

ROTARY TOOL HOLDERS

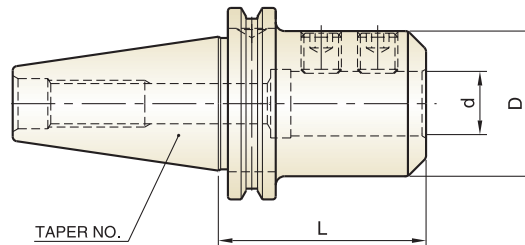
END MILL HOLDERS - CAT, BT
HIGH BALANCED END MILL HOLDERS - CAT, BT
ER COLLET CHUCKS - CAT, BT
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ER NUTS, ER WRENCHES, ER STOP SCREWS
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TG NUTS, TG WRENCHES, TG STOP SCREWS
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MILLING CHUCK COLLETS, MILLING CHUCK WRENCHES
MORSE TAPER ADAPTERS - CAT / BT
TAPPING CHUCKS - CAT, BT
POSITIVE QUICK CHANGE TAP ADAPTERS
SHELL MILL ARBORS - CAT, BT
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STUB ARBORS - CAT / BT
STUB ARBOR NUTS, KEYS, SPACERS - CAT / BT
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PULL STUD
TOOL CLAMP, END MILL HOLDER SCREWS

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END MILL HOLDER

CAT



■ STUB

EDP NO	TYPE	TAPER No.	d	L	D
AK206	CAT40-EMH1/2-1.75	40	0.500	1.75	1.25
AK208	CAT40-EMH5/8-1.75	40	0.625	1.75	1.50
AK210	CAT40-EMH3/4-1.75	40	0.750	1.75	1.75
AK214	CAT40-EMH1 -1.75	40	1.000	1.75	1.75
AK217	CAT40-EMH1 1/4-2.00	40	1.250	2.00	2.25

■ STANDARD

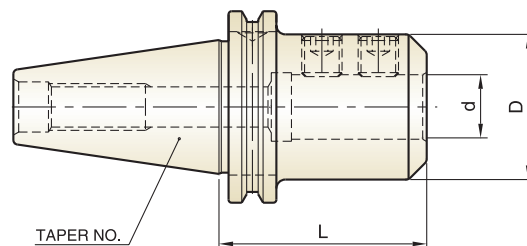
EDP NO	TYPE	TAPER No.	d	L	D
AK000	CAT40-EMH1/8-2.50	40	0.125	2.50	0.69
AK001	CAT40-EMH3/16-2.50	40	0.187	2.50	0.69
AK002	CAT40-EMH1/4-2.50	40	0.250	2.50	0.78
AK003	CAT40-EMH5/16-2.50	40	0.312	2.50	0.88
AK004	CAT40-EMH3/8-2.50	40	0.375	2.50	1.00
AK005	CAT40-EMH7/16-2.50	40	0.437	2.50	1.13
AK006	CAT40-EMH1/2-2.63	40	0.500	2.63	1.25
AK008	CAT40-EMH5/8-3.75	40	0.625	3.75	1.50
AK010	CAT40-EMH3/4-3.75	40	0.750	3.75	1.75
AK012	CAT40-EMH7/8-4.00	40	0.875	4.00	1.88
AK014	CAT40-EMH1 -4.00	40	1.000	4.00	2.00
AK017	CAT40-EMH1 1/4-4.25	40	1.250	4.25	2.50
AK021	CAT40-EMH1 1/2-4.63	40	1.500	4.63	2.50
AL002	CAT50-EMH1/4-2.50	50	0.250	2.50	0.78
AL003	CAT50-EMH5/16-2.50	50	0.312	2.50	0.88
AL004	CAT50-EMH3/8-2.50	50	0.375	2.50	1.00
AL005	CAT50-EMH7/16-2.63	50	0.437	2.63	1.13
AL006	CAT50-EMH1/2-2.63	50	0.500	2.63	1.25
AL008	CAT50-EMH5/8-3.75	50	0.625	3.75	1.50
AL010	CAT50-EMH3/4-3.75	50	0.750	3.75	1.75
AL012	CAT50-EMH7/8-3.75	50	0.875	3.75	1.88
AL014	CAT50-EMH1 -4.00	50	1.000	4.00	2.00
AL017	CAT50-EMH1 1/4-4.00	50	1.250	4.00	2.50
AL021	CAT50-EMH1 1/2-4.00	50	1.500	4.00	2.50
AL029	CAT50-EMH2 -5.63	50	2.000	5.63	3.75

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ SET SCREWS FOR END MILL HOLDERS ON PAGE 830



END MILL HOLDER

CAT



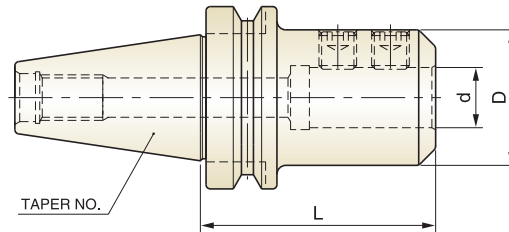
■ EXTENDED

EDP No.	Type	TAPER No.	d	L	D
AK104	CAT40-EMH3/8-4.50	40	0.375	4.50	1.00
AK106	CAT40-EMH1/2-4.63	40	0.500	4.63	1.25
AK108	CAT40-EMH5/8-5.75	40	0.625	5.75	1.50
AK110	CAT40-EMH3/4-5.75	40	0.750	5.75	1.75
AK112	CAT40-EMH7/8-6.00	40	0.875	6.00	1.88
AK114	CAT40-EMH1 -6.00	40	1.000	6.00	2.00
AK117	CAT40-EMH1 1/4-6.25	40	1.250	6.25	2.50
AK121	CAT40-EMH1 1/2-6.63	40	1.500	6.63	2.50
AL104	CAT50-EMH3/8-4.50	50	0.375	4.50	1.00
AL106	CAT50-EMH1/2-4.63	50	0.500	4.63	1.25
AL108	CAT50-EMH5/8-5.75	50	0.625	5.75	1.50
AL110	CAT50-EMH3/4-5.75	50	0.750	5.75	1.75
AL112	CAT50-EMH7/8-5.75	50	0.875	5.75	1.88
AL114	CAT50-EMH1 -6.00	50	1.000	6.00	2.00
AL117	CAT50-EMH1 1/4-6.00	50	1.250	6.00	2.50
AL121	CAT50-EMH1 1/2-6.00	50	1.500	6.00	2.50
AL129	CAT50-EMH2 -7.63	50	2.000	7.63	3.75

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END MILL HOLDER

BT



■ STUB

EDP No.	Type	TAPER No.	d	L	D
AH206	BT40 - EMH 1/2 - 1.25	40	0.500	1.25	1.25
AH208	BT40 - EMH 5/8 - 1.38	40	0.625	1.38	1.50
AH210	BT40 - EMH 3/4 - 1.44	40	0.750	1.44	1.75
AH214	BT40 - EMH 1 - 2.50	40	1.000	2.50	2.00
AH217	BT40 - EMH 1 1/4 - 2.50	40	1.250	2.50	2.50

■ STANDARD

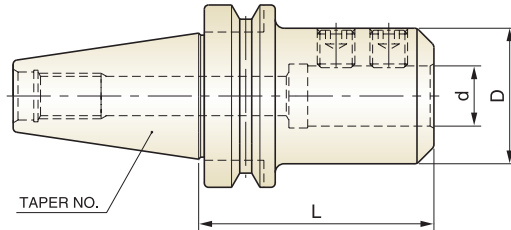
EDP No.	Type	TAPER No.	d	L	D
AH000	BT40 - EMH 1/8 - 2.50	40	0.125	2.50	0.69
AH001	BT40 - EMH 3/16 - 2.50	40	0.187	2.50	0.69
AH002	BT40 - EMH 1/4 - 2.50	40	0.250	2.50	0.78
AH003	BT40 - EMH 5/16 - 2.50	40	0.312	2.50	0.88
AH004	BT40 - EMH 3/8 - 2.50	40	0.375	2.50	1.00
AH005	BT40 - EMH 7/16 - 2.50	40	0.437	2.50	1.13
AH006	BT40 - EMH 1/2 - 2.50	40	0.500	2.50	1.25
AH008	BT40 - EMH 5/8 - 2.50	40	0.625	2.50	1.50
AH010	BT40 - EMH 3/4 - 2.50	40	0.750	2.50	1.75
AH012	BT40 - EMH 7/8 - 3.50	40	0.875	3.50	1.88
AH014	BT40 - EMH 1 - 3.75	40	1.000	3.75	2.00
AH017	BT40 - EMH 1 1/4 - 3.75	40	1.250	3.75	2.50
AH021	BT40 - EMH 1 1/2 - 4.25	40	1.500	4.25	2.50
AI002	BT50 - EMH 1/4 - 3.00	50	0.250	3.00	0.78
AI004	BT50 - EMH 3/8 - 3.00	50	0.375	3.00	1.00
AI006	BT50 - EMH 1/2 - 3.00	50	0.500	3.00	1.25
AI008	BT50 - EMH 5/8 - 3.00	50	0.625	3.00	1.50
AI010	BT50 - EMH 3/4 - 3.00	50	0.750	3.00	1.75
AI012	BT50 - EMH 7/8 - 4.00	50	0.875	4.00	1.88
AI014	BT50 - EMH 1 - 4.25	50	1.000	4.25	2.00
AI017	BT50 - EMH 1 1/4 - 4.25	50	1.250	4.25	2.50
AI021	BT50 - EMH 1 1/2 - 4.25	50	1.500	4.25	2.50
AI029	BT50 - EMH 2 - 5.00	50	2.000	5.00	3.75

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ SET SCREWS FOR END MILL HOLDERS ON PAGE 830



END MILL HOLDER

BT

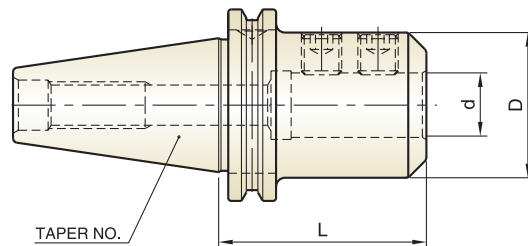


■ EXTENDED

EDP No.	Type	TAPER No.	d	L	D
AH104	BT40 - EMH 3/8 - 4.00	40	0.375	4.00	1.00
AH106	BT40 - EMH 1/2 - 4.00	40	0.500	4.00	1.25
AH108	BT40 - EMH 5/8 - 4.00	40	0.625	4.00	1.50
AH110	BT40 - EMH 3/4 - 4.00	40	0.750	4.00	1.75
AH114	BT40 - EMH 1 - 5.00	40	1.000	5.00	2.00
AH117	BT40 - EMH 1 1/4 - 5.00	40	1.250	5.00	2.50
AH121	BT40 - EMH 1 1/2 - 6.00	40	1.500	6.00	2.50
AI104	BT50 - EMH 3/8 - 6.00	50	0.375	6.00	1.00
AI106	BT50 - EMH 1/2 - 6.00	50	0.500	6.00	1.25
AI108	BT50 - EMH 5/8 - 6.00	50	0.625	6.00	1.50
AI110	BT50 - EMH 3/4 - 6.00	50	0.750	6.00	1.75
AI112	BT50 - EMH 7/8 - 6.00	50	0.875	6.00	1.88
AI114	BT50 - EMH 1 - 6.00	50	1.000	6.00	2.00
AI117	BT50 - EMH 1 1/4 - 6.00	50	1.250	6.00	2.50
AI121	BT50 - EMH 1 1/2 - 6.00	50	1.500	6.00	2.50
AI129	BT50 - EMH 2 - 6.00	50	2.000	6.00	3.75

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
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HIGH BALANCED END MILL HOLDER

CAT

STUB

EDP No.	Type	TAPER No.	d	L	D
AK206B25	CAT40 - EMH 1/2 - 1.75	40	0.500	1.75	1.25
AK208B25	CAT40 - EMH 5/8 - 1.75	40	0.625	1.75	1.50
AK210B25	CAT40 - EMH 3/4 - 1.75	40	0.750	1.75	1.75
AK214B25	CAT40 - EMH 1 - 1.75	40	1.000	1.75	1.75
AK217B25	CAT40 - EMH 1 1/4 - 2.00	40	1.250	2.00	2.25

STANDARD

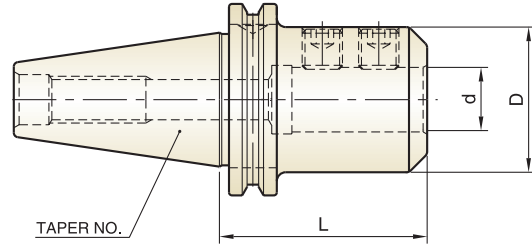
EDP No.	Type	TAPER No.	d	L	D
AK000B25	CAT40 - EMH 1/8 - 2.50	40	0.125	2.50	0.69
AK001B25	CAT40 - EMH 3/16 - 2.50	40	0.187	2.50	0.69
AK002B25	CAT40 - EMH 1/4 - 2.50	40	0.250	2.50	0.78
AK003B25	CAT40 - EMH 5/16 - 2.50	40	0.312	2.50	0.88
AK004B25	CAT40 - EMH 3/8 - 2.50	40	0.375	2.50	1.00
AK005B25	CAT40 - EMH 7/16 - 2.50	40	0.437	2.50	1.13
AK006B25	CAT40 - EMH 1/2 - 2.63	40	0.500	2.63	1.25
AK008B25	CAT40 - EMH 5/8 - 3.75	40	0.625	3.75	1.50
AK010B25	CAT40 - EMH 3/4 - 3.75	40	0.750	3.75	1.75
AK012B25	CAT40 - EMH 7/8 - 4.00	40	0.875	4.00	1.88
AK014B25	CAT40 - EMH 1 - 4.00	40	1.000	4.00	2.00
AK017B25	CAT40 - EMH 1 1/4 - 4.25	40	1.250	4.25	2.50
AK021B25	CAT40 - EMH 1 1/2 - 4.63	40	1.500	4.63	2.50

- ▶ BALANCING GRADE : BASED ON G2.5 / 25,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ THESE TOOLS ARE BALANCED WITH NO HARDWARE, NUTS, COLLETS OR CUTTING TOOLS IN THEM
- ▶ TO ACHIEVE TRUE G2.5 @ 25,000 RPM THE ENTIRE ROTARY TOOLING ASSEMBLY INCLUDING THE CUTTING TOOL NEEDS TO BE BALANCED
- ▶ SET SCREWS FOR END MILL HOLDERS ON PAGE 830



HIGH BALANCED END MILL HOLDER

CAT

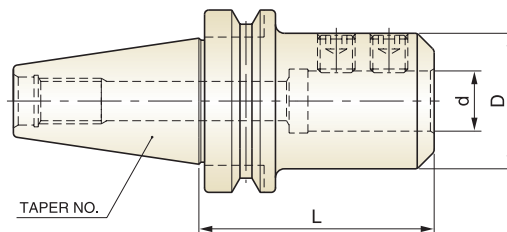


■ EXTENDED

EDP No.	Type	TAPER No.	d	L	D
AK104B25	CAT40 - EMH 3/8 - 4.50	40	0.375	4.50	1.00
AK106B25	CAT40 - EMH 1/2 - 4.63	40	0.500	4.63	1.25
AK108B25	CAT40 - EMH 5/8 - 5.75	40	0.625	5.75	1.50
AK110B25	CAT40 - EMH 3/4 - 5.75	40	0.750	5.75	1.75
AK112B25	CAT40 - EMH 7/8 - 6.00	40	0.875	6.00	1.88
AK114B25	CAT40 - EMH 1 - 6.00	40	1.000	6.00	2.00
AK117B25	CAT40 - EMH 1 1/4 - 6.25	40	1.250	6.25	2.50
AK121B25	CAT40 - EMH 1 1/2 - 6.63	40	1.500	6.63	2.50

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HIGH BALANCED END MILL HOLDER

BT

STUB

EDP No.	Type	TAPER No.	d	L	D
AH206B25	BT40 - EMH 1/2 - 1.25	40	0.500	1.25	1.25
AH208B25	BT40 - EMH 5/8 - 1.38	40	0.625	1.38	1.50
AH210B25	BT40 - EMH 3/4 - 1.44	40	0.750	1.44	1.75
AH214B25	BT40 - EMH 1 - 2.50	40	1.000	2.50	2.00
AH217B25	BT40 - EMH 1 1/4 - 2.50	40	1.250	2.50	2.50

STANDARD

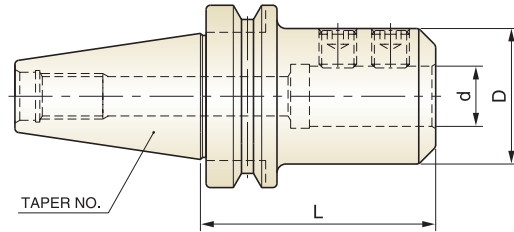
EDP No.	Type	TAPER No.	d	L	D
AH000B25	BT40 - EMH 1/8 - 2.50	40	0.125	2.50	0.69
AH001B25	BT40 - EMH 3/16 - 2.50	40	0.187	2.50	0.69
AH002B25	BT40 - EMH 1/4 - 2.50	40	0.250	2.50	0.78
AH003B25	BT40 - EMH 5/16 - 2.50	40	0.312	2.50	0.88
AH004B25	BT40 - EMH 3/8 - 2.50	40	0.375	2.50	1.00
AH005B25	BT40 - EMH 7/16 - 2.50	40	0.437	2.50	1.13
AH006B25	BT40 - EMH 1/2 - 2.50	40	0.500	2.50	1.25
AH008B25	BT40 - EMH 5/8 - 2.50	40	0.625	2.50	1.50
AH010B25	BT40 - EMH 3/4 - 2.50	40	0.750	2.50	1.75
AH012B25	BT40 - EMH 7/8 - 3.50	40	0.875	3.50	1.88
AH014B25	BT40 - EMH 1 - 3.75	40	1.000	3.75	2.00
AH017B25	BT40 - EMH 1 1/4 - 3.75	40	1.250	3.75	2.50
AH021B25	BT40 - EMH 1 1/2 - 4.25	40	1.500	4.25	2.50

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HIGH BALANCED END MILL HOLDER

BT



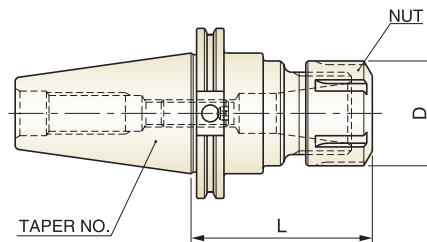
■ EXTENDED

EDP No.	Type	TAPER No.	d	L	D
AH104B25	BT40 - EMH 3/8 - 4.00	40	0.375	4.00	1.00
AH106B25	BT40 - EMH 1/2 - 4.00	40	0.500	4.00	1.25
AH108B25	BT40 - EMH 5/8 - 4.00	40	0.625	4.00	1.50
AH110B25	BT40 - EMH 3/4 - 4.00	40	0.750	4.00	1.75
AH114B25	BT40 - EMH 1 - 5.00	40	1.000	5.00	2.00
AH117B25	BT40 - EMH 1 1/4 - 5.00	40	1.250	5.00	2.50
AH121B25	BT40 - EMH 1 1/2 - 6.00	40	1.500	6.00	2.50

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- ▶ SET SCREWS FOR END MILL HOLDERS ON PAGE 830

ER COLLET CHUCK

CAT



■ STUB

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK232	CAT40 - ER20 - 2.55	40	0.039-0.511	2.55	1.26	ER20
BK233	CAT40 - ER25 - 2.50	40	0.039-0.629	2.50	1.65	ER25
BK234	CAT40 - ER32 - 2.70	40	0.078-0.787	2.70	1.88	ER32

■ STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK030	CAT40 - ER11 - 3.00	40	0.019-0.275	3.00	0.63	ER11
BK031	CAT40 - ER16 - 2.88	40	1/32-13/32	2.88	1.08	ER16
BK032	CAT40 - ER20 - 4.00	40	0.039-0.511	4.00	1.26	ER20
BK133	CAT40 - ER25 - 4.00	40	0.039-0.629	4.00	1.65	ER25
BK134	CAT40 - ER32 - 4.00	40	0.078-0.787	4.00	1.88	ER32
BL031	CAT50 - ER16 - 4.88	50	1/32-13/32	4.88	1.08	ER16
BL032	CAT50 - ER20 - 4.00	50	0.039-0.511	4.00	1.26	ER20
BL033	CAT50 - ER25 - 4.00	50	0.039-0.629	4.00	1.65	ER25
BL034	CAT50 - ER32 - 4.00	50	0.078-0.787	4.00	1.88	ER32

■ EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK331	CAT40 - ER16 - 4.88	40	1/32-13/32	4.88	1.08	ER16
BK332	CAT40 - ER20 - 6.00	40	0.039-0.511	6.00	1.26	ER20
BK333	CAT40 - ER25 - 6.00	40	0.039-0.629	6.00	1.65	ER25
BK334	CAT40 - ER32 - 6.00	40	0.078-0.787	6.00	1.88	ER32
BL331	CAT50 - ER16 - 6.88	50	1/32-13/32	6.88	1.08	ER16
BL332	CAT50 - ER20 - 6.00	50	0.039-0.511	6.00	1.26	ER20
BL333	CAT50 - ER25 - 6.00	50	0.039-0.629	6.00	1.65	ER25
BL334	CAT50 - ER32 - 6.00	50	0.078-0.787	6.00	1.88	ER32

■ EXTRA EXTENDED

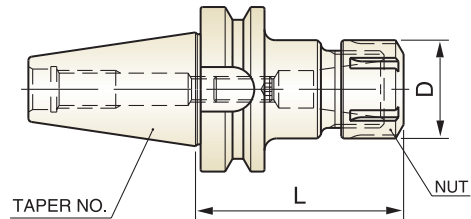
EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK432	CAT40-ER20-8.00	40	0.039-0.511	8.00	1.26	ER20

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ ER NUT : SWISS MADE PRECISION ER NUT
- ▶ SUPPLIED without WRENCH
- ▶ WRENCHES ON PAGE 811



ER COLLET CHUCK

BT



■ STUB

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH232	BT40 - ER20 - 2.20	40	0.039-0.511	2.20	1.26	ER20
BH233	BT40 - ER25 - 2.50	40	0.039-0.629	2.50	1.65	ER25
BH234	BT40 - ER32 - 2.40	40	0.078-0.787	2.40	1.88	ER32

■ STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH030	BT40 - ER11 - 3.00	40	0.019-0.250	3.00	0.63	ER11
BH031	BT40 - ER16 - 2.88	40	1/32-13/32	2.88	1.08	ER16
BH032	BT40 - ER20 - 4.00	40	0.039-0.511	4.00	1.26	ER20
BH133	BT40 - ER25 - 4.00	40	0.039-0.629	4.00	1.65	ER25
BH134	BT40 - ER32 - 4.00	40	0.078-0.787	4.00	1.88	ER32
BI031	BT50 - ER16 - 4.88	50	1/32-13/32	4.88	1.08	ER16
BI032	BT50 - ER20 - 2.63	50	0.039-0.511	2.63	1.26	ER20
BI033	BT50 - ER25 - 2.63	50	0.039-0.629	2.63	1.65	ER25
BI034	BT50 - ER32 - 4.00	50	0.078-0.787	4.00	1.88	ER32

■ EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH331	BT40 - ER16 - 4.88	40	1/32-13/32	4.88	1.08	ER16
BH332	BT40 - ER20 - 6.00	40	0.039-0.511	6.00	1.26	ER20
BH333	BT40 - ER25 - 6.00	40	0.039-0.629	6.00	1.65	ER25
BH334	BT40 - ER32 - 6.00	40	0.078-0.787	6.00	1.88	ER32
BI331	BT50 - ER16 - 6.00	50	1/32-13/32	6.00	1.08	ER16
BI332	BT50 - ER20 - 6.00	50	0.039-0.511	6.00	1.26	ER20
BI333	BT50 - ER25 - 6.00	50	0.039-0.629	6.00	1.65	ER25
BI334	BT50 - ER32 - 6.00	50	0.078-0.787	6.00	1.88	ER32

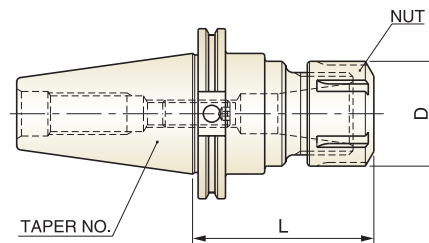
■ EXTRA EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH432	BT40 - ER20 - 8.00	40	0.039-0.511	8.00	1.26	ER20

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ ER NUT : SWISS MADE PRECISION ER NUT
- ▶ SUPPLIED without WRENCH
- ▶ WRENCHES ON PAGE 811

HIGH BALANCED ER COLLET CHUCK

CAT


STUB

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK232B25	CAT40 - ER20 - 2.55	40	0.039-0.511	2.55	1.26	ER20
BK233B25	CAT40 - ER25 - 2.50	40	0.039-0.629	2.50	1.65	ER25
BK234B25	CAT40 - ER32 - 2.70	40	0.078-0.787	2.70	1.88	ER32

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK030B25	CAT40 - ER11 - 3.00	40	0.019-0.250	3.00	0.63	ER11
BK031B25	CAT40 - ER16 - 2.88	40	1/32-13/32	2.88	1.08	ER16
BK032B25	CAT40 - ER20 - 4.00	40	0.039-0.511	4.00	1.26	ER20
BK133B25	CAT40 - ER25 - 4.00	40	0.039-0.629	4.00	1.65	ER25
BK134B25	CAT40 - ER32 - 4.00	40	0.078-0.787	4.00	1.88	ER32

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK331B25	CAT40 - ER16 - 4.88	40	1/32-13/32	4.88	1.08	ER16
BK332B25	CAT40 - ER20 - 6.00	40	0.039-0.511	6.00	1.26	ER20
BK333B25	CAT40 - ER25 - 6.00	40	0.039-0.629	6.00	1.65	ER25
BK334B25	CAT40 - ER32 - 6.00	40	0.078-0.787	6.00	1.88	ER32

EXTRA EXTENDED

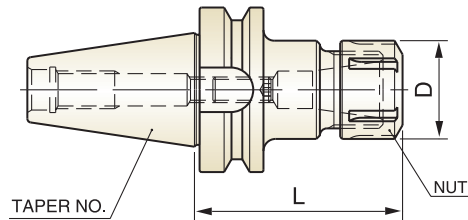
EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BK432B25	CAT40 - ER20 - 8.00	40	0.039-0.511	8.00	1.26	ER20

- ▶ BALANCING GRADE : BASED ON G2.5 / 25,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ THESE TOOLS ARE BALANCED WITH NO HARDWARE, NUTS, SCREWS, COLLETS OR CUTTING TOOLS IN THEM
- ▶ TO ACHIEVE TRUE G2.5 @ 25,000 RPM THE ENTIRE ROTARY TOOLING ASSEMBLY INCLUDING THE CUTTING TOOL NEEDS TO BE BALANCED
- ▶ ER NUT : SWISS MADE PRECISION ER NUT
- ▶ SUPPLIED without WRENCH
- ▶ WRENCHES ON PAGE 811



HIGH BALANCED ER COLLET CHUCK

BT



STUB

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH232B25	BT40-ER20-2.20	40	0.039 - 0.511	2.20	1.26	ER20
BH233B25	BT40-ER25-2.50	40	0.039 - 0.629	2.50	1.65	ER25
BH234B25	BT40-ER32-2.40	40	0.078 - 0.787	2.40	1.88	ER32

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH030B25	BT40-ER11-3.00	40	0.019 - 0.250	3.00	0.63	ER11
BH031B25	BT40-ER16-2.88	40	1/32 - 13/32	2.88	1.08	ER16
BH032B25	BT40-ER20-4.00	40	0.039 - 0.511	4.00	1.26	ER20
BH133B25	BT40-ER25-4.00	40	0.039 - 0.629	4.00	1.65	ER25
BH134B25	BT40-ER32-4.00	40	0.078 - 0.787	4.00	1.88	ER32

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH331B25	BT40-ER16-4.88	40	1/32 - 13/32	4.88	1.08	ER16
BH332B25	BT40-ER20-6.00	40	0.039 - 0.511	6.00	1.26	ER20
BH333B25	BT40-ER25-6.00	40	0.039 - 0.629	6.00	1.65	ER25
BH334B25	BT40-ER32-6.00	40	0.078 - 0.787	6.00	1.88	ER32

EXTRA EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
BH432B25	BT40-ER20-8.00	40	0.039 - 0.511	8.00	1.26	ER20

- ▶ BALANCING GRADE : BASED ON G2.5 / 25,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ THESE TOOLS ARE BALANCED WITH NO HARDWARE, NUTS, SCREWS, COLLETS OR CUTTING TOOLS IN THEM
- ▶ TO ACHIEVE TRUE G2.5 @ 25,000 RPM THE ENTIRE ROTARY TOOLING ASSEMBLY INCLUDING THE CUTTING TOOL NEEDS TO BE BALANCED
- ▶ ER NUT : SWISS MADE PRECISION ER NUT
- ▶ SUPPLIED without WRENCH
- ▶ WRENCHES ON PAGE 811

ER NUT

CAT / BT

EDP No.	Series	Type
ZZ061	ER11 - NUT	FIG. 1
ZZ063	ER16 - NUT	FIG. 1
ZZ066	ER20 - NUT	FIG. 1
ZZ069	ER25 - NUT	FIG. 2
ZZ072	ER32 - NUT	FIG. 2

FIG.1



FIG.2



ER WRENCH

CAT / BT

EDP No.	For Use With	Type
ZZ062	ER11	FIG. 1
ZZ064	ER16	FIG. 1
ZZ067	ER20	FIG. 1
ZZ070	ER25	FIG. 2
ZZ073	ER32	FIG. 2

FIG.1



FIG.2



ER STOP SCREW

CAT / BT

FIG.1

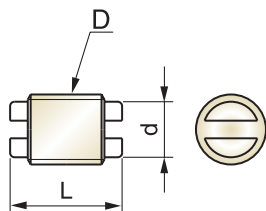
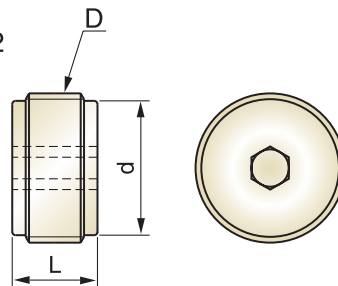


FIG.2



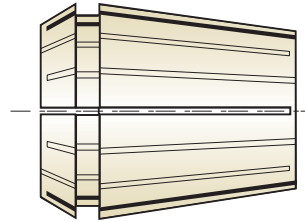
EDP No.	Series	L	d	D	Type
ZZ060	ER11	0.50	0.25	UN5/16 - 18	FIG. 1
ZZ065	ER16	0.50	0.35	UN7/16 - 16	FIG.2
ZZ068	ER20	0.50	0.48	UN9/16 - 16	FIG.2
ZZ071	ER25	0.50	0.60	UN11/16 - 16	FIG.2
ZZ074	ER32	0.50	0.79	UN7/8 - 16	FIG.2



ROTARY TOOL HOLDERS

ROTARY TOOL HOLDERS

ER COLLET - STANDARD

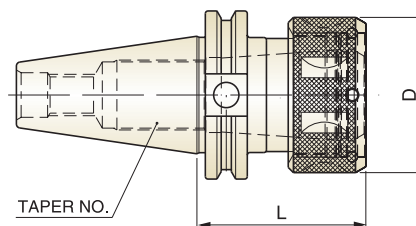


Type ER 11		Type ER 16		Type ER 20		Type ER 25		Type ER 32	
Clamping Capacity	EDP No.	Clamping Capacity	EDP No.	Clamping Capacity	EDP No.	Clamping Capacity	EDP No.	Clamping Capacity	EDP No.
1/16	110116	1/16	160116	1/16	200116	1/16	250116	3/32	320332
3/32	110332	3/32	160332	3/32	200332	3/32	250332	1/8	320108
1/8	110108	1/8	160108	1/8	200108	1/8	250108	5/32	320532
5/32	110532	5/32	160532	5/32	200532	5/32	250532	3/16	320316
3/16	110316	3/16	160316	3/16	200316	3/16	250316	7/32	320732
7/32	110732	7/32	160732	7/32	200732	7/32	250732	1/4	320104
1/4	110104	1/4	160104	1/4	200104	1/4	250104	9/32	320932
		9/32	160932	9/32	200932	9/32	250932	5/16	320516
		5/16	160516	5/16	200516	5/16	250516	11/32	321132
		11/32	161132	11/32	201132	11/32	251132	3/8	320308
		3/8	160308	3/8	200308	3/8	250308	13/32	321332
		13/32	161332	13/32	201332	13/32	251332	7/16	320716
				7/16	200716	7/16	250716	15/32	321532
				15/32	201532	15/32	251532	1/2	320102
				1/2	200102	1/2	250102	17/32	321732
						17/32	251732	9/16	320916
						9/16	250916	19/32	321932
						19/32	251932	5/8	320508
						5/8	250508	21/32	322132
								11/16	321116
								23/32	322332
								3/4	320304
Standard Set	ER11S07	Standard Set	ER16S12	Standard Set	ER20S15	Standard Set	ER25S19	Standard Set	ER32S22
1/16 to 1/4		1/16 to 13/32		1/16 to 1/2		1/16 to 5/8		3/32 to 3/4	
7 Pcs.		12 Pcs.		15 Pcs.		19 Pcs.		22 Pcs.	

► Rubber sealed er collets are available on request

TG COLLET CHUCK

CAT



TG75

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
VK012	CAT40-TG75-2.50	40	3/64-3/4	2.50	1.87	75TG

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
VK312	CAT40-TG75-3.00	40	3/64-3/4	3.00	1.87	75TG

TG100

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
OK014	CAT40-TG100-3.25	40	1/16-1	3.25	2.50	100TG
OL014	CAT50-TG100-3.25	50	1/16-1	3.25	2.50	100TG

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
OK314	CAT40-TG100-4.50	40	1/16-1	4.50	2.50	100TG
OL314	CAT50-TG100-5.50	50	1/16-1	5.50	2.50	100TG

TG150

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
UL052	CAT50-TG150-3.50	50	1/2-1 1/2	3.50	3.50	150TG

EXTENDED

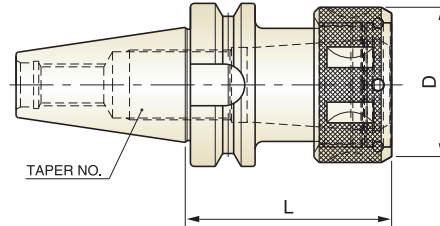
EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
UL352	CAT50 - TG150 - 6.00	50	1/2-1 1/2	6.00	3.50	150TG

► WRENCH / NUTS / STOP SCREW FOR TG COLLET CHUCKS ON PAGE 815



TG COLLET CHUCK

BT



TG75

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
VH012	BT40 - TG75 - 3.00	40	3/64-3/4	3.00	1.87	75TG

TG100

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
OH014	BT40 - TG100 - 3.50	40	1/16-1	3.50	2.50	100TG
OI014	BT50 - TG100 - 3.50	50	1/16-1	3.50	2.50	100TG

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
OH314	BT40 - TG100 - 5.50	40	1/16-1	5.50	2.50	100TG
OI314	BT50 - TG100 - 6.00	50	1/16-1	6.00	2.50	100TG

TG150

STANDARD

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
UI052	BT50 - TG150 - 4.00	50	1/2-1 1/2	4.00	3.50	150TG

EXTENDED

EDP No.	Type	TAPER No.	Size Range	L	D	Collet Series
UI352	BT50 - TG150 - 6.00	50	1/2-1 1/2	6.00	3.50	150TG

► WRENCH / NUTS / STOP SCREW FOR TG COLLET CHUCKS ON PAGE 815

TG NUT

CAT / BT

EDP No.	Series
ZZ084	TG75-NUT
ZZ081	TG100-NUT
ZZ087	TG150-NUT



TG WRENCH

CAT / BT

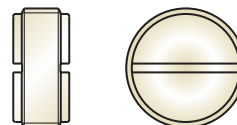
EDP No.	For Use With
ZZ085	TG75
ZZ082	TG100
ZZ088	TG150



TG STOP SCREW

CAT / BT

EDP No.	Series
ZZ086	TG75
ZZ083	TG100
ZZ089	TG150



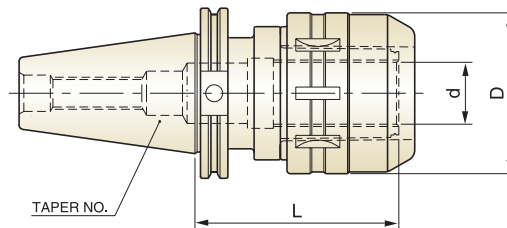


ROTARY TOOL HOLDERS

ROTARY TOOL HOLDERS

MILLING CHUCK

CAT



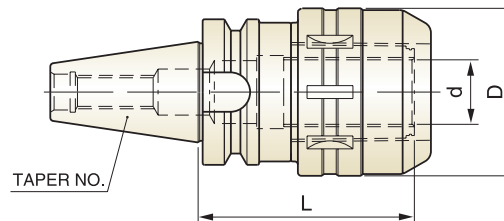
STANDARD

EDP No.	Type	TAPER No.	d	L	D
LK010	CAT40 - C 3/4 - 4.13	40	0.750	4.13	2.13
LK014	CAT40 - C 1 - 4.13	40	1.000	4.13	2.50
LK017	CAT40 - C 1 1/4 - 4.13	40	1.250	4.13	2.81
LL010	CAT50 - C 3/4 - 4.13	50	0.750	4.13	2.13
LL014	CAT50 - C 1 - 4.13	50	1.000	4.13	2.50
LL017	CAT50 - C 1 1/4 - 4.13	50	1.250	4.13	2.81

► COLLETS / WRENCHES FOR MILLING CHUCKS ON PAGE 817

MILLING CHUCK

BT



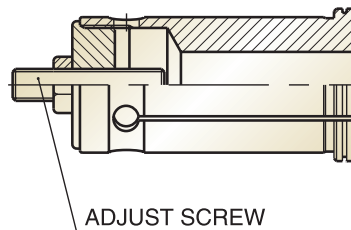
STANDARD

EDP No.	Type	TAPER No.	d	L	D
LH010	BT40 - C 3/4 - 3.56	40	0.750	3.56	2.13
LH014	BT40 - C 1 - 4.13	40	1.000	4.13	2.50
LH017	BT40 - C 1 1/4 - 4.13	40	1.250	4.13	2.81
LI010	BT50 - C 3/4 - 4.13	50	0.750	4.13	2.13
LI014	BT50 - C 1 - 4.13	50	1.000	4.13	2.50
LI017	BT50 - C 1 1/4 - 4.13	50	1.250	4.13	2.81

► COLLETS / WRENCHES FOR MILLING CHUCKS ON PAGE 817

MILLING CHUCK COLLET

CAT / BT



EDP No.	Type	Hole Size (D)	EDP No.	Type	Hole Size (D)	EDP No.	Type	Hole Size (D)
MZ002	C3/4	1/4	MZ102	C1	1/4	MZ302	C1 1/4	1/4
MZ003	C3/4	5/16	MZ103	C1	5/16	MZ303	C1 1/4	5/16
MZ004	C3/4	3/8	MZ104	C1	3/8	MZ304	C1 1/4	3/8
MZ006	C3/4	1/2	MZ106	C1	1/2	MZ306	C1 1/4	1/2
MZ008	C3/4	5/8	MZ108	C1	5/8	MZ308	C1 1/4	5/8
			MZ110	C1	3/4	MZ310	C1 1/4	3/4
						MZ312	C1 1/4	7/8
						MZ314	C1 1/4	1"

WRENCH

CAT / BT

EDP No.	For Use With
ZZ056	C3/4
ZZ057	C1
ZZ058	C1 1/4



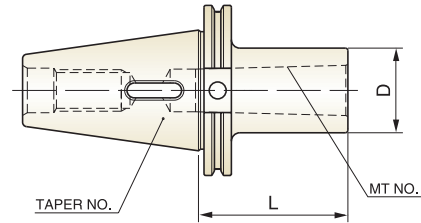


ROTARY TOOL HOLDERS

ROTARY TOOL HOLDERS

MORSE TAPER ADAPTER

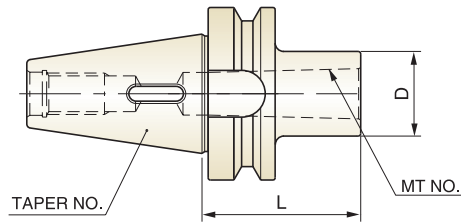
CAT



EDP No.	Type	TAPER No.	MT No.	L	D
CK037	CAT40-MTA1-1.75	40	#1	1.75	1.00
CK038	CAT40-MTA2-2.00	40	#2	2.00	1.26
CK039	CAT40-MTA3-2.75	40	#3	2.75	1.58
CK040	CAT40-MTA4-3.63	40	#4	3.63	1.97
CLO38	CAT50-MTA2-1.38	50	#2	1.38	1.26
CLO39	CAT50-MTA3-1.88	50	#3	1.88	1.58
CLO40	CAT50-MTA4-2.75	50	#4	2.75	1.97
CLO41	CAT50-MTA5-4.06	50	#5	4.06	2.55

MORSE TAPER ADAPTER

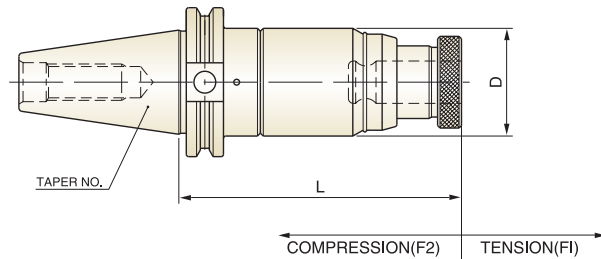
BT



EDP No.	Type	TAPER No.	MT No.	L	D
CH037	BT40 - MTA 1 - 1.75	40	#1	1.75	1.00
CH038	BT40 - MTA 2 - 2.36	40	#2	2.36	1.26
CH039	BT40 - MTA 3 - 2.95	40	#3	2.95	1.58
CH040	BT40 - MTA 4 - 3.74	40	#4	3.74	1.97
CI038	BT50 - MTA 2 - 2.36	50	#2	2.36	1.26
CI039	BT50 - MTA 3 - 2.95	50	#3	2.95	1.58
CI040	BT50 - MTA 4 - 3.74	50	#4	3.74	1.97
CI041	BT50 - MTA 5 - 4.13	50	#5	4.13	2.55

TAPPING CHUCK

CAT


These holders use Tap System #1 collets.

EDP No.	Type	TAPER No.	D	L	F1	F2
JK048	CAT40-TC#1-4.56	40	1.77	4.56	0.197	0.591
JL048	CAT50-TC#1-4.56	50	1.77	4.56	0.197	0.591

These holders use Tap System #2 collets.

EDP No.	Type	TAPER No.	D	L	F1	F2
JK049	CAT40-TC#2-6.47	40	2.48	6.47	0.197	0.787
JL049	CAT50-TC#2-5.82	50	2.48	5.82	0.197	0.787

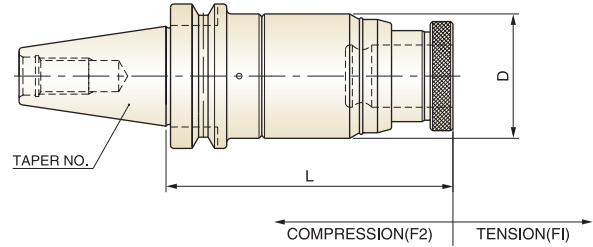
These holders use Tap System #3 collets.

EDP No.	Type	TAPER No.	D	L	F1	F2
JL050	CAT50-TC#3-7.75	50	3.86	7.75	0.394	0.984



TAPPING CHUCK

BT



■ These holders use Tap System #1 collets.

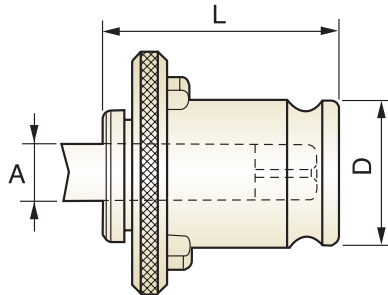
EDP No.	Type	TAPER No.	D	L	F1	F2
JH048	BT40 - TC #1 - 4.53	40	1.77	4.53	0.197	0.591
J1048	BT50 - TC #1 - 4.64	50	1.77	4.64	0.197	0.591

■ These holders use Tap System #2 collets.

EDP No.	Type	TAPER No.	D	L	F1	F2
JH049	BT40 - TC #2 - 6.72	40	2.48	6.72	0.197	0.787
J1049	BT50 - TC #2 - 6.72	50	2.48	6.72	0.197	0.787

■ These holders use Tap System #3 collets.

EDP No.	Type	TAPER No.	D	L	F1	F2
J1050	BT50 - TC #3 - 8.33	50	3.86	8.33	0.394	0.984

POSITIVE QUICK CHANGE TAP ADAPTERS

■ Bilz Type Tap Chucks

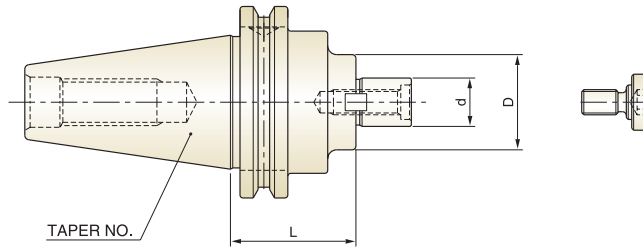
EDP No.	Adapter size	Tap size range	tap size	A shank dia	square AF
QCT12001	QCT 12 D = 19mm/0.748 L = 28.5mm/1.122	0-9/16	# 0-6	0.141	0.110
QCT12002			# 8	0.168	0.131
QCT12003			# 10	0.194	0.152
QCT12004			# 12	0.220	0.165
QCT12005			1/4	0.255	0.191
QCT12006			5/16	0.318	0.238
QCT12007			3/8	0.381	0.286
QCT12008			7/16	0.323	0.242
QCT12009			1/2	0.367	0.275
QCT12010			1/8 PIPE	9/16	0.429
QCT12011		1/8pss		0.3125	0.234
QCT12012		1/8pls		0.4370	0.328
QCT24001	QCT 24 D = 31mm/1.220 L = 46mm/1.811	5/16-7/8	5/16	0.318	0.238
QCT24002			3/8	0.381	0.286
QCT24003			7/16	0.323	0.242
QCT24004			1/2	0.367	0.275
QCT24005			9/16	0.429	0.322
QCT24006			5/8	0.480	0.360
QCT24007			11/16	0.542	0.406
QCT24008			3/4	0.590	0.442
QCT24009			13/16	0.652	0.489
QCT24010		7/8	0.697	0.523	
QCT24011		1/4 - 3/8 1/2 PIPE	1/4p	0.5620	0.421
QCT24012			3/8p	0.7000	0.531
QCT24013			1/2p	0.6875	0.515
QCT32001	QCT 32 D = 48mm/1.890 L = 69.5mm/2.736	13/16-1-3/8	13/16	0.652	0.489
QCT32002			7/8	0.697	0.523
QCT32003			15/16	0.760	0.570
QCT32004			1	0.800	0.600
QCT32005			1-1/8	0.896	0.672
QCT32006			1-1/4	1.021	0.766
QCT32007			1-3/8	1.108	0.831
QCT32008		1/2, 3/4 & 1 PIPE	1/2p	0.6875	0.515
QCT32009			3/4p	0.9060	0.679
QCT32010			1p	1.1250	0.843

- ▶ IMPROPER SELECTION OF PULL STUDS CAN CAUSE SERIOUS DAMAGE AND POSSIBLE INJURY.
PLEASE MAKE SURE THE MACHINE ACCEPTS THE PULL STUD YOU SELECT.
- ▶ ADDITIONAL PULL STUDS AVAILABLE



SHELL MILL ARBOR

CAT



STANDARD

EDP No.	Type	TAPER No.	d	L	D
EK006	CAT40-SMA1/2-1.50	40	0.500	1.50	1.44
EK010	CAT40-SMA3/4-1.50	40	0.750	1.50	1.69
EK014	CAT40-SMA1 -2.06	40	1.000	2.06	2.19
EK017	CAT40-SMA1 1/4-2.63	40	1.250	2.63	2.75
EK021	CAT40-SMA1 1/2-3.00	40	1.500	3.00	3.81
EL010	CAT50-SMA3/4-1.50	50	0.750	1.50	1.69
EL014	CAT50-SMA1 -2.00	50	1.000	2.00	2.19
EL017	CAT50-SMA1 1/4-1.50	50	1.250	1.50	2.75
EL021	CAT50-SMA1 1/2-2.50	50	1.500	2.50	3.81
EL029	CAT50-SMA2 -3.00	50	2.000	3.00	4.88

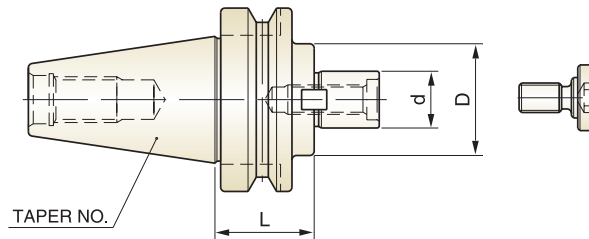
EXTENDED

EDP No.	Type	TAPER No.	d	L	D
EK306	CAT40-SMA1/2-3.50	40	0.500	3.50	1.44
EK310	CAT40-SMA3/4-3.50	40	0.750	3.50	1.69
EK314	CAT40-SMA1 -4.00	40	1.000	4.00	2.19
EK317	CAT40-SMA1 1/4-4.00	40	1.250	4.00	2.75
EK321	CAT40-SMA1 1/2-4.00	40	1.500	4.00	3.81
EL310	CAT50-SMA3/4-3.50	50	0.750	3.50	1.69
EL314	CAT50-SMA1 -4.00	50	1.000	4.00	2.19
EL317	CAT50-SMA1 1/4-3.50	50	1.250	3.50	2.75
EL321	CAT50-SMA1 1/2-4.00	50	1.500	4.00	3.81
EL329	CAT50-SMA2 -4.00	50	2.000	4.00	4.88

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ DRIVE KEY / LOCK SCREW FOR SHELL MILL ARBORS ON PAGE 824

SHELL MILL ARBOR

BT


STANDARD

EDP No.	Type	TAPER No.	d	L	D
EH006	BT40 - SMA 1/2 - 1.75	40	0.500	1.75	1.44
EH010	BT40 - SMA 3/4 - 1.77	40	0.750	1.77	1.69
EH014	BT40 - SMA 1 - 1.77	40	1.000	1.77	2.19
EH017	BT40 - SMA 1 1/4 - 1.81	40	1.250	1.81	2.75
EH021	BT40 - SMA 1 1/2 - 2.36	40	1.500	2.36	3.81
EI010	BT50 - SMA 3/4 - 1.75	50	0.750	1.75	1.69
EI014	BT50 - SMA 1 - 1.75	50	1.000	1.75	2.19
EI017	BT50 - SMA 1 1/4 - 1.75	50	1.250	1.75	2.75
EI021	BT50 - SMA 1 1/2 - 1.75	50	1.500	1.75	3.81
EI029	BT50 - SMA 2 - 3.00	50	2.000	3.00	4.88

EXTENDED

EDP No.	Type	TAPER No.	d	L	D
EH306	BT40 - SMA 1/2 - 3.50	40	0.500	3.50	1.44
EH310	BT40 - SMA 3/4 - 4.13	40	0.750	4.13	1.69
EH314	BT40 - SMA 1 - 4.13	40	1.000	4.13	2.19
EH317	BT40 - SMA 1 1/4 - 4.13	40	1.250	4.13	2.75
EH321	BT40 - SMA 1 1/2 - 4.72	40	1.500	4.72	3.81
EI310	BT50 - SMA 3/4 - 3.50	50	0.750	3.50	1.69
EI314	BT50 - SMA 1 - 4.00	50	1.000	4.00	2.19
EI317	BT50 - SMA 1 1/4 - 4.00	50	1.250	4.00	2.75
EI321	BT50 - SMA 1 1/2 - 4.00	50	1.500	4.00	3.81
EI329	BT50 - SMA 2 - 4.00	50	2.000	4.00	4.88

- ▶ BALANCING GRADE : BASED ON G6.3 / 15,000rpm
- ▶ HIGH BALANCED END MILL HOLDERS ARE AVAILABLE ON REQUEST
- ▶ DRIVE KEY / LOCK SCREW FOR SHELL MILL ARBORS ON PAGE 824



ROTARY TOOL HOLDERS

ROTARY TOOL HOLDERS

SHELL MILL DRIVE KEY

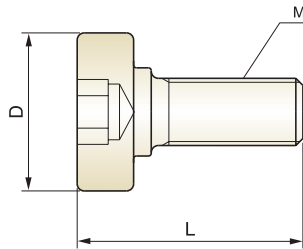
CAT / BT

EDP No.	Series	B
ZZ021	SMA 1/2-KEY	0.25
ZZ022	SMA 3/4-KEY	0.312
ZZ023	SMA 1 -KEY	0.375
ZZ024	SMA 1 1/4-KEY	0.5
ZZ025	SMA 1 1/2-KEY	0.625
ZZ026	SMA 2 -KEY	0.75

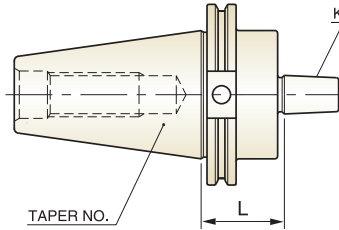


SHELL MILL LOCK SCREW

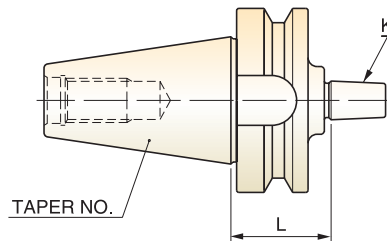
CAT / BT



EDP No.	Type (M)	L	D	Series
ZZ031	UNF 1/4 - 28	0.906	0.618	SMA 1/2 - SCREW
ZZ032	UNF 3/8 - 24	1.26	0.882	SMA 3/4 - SCREW
ZZ033	UNF 1/2 - 20	1.69	1.181	SMA 1 - SCREW
ZZ034	UNF 5/8 - 18	2.05	1.5	SMA 1 1/4 - SCREW
ZZ035	UNF 3/4 - 16	2.36	1.88	SMA 1 1/2 - SCREW
ZZ036	UNS 1 - 14	2.52	2.5	SMA 2 - SCREW

JACOBS TAPER ARBOR
CAT


EDP No.	Type	TAPER No.	K	L
GK042	CAT40 - JTA 1 - 1.50	40	#1	1.50
GK043	CAT40 - JTA 2 - 1.50	40	#2	1.50
GK044	CAT40 - JTA 3 - 1.50	40	#3	1.50
GK045	CAT40 - JTA 4 - 1.50	40	#4	1.50
GK046	CAT40 - JTA 6 - 1.50	40	#6	1.50
GK047	CAT40 - JTA 33 - 1.50	40	#33	1.50
GL042	CAT50 - JTA 1 - 1.50	50	#1	1.50
GL043	CAT50 - JTA 2 - 1.50	50	#2	1.50
GL044	CAT50 - JTA 3 - 1.50	50	#3	1.50
GL045	CAT50 - JTA 4 - 1.50	50	#4	1.50
GL046	CAT50 - JTA 6 - 1.50	50	#6	1.50
GL047	CAT50 - JTA 33 - 1.50	50	#33	1.50

JACOBS TAPER ARBOR
BT


EDP No.	Type	TAPER No.	K	L
GH042	BT40 - JTA 1 - 1.34	40	#1	1.34
GH043	BT40 - JTA 2 - 1.77	40	#2	1.77
GH044	BT40 - JTA 3 - 1.77	40	#3	1.77
GH045	BT40 - JTA 4 - 1.77	40	#4	1.77
GH046	BT40 - JTA 6 - 1.77	40	#6	1.77
GH047	BT40 - JTA 33 - 1.77	40	#33	1.77
GI042	BT50 - JTA 1 - 1.80	50	#1	1.80
GI043	BT50 - JTA 2 - 1.77	50	#2	1.77
GI044	BT50 - JTA 3 - 1.77	50	#3	1.77
GI045	BT50 - JTA 4 - 1.77	50	#4	1.77
GI046	BT50 - JTA 6 - 1.77	50	#6	1.77
GI047	BT50 - JTA 33 - 1.77	50	#33	1.77

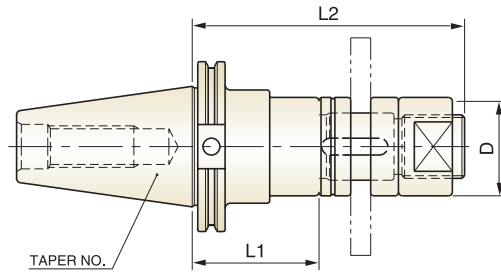


ROTARY TOOL HOLDERS

ROTARY TOOL HOLDERS

STUB ARBOR

CAT

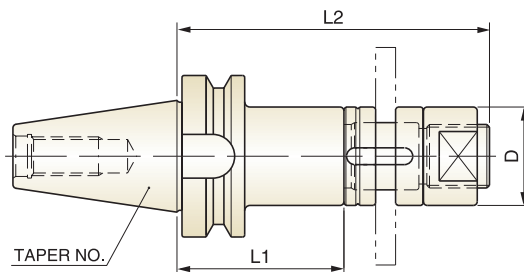


STANDARD

EDP No.	Type	TAPER No.	Cutter Size I.D	L1	D	L2
PK014	CAT40-STUB1 -4.00	40	1.000	4.00	1.56	6.25
PK017	CAT40-STUB1 1/4-4.00	40	1.250	4.00	1.88	6.50
PK021	CAT40-STUB1 1/2-4.00	40	1.500	4.00	2.12	6.75
PL014	CAT50-STUB1 -4.00	50	1.000	4.00	1.56	6.25
PL017	CAT50-STUB1 1/4-4.00	50	1.250	4.00	1.88	6.50
PL021	CAT50-STUB1 1/2-4.00	50	1.500	4.00	2.12	6.75

STUB ARBOR

BT



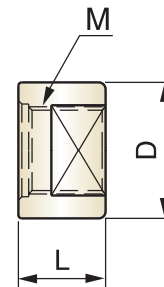
STANDARD

EDP No.	Type	TAPER No.	Cutter Size I.D	L1	D	L2
PH014	BT40 - STUB 1 - 3.00	40	1.000	3.00	1.56	5.25
PH017	BT40 - STUB 1 1/4 - 3.00	40	1.250	3.00	1.88	5.50
PH021	BT40 - STUB 1 1/2 - 3.00	40	1.500	3.00	2.12	5.75
PI014	BT50 - STUB 1 - 4.00	50	1.000	4.00	1.56	6.25
PI017	BT50 - STUB 1 1/4 - 4.00	50	1.250	4.00	1.88	6.50
PI021	BT50 - STUB 1 1/2 - 4.00	50	1.500	4.00	2.12	6.75

NUT

CAT / BT

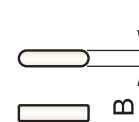
EDP No.	Type(M)	L	D	Series
ZZ041	1.56	1.00	1.56	STUB 1
ZZ046	1.87	1.25	1.87	STUB 1 1/4
ZZ052	2.12	1.50	2.12	STUB 1 1/2



KEY

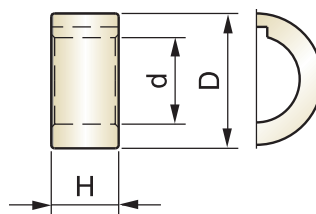
CAT / BT

EDP No.	Serie	B
ZZ042	STUB 1	0.25
ZZ047	STUB 1 1/4	0.312
ZZ054	STUB 1 1/2	0.375



SPACER

CAT / BT



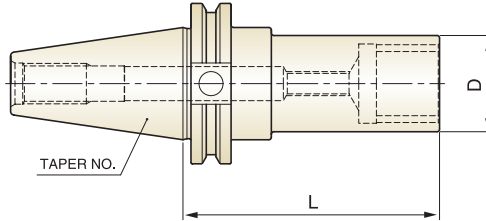
EDP No.	Type	H	D	d	Series
ZZ048	1/4-SPACER	0.25	1.87	1.25	STUB1 1/4
ZZ049	3/8-SPACER	0.375	1.87	1.25	STUB1 1/4
ZZ050	3/4-SPACER	0.75	1.87	1.25	STUB1 1/4
ZZ043	1/4-SPACER	0.25	1.56	1.00	STUB1
ZZ044	3/8-SPACER	0.375	1.56	1.00	STUB1
ZZ045	3/4-SPACER	0.75	1.56	1.00	STUB1
ZZ037	1/4-SPACER	0.25	2.12	1.50	STUB1 1/2
ZZ038	3/8-SPACER	0.375	2.12	1.50	STUB1 1/2
ZZ039	3/4-SPACER	0.75	2.12	1.50	STUB1 1/2



ROTARY TOOL HOLDERS

SLITTING SAW ARBOR

CAT

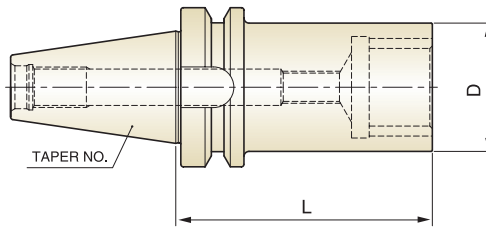


■ STANDARD

EDP No.	Type	TAPER No.	Collet Series	L	D
QK014	CAT40-SSA1 -4.00	40	1.000	4.00	1.50
QK017	CAT40-SSA1 1/4-4.00	40	1.250	4.00	2.00
QL014	CAT50-SSA1 -4.00	50	1.000	4.00	1.50
QL017	CAT50-SSA1 1/4-4.00	50	1.250	4.00	2.00

SLITTING SAW ARBOR

BT



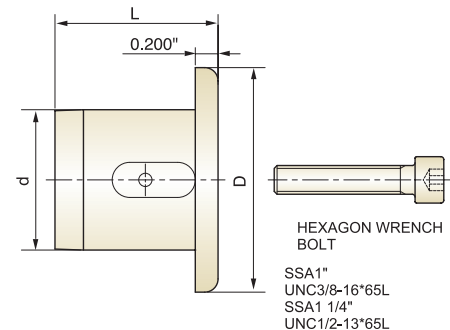
■ STANDARD

EDP No.	Type	TAPER No.	Collet Series	L	D
QH014	BT40 - SSA 1 - 4.00	40	1.000	4.00	1.50
QH017	BT40 - SSA 1 1/4 - 4.00	40	1.250	4.00	2.00

CAP

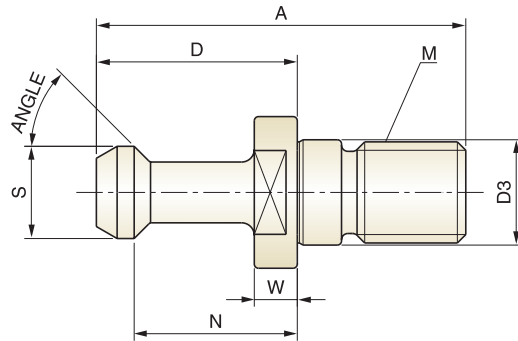
CAT / BT

EDP No.	Type	L	D	d
ZZ051	SSA 1	1.02	1.50	1.00
ZZ053	SSA 1 1/4	1.30	2.00	1.25



PULL STUD

PS



EDP No.	Type C = Coolant	Angle	S	P	D3	A	N	D	W	M
SK661	CAT-40 ANSI C	45°	0.740	0.490	0.490	1.500	0.440	0.640	0.120	5/8-11
SL661	CAT-50 ANSI C	45°	1.140	0.820	0.820	2.300	0.700	1.000	0.200	1-8
SK561	CAT-40 ANSI	45°	0.740	0.490	0.490	1.500	0.440	0.640	0.120	5/8-11
SL561	CAT-50 ANSI	45°	1.140	0.820	0.820	2.300	0.700	1.000	0.200	1-8
SK761	CAT-40 TYPE I	45°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SK762	CAT-40 TYPE II	60°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SK763	CAT-40 TYPE III	90°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SK861	CAT-40 TYPE I C	45°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SK862	CAT-40 TYPE II C	60°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SK863	CAT-40 TYPE III C	90°	0.590	0.394	0.512	2.250	0.990	1.266	0.120	5/8-11
SL761	CAT-50 TYPE I	45°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SL762	CAT-50 TYPE II	60°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SL763	CAT-50 TYPE III	90°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SL861	CAT-50 TYPE I C	45°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SL862	CAT-50 TYPE II C	60°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SL863	CAT-50 TYPE III C	90°	0.906	0.669	0.827	3.346	1.377	1.772	0.390	1-8
SH061	BT-40 PS 1	45°	0.590	0.394	0.669	2.360	1.102	1.378	0.230	M16
SI061	BT-50 PS 5	45°	0.905	0.669	0.984	3.346	1.377	1.772	0.390	M24
SH062	BT-40 PS 2	60°	0.590	0.394	0.669	2.360	1.102	1.378	0.230	M16
SI062	BT-50 PS 6	60°	0.905	0.669	0.984	3.346	1.377	1.772	0.390	M24
SH063	BT-40 PS 8	90°	0.590	0.394	0.669	2.360	1.102	1.378	0.230	M16
SI063	BT-50 PS 0	90°	0.905	0.669	0.984	3.346	1.377	1.772	0.390	M24
SK161	CAT-40 TYPE I	45°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11
SK162	CAT-40 TYPE II	60°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11
SK163	CAT-40 TYPE III	90°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11
SK261	CAT-40 TYPE I C	45°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11
SK262	CAT-40 TYPE II C	60°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11
SK263	CAT-40 TYPE III C	90°	0.590	0.394	0.512	2.250	0.990	1.266	0.236	5/8-11

► IMPROPER SELECTION OF PULL STUDS CAN CAUSE SERIOUS DAMAGE AND POSSIBLE INJURY. PLEASE MAKE SURE THE MACHINE ACCEPTS THE PULL STUD YOU SELECT.



TOOL CLAMP

TBT, TCT

EDP No.	Type	Shank Flange Type
RK099	TCT-40	CAT-40
RH099	TBT-40	BT-40
RL099	TCT-50	CAT-50
RM099	TBT-50	BT-50

▶ AVAILABLE IN ALL TAPERS.



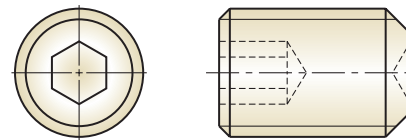
FEATURES :

- ▶ ACCESS BOTH ENDS OF YOUR TOOL HOLDERS SIMULTANEOUSLY
- ▶ MINIMIZES TOOL HOLDERS HANDLING
- ▶ SPEEDS UP YOUR OPERATIONS
- ▶ CONVENIENT

END MILL HOLDER SCREWS

HEXAGON SOCKET SET SCREW (FLAT TYPE)

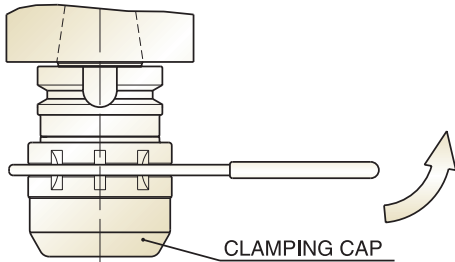
EDP No.	Screw	End Mill DIA.
ZZ003	UNF5/16-24	1/8
ZZ003	UNF5/16-24	3/16
ZZ003	UNF5/16-24	1/4
ZZ003	UNF5/16-24	5/16
ZZ004	UNF3/8-24	3/8
ZZ005	UNF3/8-24	7/16
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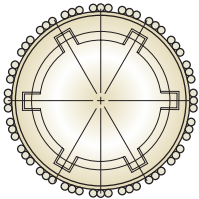


MILLING CHUCK

Grasping;



Structure;



SPECIAL FEATURES

EASE OF USE

BORE DIAMETER IS REDUCED BY .006 WITH ONLY TWO FULL TURNS OF THE CLAMPING CAP.

HOLDING POWER

THICKER BODY STRUCTURE OF CLAMPING CAP ASSURES STRONG HOLDING POWER MAXIMUM DURABILITY AND SMOOTH MOVEMENT OF NEEDLE BEARINGS 300 kgm HOLDING FORCE.

ACCURACY

SLOTS ON THE INSIDE OF BORE HELP PREVENT EXCESSIVE OIL AND GRIME FROM BUILDING UP BETWEEN SHANK OF END MILL AND INSIDE OF BORE WHICH INCREASES ACCURACY AND HOLDING POWER .0002 TIR AT 3940 FROM NOSE

DURABILITY

SPECIAL ENGINEERED STEELS AND ALLOYS ARE USED IN THE BEARING AND STOP SEAL TO INCREASE LIFE AND REDUCE MAINTENANCE.

T.I.R TOLERANCE

ER CHUCK

Concentric to 0.0002" T.I.R
puts tool precisely on spindle centerline

END MILL HOLDER

Concentric to 0.0002" T.I.R
puts tool precisely on spindle centerline

MILLING CHUCK

Concentric to 0.0002" T.I.R
puts tool precisely on spindle centerline

SLITTING SAW ARBOR

Face perpendicular to taper within 0.0002" T.I.R

STUB ARBOR

Face perpendicular to taper within 0.0002" T.I.R

SHELL MILL ARBOR

Face perpendicular to taper within 0.0001" T.I.R
Out diameter to taper within 0.0002" T.I.R

MORSE TAPER ARBOR

Concentric to 0.0003" T.I.R

JACOBS TAPER ARBOR

Concentric to 0.0002" T.I.R

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