6.00	CAT-40	.89	1.20	280.00
* CAT-40-14MM-4	14MM	6.68	4.00	CAT-40	.93	1.10	230.00
* CAT-40-14MM-6	14MM	8.68	6.00	CAT-40	.93	1.24	280.00
CAT-40-15MM-4	15MM	6.68	4.00	CAT-40	1.03	1.19	230.00
CAT-40-15MM-6	15MM	8.68	6.00	CAT-40	1.03	1.33	280.00
CAT-40-16MM-4	16MM	6.68	4.00	CAT-40	1.07	1.22	230.00
CAT-40-16MM-6	16MM	8.68	6.00	CAT-40	1.07	1.36	280.00
CAT-40-17MM-4	17MM	6.68	4.00	CAT-40	1.11	1.26	230.00
CAT-40-17MM-6	17MM	8.68	6.00	CAT-40	1.11	1.40	280.00
CAT-40-18MM-4	18MM	6.68	4.00	CAT-40	1.15	1.31	230.00
CAT-40-18MM-6	18MM	8.68	6.00	CAT-40	1.15	1.45	280.00
CAT-40-19MM-4	19MM	6.68	4.00	CAT-40	1.19	1.35	230.00
CAT-40-19MM-6	19MM	8.68	6.00	CAT-40	1.19	1.49	280.00
CAT-40-20MM-4	20MM	6.68	4.00	CAT-40	1.23	1.39	230.00
CAT-40-20MM-6	20MM	8.68	6.00	CAT-40	1.23	1.53	280.00
CAT-40-21MM-4	21MM	6.68	4.00	CAT-40	1.27	1.43	230.00
CAT-40-21MM-6	21MM	8.68	6.00	CAT-40	1.27	1.57	280.00
CAT-40-22MM-4	22MM	6.68	4.00	CAT-40	1.31	1.46	230.00
CAT-40-22MM-6	22MM	8.68	6.00	CAT-40	1.31	1.60	280.00
CAT-40-23MM-4	23MM	6.68	4.00	CAT-40	1.40	1.56	230.00
CAT-40-23MM-6	23MM	8.68	6.00	CAT-40	1.40	1.70	280.00
CAT-40-24MM-4	24MM	6.68	4.00	CAT-40	1.56	1.60	230.00
CAT-40-24MM-6	24MM	8.68	6.00	CAT-40	1.56	1.75	280.00
CAT-40-25MM-4	25MM	6.68	4.00	CAT-40	1.61	1.75	230.00
CAT-40-25MM-6	25MM	8.68	6.00	CAT-40	1.61	1.75	280.00
CAT-40-28MM-4	28MM	6.68	4.00	CAT-40	1.73	1.75	230.00
CAT-40-28MM-6	28MM	8.68	6.00	CAT-40	1.73	1.75	280.00
CAT-40-32MM-4	32MM	6.68	4.00	CAT-40	1.88	2.04	230.00
CAT-40-32MM-6	32MM	8.68	6.00	CAT-40	1.88	2.18	280.00

SEE PAGE 23 FOR RETENTION KNOBS

*Accepts Single End End Mill Only

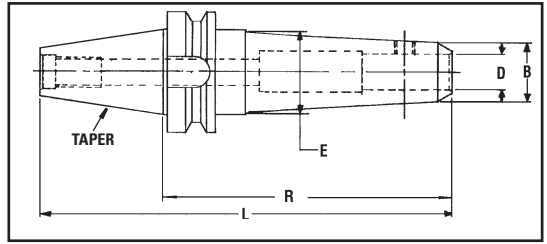
Replacement screws available on page 12



- Hardened
- Precision Ground
- American Made

*Available in Dual Contact

Precision Components BT-40 tooling is designed to give maximum rigidity at extended lengths with metric I.D.'s ranging from 3mm - 32mm.



BT-40 METRICS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
BT-40-3MM-4	3MM	6.58	4.00	BT-40	.39	.55	\$247.00
BT-40-3MM-6	3MM	8.58	6.00	BT-40	.39	.69	296.00
BT-40-4MM-4	4MM	6.58	4.00	BT-40	.41	.58	230.00
BT-40-4MM-6	4MM	8.58	6.00	BT-40	.41	.72	280.00
BT-40-5MM-4	5MM	6.58	4.00	BT-40	.45	.62	230.00
BT-40-5MM-6	5MM	8.58	6.00	BT-40	.45	.76	280.00
BT-40-6MM-4	6MM	6.58	4.00	BT-40	.49	.66	230.00
BT-40-6MM-6	6MM	8.58	6.00	BT-40	.49	.80	280.00
BT-40-7MM-4	7MM	6.58	4.00	BT-40	.53	.70	230.00
BT-40-7MM-6	7MM	8.58	6.00	BT-40	.53	.84	280.00
BT-40-8MM-4	8MM	6.58	4.00	BT-40	.57	.73	230.00
BT-40-8MM-6	8MM	8.58	6.00	BT-40	.57	.87	280.00
BT-40-9MM-4	9MM	6.58	4.00	BT-40	.73	.89	230.00
BT-40-9MM-6	9MM	8.58	6.00	BT-40	.73	1.03	280.00
BT-40-10MM-4	10MM	6.58	4.00	BT-40	.77	.93	230.00
BT-40-10MM-6	10MM	8.58	6.00	BT-40	.77	1.07	280.00
BT-40-11MM-4	11MM	6.58	4.00	BT-40	.81	.97	230.00
BT-40-11MM-6	11MM	8.58	6.00	BT-40	.81	1.11	280.00
BT-40-12MM-4	12MM	6.58	4.00	BT-40	.85	1.01	230.00
BT-40-12MM-6	12MM	8.58	6.00	BT-40	.85	1.15	280.00
BT-40-13MM-4	13MM	6.58	4.00	BT-40	.89	1.05	230.00
BT-40-13MM-6	13MM	8.58	6.00	BT-40	.89	1.19	280.00
* BT-40-14MM-4	14MM	6.58	4.00	BT-40	.93	1.09	230.00
* BT-40-14MM-6	14MM	8.58	6.00	BT-40	.93	1.23	280.00
BT-40-15MM-4	15MM	6.58	4.00	BT-40	1.03	1.18	230.00
BT-40-15MM-6	15MM	8.58	6.00	BT-40	1.03	1.32	280.00
BT-40-16MM-4	16MM	6.58	4.00	BT-40	1.07	1.21	230.00
BT-40-16MM-6	16MM	8.58	6.00	BT-40	1.07	1.35	280.00
BT-40-17MM-4	17MM	6.58	4.00	BT-40	1.11	1.25	230.00
BT-40-17MM-6	17MM	8.58	6.00	BT-40	1.11	1.39	280.00
BT-40-18MM-4	18MM	6.58	4.00	BT-40	1.15	1.30	230.00
BT-40-18MM-6	18MM	8.58	6.00	BT-40	1.15	1.44	280.00
BT-40-19MM-4	19MM	6.58	4.00	BT-40	1.19	1.34	230.00
BT-40-19MM-6	19MM	8.58	6.00	BT-40	1.19	1.48	280.00
BT-40-20MM-4	20MM	6.58	4.00	BT-40	1.23	1.38	230.00
BT-40-20MM-6	20MM	8.58	6.00	BT-40	1.23	1.52	280.00
BT-40-21MM-4	21MM	6.58	4.00	BT-40	1.27	1.42	230.00
BT-40-21MM-6	21MM	8.58	6.00	BT-40	1.27	1.56	280.00
BT-40-22MM-4	22MM	6.58	4.00	BT-40	1.31	1.45	230.00
BT-40-22MM-6	22MM	8.58	6.00	BT-40	1.31	1.59	280.00
BT-40-23MM-4	23MM	6.58	4.00	BT-40	1.40	1.55	230.00
BT-40-23MM-6	23MM	8.58	6.00	BT-40	1.40	1.69	280.00
BT-40-24MM-4	24MM	6.58	4.00	BT-40	1.56	1.75	230.00
BT-40-24MM-6	24MM	8.58	6.00	BT-40	1.56	1.85	280.00
BT-40-25MM-4	25MM	6.58	4.00	BT-40	1.61	1.76	230.00
BT-40-25MM-6	25MM	8.58	6.00	BT-40	1.61	1.90	280.00
BT-40-32MM-4	32MM	6.58	4.00	BT-40	1.88	2.03	230.00
BT-40-32MM-6	32MM	8.58	6.00	BT-40	1.88	2.17	280.00

SEE PAGE 23 FOR RETENTION KNOBS

*Accepts Single End End Mill Only

Replacement screws available on page 12



PRECISION COMPONENTS TOLL FREE 1-800-525-1373

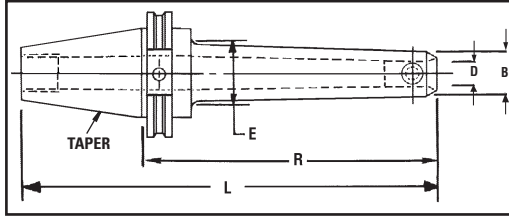
COOLANT THROUGH & MAHO KNOTCHES AVAILABLE UPON REQUEST



- Hardened
- Precision Ground
- American Made

*Available in
Dual Contact

Precision Components CAT-50 tooling is designed to give maximum rigidity at extended lengths with metric I.D.'s ranging from 3mm - 32mm.



CAT-50 METRICS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-50-3MM-6	3MM	10.00	6.00	CAT-50	.39	.69	\$438.00
CAT-50-3MM-9	3MM	13.00	9.00	CAT-50	.39	.90	503.00
CAT-50-4MM-6	4MM	10.00	6.00	CAT-50	.41	.73	422.00
CAT-50-4MM-9	4MM	13.00	9.00	CAT-50	.41	.94	486.00
CAT-50-5MM-6	5MM	10.00	6.00	CAT-50	.45	.77	422.00
CAT-50-5MM-9	5MM	13.00	9.00	CAT-50	.45	.98	486.00
CAT-50-6MM-6	6MM	10.00	6.00	CAT-50	.49	.81	422.00
CAT-50-6MM-9	6MM	13.00	9.00	CAT-50	.49	1.02	486.00
CAT-50-7MM-6	7MM	10.00	6.00	CAT-50	.53	.84	422.00
CAT-50-7MM-9	7MM	13.00	9.00	CAT-50	.53	1.05	486.00
CAT-50-8MM-6	8MM	10.00	6.00	CAT-50	.57	.89	422.00
CAT-50-8MM-9	8MM	13.00	9.00	CAT-50	.57	1.10	486.00
CAT-50-9MM-6	9MM	10.00	6.00	CAT-50	.73	1.04	422.00
CAT-50-9MM-9	9MM	13.00	9.00	CAT-50	.73	1.25	486.00
CAT-50-10MM-6	10MM	10.00	6.00	CAT-50	.77	1.08	422.00
CAT-50-10MM-9	10MM	13.00	9.00	CAT-50	.77	1.29	486.00
CAT-50-11MM-6	11MM	10.00	6.00	CAT-50	.81	1.12	422.00
CAT-50-11MM-9	11MM	13.00	9.00	CAT-50	.81	1.33	486.00
CAT-50-12MM-6	12MM	10.00	6.00	CAT-50	.85	1.16	422.00
CAT-50-12MM-9	12MM	13.00	9.00	CAT-50	.85	1.37	486.00
CAT-50-13MM-6	13MM	10.00	6.00	CAT-50	.89	1.20	422.00
CAT-50-13MM-9	13MM	13.00	9.00	CAT-50	.89	1.41	486.00
CAT-50-14MM-6	14MM	10.00	6.00	CAT-50	.93	1.23	422.00
CAT-50-14MM-9	14MM	13.00	9.00	CAT-50	.93	1.44	486.00
CAT-50-15MM-6	15MM	10.00	6.00	CAT-50	1.03	1.33	422.00
CAT-50-15MM-9	15MM	13.00	9.00	CAT-50	1.03	1.54	486.00
CAT-50-16MM-6	16MM	10.00	6.00	CAT-50	1.07	1.37	422.00
CAT-50-16MM-9	16MM	13.00	9.00	CAT-50	1.07	1.58	486.00
CAT-50-17MM-6	17MM	10.00	6.00	CAT-50	1.11	1.41	422.00
CAT-50-17MM-9	17MM	13.00	9.00	CAT-50	1.11	1.62	486.00
CAT-50-18MM-6	18MM	10.00	6.00	CAT-50	1.15	1.45	422.00
CAT-50-18MM-9	18MM	13.00	9.00	CAT-50	1.15	1.66	486.00
CAT-50-19MM-6	19MM	10.00	6.00	CAT-50	1.19	1.49	422.00
CAT-50-19MM-9	19MM	13.00	9.00	CAT-50	1.19	1.70	486.00
CAT-50-20MM-6	20MM	10.00	6.00	CAT-50	1.23	1.53	422.00
CAT-50-20MM-9	20MM	13.00	9.00	CAT-50	1.23	1.74	486.00
CAT-50-21MM-6	21MM	10.00	6.00	CAT-50	1.27	1.57	422.00
CAT-50-21MM-9	21MM	13.00	9.00	CAT-50	1.27	1.78	486.00
CAT-50-22MM-6	22MM	10.00	6.00	CAT-50	1.31	1.61	422.00
CAT-50-22MM-9	22MM	13.00	9.00	CAT-50	1.31	1.82	486.00
CAT-50-23MM-6	23MM	10.00	6.00	CAT-50	1.40	1.70	422.00
CAT-50-23MM-9	23MM	13.00	9.00	CAT-50	1.40	1.91	486.00
CAT-50-24MM-6	24MM	10.00	6.00	CAT-50	1.56	1.86	422.00
CAT-50-24MM-9	24MM	13.00	9.00	CAT-50	1.56	2.07	486.00
CAT-50-25MM-6	25MM	10.00	6.00	CAT-50	1.61	1.91	422.00
CAT-50-25MM-9	25MM	13.00	9.00	CAT-50	1.61	2.12	486.00
CAT-50-28MM-6	28MM	10.00	6.00	CAT-50	1.73	2.02	422.00
CAT-50-28MM-9	28MM	13.00	9.00	CAT-50	1.73	2.23	486.00
CAT-50-32MM-6	32MM	10.00	6.00	CAT-50	1.88	2.18	422.00
CAT-50-32MM-9	32MM	13.00	9.00	CAT-50	1.88	2.39	486.00

SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on page 12

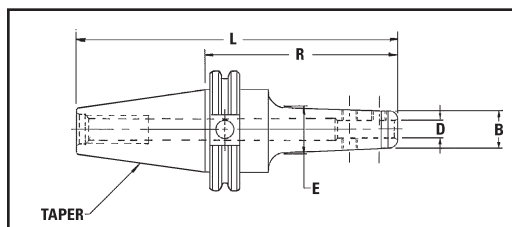
PC PRECISION COMPONENTS TOLL FREE 1-800-525-1373

COOLANT THROUGH DINS & MAHO KNOTCHES AVAILABLE UPON REQUEST



- Hardened
- Precision Ground
- American Made

Precision Components' Metric Din Shank Tap Drivers eliminate the bushings and collets associated with most systems while providing maximum rigidity. It holds European style metric din shank taps. The slim design allows hard to reach areas to be tapped with minimum interference. NOTE: Your machining center must have a synchronized tapping control.



CAT-40 METRIC DIN SHANK TAP DRIVERS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-40-M2-M2.5TD-4	.110	6.68	4.00	CAT-40	.49	.67	\$247.00
CAT-40-M2-M2.5TD-6	.110	8.68	6.00	CAT-40	.49	.81	278.00
CAT-40-M3TD-4	.137	6.68	4.00	CAT-40	.51	.69	247.00
CAT-40-M3TD-6	.137	8.68	6.00	CAT-40	.51	.83	278.00
CAT-40-M3.5TD-4	.157	6.68	4.00	CAT-40	.54	.72	230.00
CAT-40-M3.5TD-6	.157	8.68	6.00	CAT-40	.54	.86	262.00
CAT-40-M4TD-4	.177	6.68	4.00	CAT-40	.56	.74	230.00
CAT-40-M4TD-6	.177	8.68	6.00	CAT-40	.56	.88	262.00
CAT-40-M4.5-M6TD-4	.236	6.68	4.00	CAT-40	.62	.80	230.00
CAT-40-M4.5-M6TD-6	.236	8.68	6.00	CAT-40	.62	.94	262.00
CAT-40-M8TD-4	.315	6.68	4.00	CAT-40	.74	.91	230.00
CAT-40-M8TD-6	.315	8.68	6.00	CAT-40	.74	1.05	262.00
CAT-40-M10TD-4S	.275	6.68	4.00	CAT-40	.70	.88	230.00
CAT-40-M10TD-6S	.275	8.68	6.00	CAT-40	.70	1.01	262.00
CAT-40-M10TD-4L	.393	6.68	4.00	CAT-40	.81	.99	230.00
CAT-40-M10TD-6L	.393	8.68	6.00	CAT-40	.81	1.12	262.00
CAT-40-M12TD-4	.354	6.68	4.00	CAT-40	.78	.95	230.00
CAT-40-M12TD-6	.354	8.68	6.00	CAT-40	.78	1.09	262.00
CAT-40-M14TD-4	.433	6.68	4.00	CAT-40	.94	1.11	230.00
CAT-40-M14TD-6	.433	8.68	6.00	CAT-40	.94	1.25	262.00
CAT-40-M16TD-4	.472	6.68	4.00	CAT-40	.98	1.15	230.00
CAT-40-M16TD-6	.472	8.68	6.00	CAT-40	.98	1.29	262.00
CAT-40-M18TD-4	.551	6.68	4.00	CAT-40	1.06	1.23	230.00
CAT-40-M18TD-6	.551	8.68	6.00	CAT-40	1.06	1.37	262.00
CAT-40-M20TD-4	.630	6.68	4.00	CAT-40	1.14	1.31	230.00
CAT-40-M20TD-6	.630	8.68	6.00	CAT-40	1.14	1.45	262.00
CAT-40-M22-M24TD-4	.708	6.68	4.00	CAT-40	1.33	1.50	230.00
CAT-40-M22-M24TD-6	.708	8.68	6.00	CAT-40	1.33	1.64	262.00
CAT-40-M27TD-4	.787	6.68	4.00	CAT-40	1.54	1.70	230.00
CAT-40-M27TD-6	.787	8.68	6.00	CAT-40	1.54	1.84	262.00
CAT-40-M30TD-4	.866	6.68	4.00	CAT-40	1.62	1.75	230.00
CAT-40-M30TD-6	.866	8.68	6.00	CAT-40	1.62	1.92	262.00

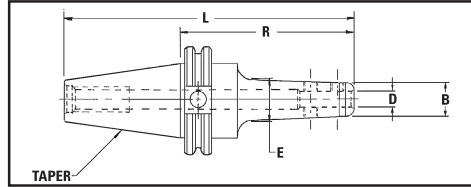
SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on page 12

COOLANT THROUGH DINs & MAHO KNOTCHES AVAILABLE UPON REQUEST

Precision Components' Metric Din shank Tap Drivers eliminate the bushings and collets associated with most systems while providing maximum rigidity. It holds European style metric din shank taps. The slim design allows hard to reach areas to be tapped with minimum interference. NOTE: Your machining center must have a synchronized tapping control.



- Hardened
- Precision Ground
- American Made



CAT-50 METRIC DIN SHANK TAP DRIVERS

CATALOG NUMBER	D	L	R	TAPER	B	E	LIST PRICE
CAT-50-M2-M2.5TD-6	.110	10.00	6.00	CAT-50	.49	.81	\$438.00
CAT-50-M2-M2.5TD-9	.110	13.00	9.00	CAT-50	.49	1.02	503.00
CAT-50-M3TD-6	.137	10.00	6.00	CAT-50	.51	.83	438.00
CAT-50-M3TD-9	.137	13.00	9.00	CAT-50	.51	1.04	503.00
CAT-50-M3.5TD-6	.157	10.00	6.00	CAT-50	.54	.86	422.00
CAT-50-M3.5TD-9	.157	13.00	9.00	CAT-50	.54	1.07	486.00
CAT-50-M4TD-6	.177	10.00	6.00	CAT-50	.56	.88	422.00
CAT-50-M4TD-9	.177	13.00	9.00	CAT-50	.56	1.09	486.00
CAT-50-M4.5TD-M6TD-6	.236	10.00	6.00	CAT-50	.62	.94	422.00
CAT-50-M4.5TD-M6TD-9	.236	13.00	9.00	CAT-50	.62	1.15	486.00
CAT-50-M8TD-6	.315	10.00	6.00	CAT-50	.74	1.05	422.00
CAT-50-M8TD-9	.315	13.00	9.00	CAT-50	.74	1.26	486.00
CAT-50-M10TD-6S	.275	10.00	6.00	CAT-50	.70	1.01	422.00
CAT-50-M10TD-9S	.275	13.00	9.00	CAT-50	.70	1.22	486.00
CAT-50-M10TD-6L	.393	10.00	6.00	CAT-50	.81	1.12	422.00
CAT-50-M10TD-9L	.393	13.00	9.00	CAT-50	.81	1.33	486.00
CAT-50-M12TD-6	.354	10.00	6.00	CAT-50	.78	1.09	422.00
CAT-50-M12TD-9	.354	13.00	9.00	CAT-50	.78	1.30	486.00
CAT-50-M14TD-6	.433	10.00	6.00	CAT-50	.94	1.25	422.00
CAT-50-M14TD-9	.433	13.00	9.00	CAT-50	.94	1.46	486.00
CAT-50-M16TD-6	.472	10.00	6.00	CAT-50	.98	1.29	422.00
CAT-50-M16TD-9	.472	13.00	9.00	CAT-50	.98	1.50	486.00
CAT-50-M18TD-6	.551	10.00	6.00	CAT-50	1.06	1.37	422.00
CAT-50-M18TD-9	.551	13.00	9.00	CAT-50	1.06	1.58	486.00
CAT-50-M20TD-6	.630	10.00	6.00	CAT-50	1.14	1.45	422.00
CAT-50-M20TD-9	.630	13.00	9.00	CAT-50	1.14	1.66	486.00
CAT-50-M22-M24TD-6	.708	10.00	6.00	CAT-50	1.33	1.64	422.00
CAT-50-M22-M24TD-9	.708	13.00	9.00	CAT-50	1.33	1.85	486.00
CAT-50-M27TD-6	.787	10.00	6.00	CAT-50	1.54	1.84	422.00
CAT-50-M27TD-9	.787	13.00	9.00	CAT-50	1.54	2.05	486.00
CAT-50-M30TD-6	.866	10.00	6.00	CAT-50	1.62	1.92	422.00
CAT-50-M30TD-9	.866	13.00	9.00	CAT-50	1.62	2.13	486.00
CAT-50-M33-TD-6	.984	10.00	6.00	CAT-50	1.98	2.27	422.00
CAT-50-M33TD-9	.984	13.00	9.00	CAT-50	1.98	2.48	486.00
CAT-50-M36TD-6	1.102	10.00	6.00	CAT-50	2.11	2.40	422.00
CAT-50-M36TD-9	1.102	13.00	9.00	CAT-50	2.11	2.61	486.00
CAT-50-M42TD-6	1.259	10.00	6.00	CAT-50	2.26	2.55	422.00
CAT-50-M42TD-9	1.259	13.00	9.00	CAT-50	2.26	2.75	486.00
CAT-50-M45-M48TD-6	1.417	10.00	6.00	CAT-50	2.45	2.75	422.00
CAT-50-M45-M48TD-9	1.417	13.00	9.00	CAT-50	2.45	2.94	486.00
CAT-50-M52TD-6	1.574	10.00	6.00	CAT-50	2.61	2.89	422.00
CAT-50-M52TD-9	1.574	13.00	9.00	CAT-50	2.61	3.11	486.00

SEE PAGE 23 FOR RETENTION KNOBS
Replacement screws available on page 12

PRECISION COMPONENTS TOLL FREE 1-800-525-1373

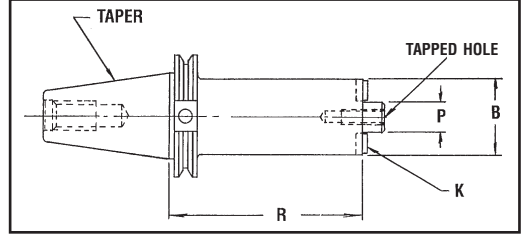


Precision Components METRIC Face Mill / Shell Mill Extensions allow milling of hard to reach areas while maintaining rigidity at extended lengths. 4" thru 12" reach available.

***Available in Dual Contact**

- Hardened
- Precision Ground
- American Made

INCLUDES KEYS



METRIC FACE MILL / SHELL MILL EXTENSIONS

CATALOG NUMBER	P	K	TAPPED HOLE	R	TAPER	B	LIST PRICE
CAT-40-16MMFMX-4	16MM	8MM	5/16-24	4.00	CAT-40	34MM	\$274.00
CAT-40-16MMFMX-6	16MM	8MM	5/16-24	6.00	CAT-40	34MM	\$323.00
CAT-40-16MMFMX-9	16MM	8MM	5/16-24	9.00	CAT-40	34MM	\$361.00
CAT-40-22MMFMX-4	22MM	10MM	3/8-24	4.00	CAT-40	44MM	\$274.00
CAT-40-22MMFMX-6	22MM	10MM	3/8-24	6.00	CAT-40	44MM	\$323.00
CAT-40-22MMFMX-9	22MM	10MM	3/8-24	9.00	CAT-40	44MM	\$361.00
CAT-40-27MMFMX-4	27MM	12MM	1/2-20	4.00	CAT-40	53MM	\$274.00
CAT-40-27MMFMX-6	27MM	12MM	1/2-20	6.00	CAT-40	53MM	\$323.00
CAT-40-27MMFMX-9	27MM	12MM	1/2-20	9.00	CAT-40	53MM	\$361.00
BT-40-16MMFMX-4	16MM	8MM	5/16-24	4.00	BT-40	34MM	\$274.00
BT-40-16MMFMX-6	16MM	8MM	5/16-24	6.00	BT-40	34MM	\$323.00
BT-40-16MMFMX-9	16MM	8MM	5/16-24	9.00	BT-40	34MM	\$361.00
BT-40-22MMFMX-4	22MM	10MM	3/8-24	4.00	BT-40	44MM	\$274.00
BT-40-22MMFMX-6	22MM	10MM	3/8-24	6.00	BT-40	44MM	\$323.00
BT-40-22MMFMX-9	22MM	10MM	3/8-24	9.00	BT-40	44MM	\$361.00
BT-40-27MMFMX-4	27MM	12MM	1/2-20	4.00	BT-40	53MM	\$274.00
BT-40-27MMFMX-6	27MM	12MM	1/2-20	6.00	BT-40	53MM	\$323.00
BT-40-27MMFMX-9	27MM	12MM	1/2-20	9.00	BT-40	53MM	\$361.00
CAT-50-16MMFMX-4	16MM	8MM	5/16-24	4.00	CAT-50	34MM	\$460.00
CAT-50-16MMFMX-6	16MM	8MM	5/16-24	6.00	CAT-50	34MM	\$473.00
CAT-50-16MMFMX-9	16MM	8MM	5/16-24	9.00	CAT-50	34MM	\$499.00
CAT-50-16MMFMX-12	16MM	8MM	5/16-24	12.00	CAT-50	34MM	\$512.00
CAT-50-22MMFMX-4	22MM	10MM	3/8-24	4.00	CAT-50	44MM	\$460.00
CAT-50-22MMFMX-6	22MM	10MM	3/8-24	6.00	CAT-50	44MM	\$473.00
CAT-50-22MMFMX-9	22MM	10MM	3/8-24	9.00	CAT-50	44MM	\$499.00
CAT-50-22MMFMX-12	22MM	10MM	3/8-24	12.00	CAT-50	44MM	\$512.00
CAT-50-27MMFMX-5	27MM	12MM	1/2-20	5.00	CAT-50	53MM	\$467.00
CAT-50-27MMFMX-7	27MM	12MM	1/2-20	7.00	CAT-50	53MM	\$480.00
CAT-50-27MMFMX-10	27MM	12MM	1/2-20	10.00	CAT-50	53MM	\$506.00
CAT-50-27MMFMX-12	27MM	12MM	1/2-20	12.00	CAT-50	53MM	\$512.00
BT-50-16MMFMX-4	16MM	8MM	5/16-24	4.00	BT-50	34MM	\$460.00
BT-50-16MMFMX-6	16MM	8MM	5/16-24	6.00	BT-50	34MM	\$473.00
BT-50-16MMFMX-9	16MM	8MM	5/16-24	9.00	BT-50	34MM	\$499.00
BT-50-22MMFMX-4	22MM	10MM	3/8-24	4.00	BT-50	44MM	\$460.00
BT-50-22MMFMX-6	22MM	10MM	3/8-24	6.00	BT-50	44MM	\$473.00
BT-50-22MMFMX-9	22MM	10MM	3/8-24	9.00	BT-50	44MM	\$499.00
BT-50-27MMFMX-5	27MM	12MM	1/2-20	5.00	BT-50	53MM	\$467.00
BT-50-27MMFMX-7	27MM	12MM	1/2-20	7.00	BT-50	53MM	\$480.00
BT-50-27MMFMX-10	27MM	12MM	1/2-20	10.00	BT-50	53MM	\$506.00
BT-50-27MMFMX-12	27MM	12MM	1/2-20	12.00	BT-50	53MM	\$512.00
NMTB-50-16MMFMX-4	16MM	8MM	5/16-24	4.00	NMTB-50	34MM	\$460.00
NMTB-50-16MMFMX-6	16MM	8MM	5/16-24	6.00	NMTB-50	34MM	\$473.00
NMTB-50-16MMFMX-9	16MM	8MM	5/16-24	9.00	NMTB-50	34MM	\$499.00
NMTB-50-22MMFMX-4	22MM	10MM	3/8-24	4.00	NMTB-50	44MM	\$460.00
NMTB-50-22MMFMX-6	22MM	10MM	3/8-24	6.00	NMTB-50	44MM	\$473.00
NMTB-50-22MMFMX-9	22MM	10MM	3/8-24	9.00	NMTB-50	44MM	\$499.00
NMTB-50-27MMFMX-5	27MM	12MM	1/2-20	5.00	NMTB-50	53MM	\$467.00
NMTB-50-27MMFMX-7	27MM	12MM	1/2-20	7.00	NMTB-50	53MM	\$480.00
NMTB-50-27MMFMX-10	27MM	12MM	1/2-20	10.00	NMTB-50	53MM	\$506.00

SEE PAGE 11 FOR REPLACEMENT KEY
Replacement screws available on page 12

Precision Components cutter heads are used on Precision Components Flange Mount CHX tool holders, on page 19, 20 & 21, and tapered Cutter Head Extensions on page 21 - available in (5) styles.

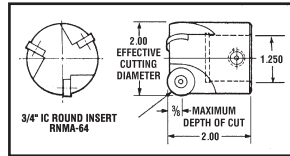
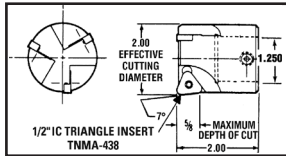
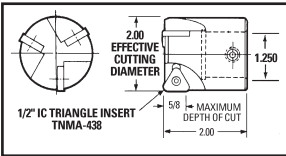


- Hardened
- Precision Ground
- American Made

0° LEAD 2" DIAMETER (P.C. 200-T)

7° BACK DRAFT 2" DIAMETER (P.C. 207-T)

2" DIAMETER (P.C. 222-R)

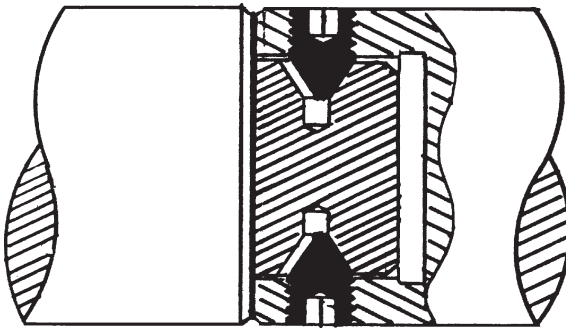


CUTTER HEADS

CATALOG NUMBER	DESCRIPTION	SIZE	USES CARBIDE INSERT	LIST PRICE
P.C. 207-T	7° Back Draft	2.00	TNMA-438	\$211.00
P.C. 200-T	0° Back Draft	2.00	TNMA-438	211.00
P.C. 222-R	Round Button Cutter	2.00	RNMA-64	211.00
PCR-4	Clamp Screw		RNMA-64	3.90
PCT-5	Clamp Screw		TNMA-438	3.90
RNMA-64B	Button Cutter Insert		RNMA-64B T-14	P.O.R.
TNMA-438B	Triangle Cutter Inserts		TNMA-438 T-14	P.O.R.
HT-3824	Tapered Hi-Tork™ Set Scw.		For use w/ all cutter heads	3.90

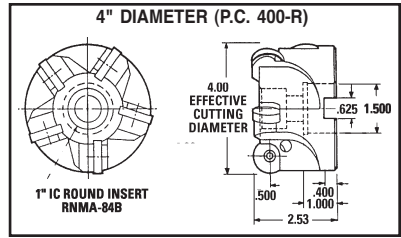
HI-TORK™ LOCKING SYSTEM

Precision Components' Hi-Tork™ cutter head locking system was designed to provide mold and die makers with a rigid replacable cutter head holder. The system utilizes two symmetrically opposed tapered set screws that fasten into two offset dimpled ports. The force delivered by these set screws simultaneously draws and aligns the cutter head onto the 1.250" ground male pilot.





- Hardened
- Precision Ground
- American Made



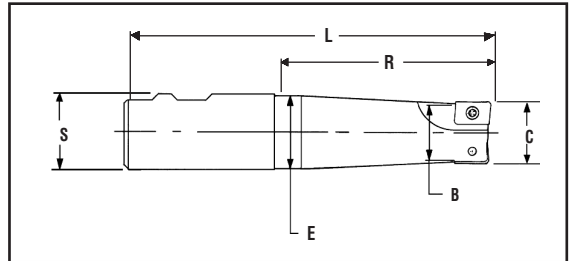
CUTTER HEADS

CATALOG NUMBER	DESCRIPTION	SIZE	USES CARBIDE INSERT	LIST PRICE
P.C. 400-R	0° Back Draft	4"	RNMA-84B	\$503.00
PCR-8	Clamp Screw		RNMA-84	5.85
RNMA-84B	Button Cutter Insert		RNMA-84-T-14	P.O.R.

Similar in style to the LRBD End Mills, the LRHH takes a thicker and stronger insert. This new insert with its High Helix Design will maximize metal removal with minimum deflection. NOTE: Inserts are available from Precision Components in a variety of grades and tool nose radii.



- Hardened
- Precision Ground
- American Made



ADKT 1505 CUTTER HEAD INSERTS

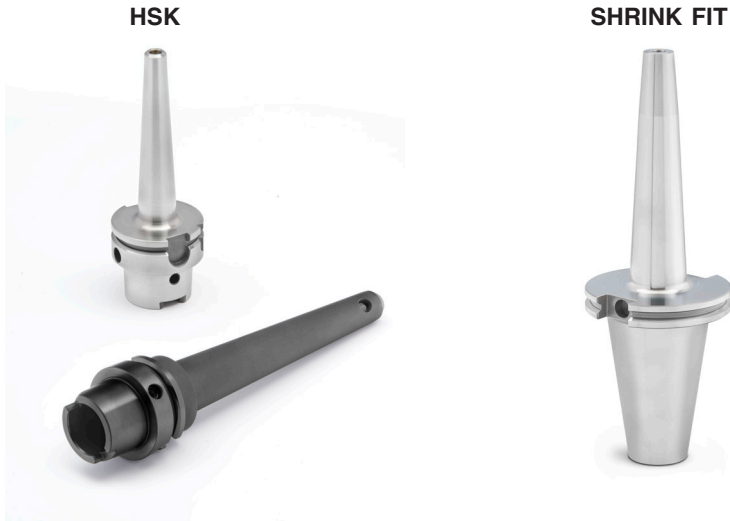
CATALOG NUMBER	SIZE	LIST PRICE
ADKT 1505 16R	1/16" Radius	P.O.R.
ADKT 1505 32R	1/8" Radius	P.O.R.
ADKT 1505 PDR	1/32" Radius	P.O.R.

LONG REACH HIGH HELIX CUTTERS • CLOSE OUT ITEM •

CATALOG NUMBER	C	L	R	S	B	E	LIST PRICE
LRHH-31-3.5-S	1.00	6.00	3.50	1.250	.96	.96	\$185.00
LRHH-31-3.5-T	1.00	6.00	3.50	1.250	.96	1.24	185.00
LRHH-31-5.5-S	1.00	8.00	5.50	1.250	.96	.96	210.00
LRHH-31-5.5-T	1.00	8.00	5.50	1.250	.96	1.24	210.00
LRHH-31-7.5-T	1.00	10.00	7.50	1.250	.96	1.24	250.00
LRHH-32-3.5-S	1.25	6.00	3.50	1.250	1.21	1.21	210.00
LRHH-32-5.5-S	1.25	8.00	5.50	1.250	1.21	1.21	240.00

P.C.-832 Torque Screw \$3.90 ea.

HSK- SHRINK FIT



Precision Components manufactures HSK and Shrink Fit holders in extended lengths only. Precision Components does not make standard tooling. When in need of a special HSK or Shrink Fit holder you can call us at 800.525.1373 or email us at sales@pctooling.com for a quote.

Precision Components has always been the leader in special, extended length tooling. Hundreds of extended length holders that are not found in our catalog are in process every month. We refer to these holders as "special" specials. When we are processing these parts we make extras in most cases.

If you are in need of a special, call the 800 number or email us, it may be in our stock overrun.

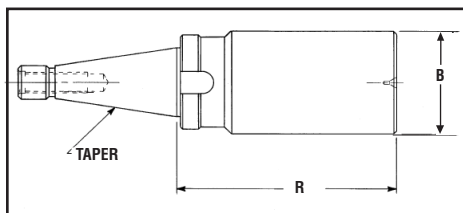


CAT-40/CAT-50

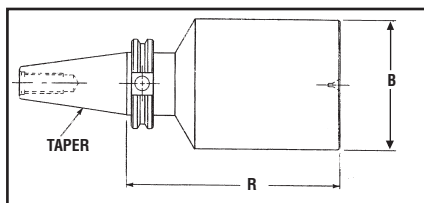
BT-40/BT-50

PRECISION COMPONENTS is proud to offer a complete line of blank tool holders.

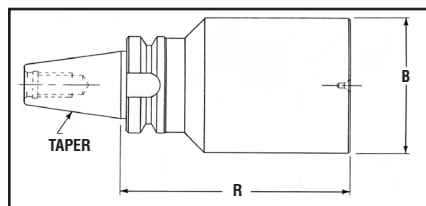
- 6150 Material
- Taper Hardened to R/C 58-62
- Soft Body
- 100% Guaranteed
- American Made



NMTB-30/NMTB-50



CAT-30/CAT-40/CAT-50



BT-30/BT-40/BT-50

BLANKS

CATALOG NUMBER	B	R	LIST PRICE
CAT-30-2-8 (BLANK)	2"	8"	\$219.00
CAT-30-2-12 (BLANK)	2"	12"	230.00
BT-30-2-8 (BLANK)	2"	8"	219.00
BT-30-2-12 (BLANK)	2"	12"	230.00
CAT-40-3-8 (BLANK)	3"	8"	249.00
CAT-40-3-12 (BLANK)	3"	12"	268.00
CAT-40-4-8 (BLANK)	4"	8"	298.00
BT-40-3-8 (BLANK)	3"	8"	249.00
BT-40-3-12 (BLANK)	3"	12"	268.00
BT-40-4-8 (BLANK)	4"	8"	298.00
BT-50-4-8 (BLANK)	4"	8"	286.00
BT-50-4-12 (BLANK)	4"	12"	308.00
BT-50-5-8 (BLANK)	5"	8"	597.00
BT-50-6-8 (BLANK)	6"	8"	713.00
CAT-50-4-8 (BLANK)	4"	8"	286.00
CAT-50-4-12 (BLANK)	4"	12"	308.00
CAT-50-5-8 (BLANK)	5"	8"	597.00
CAT-50-6-8 (BLANK)	6"	8"	713.00
NMTB-30-2-8 (BLANK)	2"	8"	219.00
NMTB-30-2-12 (BLANK)	2"	12"	230.00
NMTB-50-4-8 (BLANK)	4"	8"	344.00
NMTB-50-4-12 (BLANK)	4"	12"	376.00

For all your standard tooling needs call **1-800-478-2304** for a free catalog or you can talk with an experienced sales person at **BASIC LINE**. Thru our shared data base there is no need to set up a new account with **BASIC LINE**. If you are a customer in good standings with Precision Components you are automatically on open account.



BASIC LINE →



**SUPER PRECISION TOOL HOLDERS
MADE IN THE U.S.A.**

**For Information or Free Catalog
Call Toll Free 1-800-478-2304**

At Precision Components, we are committed to producing the highest quality machine tools, anywhere. This commitment is demonstrated not only by the quality of our products and personal service, but also by our dedication to developing new products that allow our customers to take advantage of today's advancing technologies. At Precision Components your satisfaction is our #1 priority. That is why all of our products are manufactured to the highest quality standards and backed by our full 100% money back guarantee if not completely satisfied.

Sincerely,



Bobbie Fitzpatrick, C.E.O.

Manufactured By:



PRECISION COMPONENTS

324 Robbins

Troy, Michigan 48083

(248) 588-5650 FAX (248) 589-9211

Website: www.pctooling.com

Email: sales@pctooling.com

CALL TOLL FREE 1-800-525-1373

Distributed By:

