

CV40 & CV50 RETENTION STUDS	138
BT30 & BT40 RETENTION STUDS	139
RETENTION STUD WRENCHES	139
DRAW BAR EXTENDERS	140
SPECIAL RETENTION STUD REQUEST FORM	140



SHELL MILL  
HOLDERS

END MILL  
HOLDERS

MILLING  
CHUCKS

SHRINK FIT  
HOLDERS

COLLET  
CHUCKS

RADIAL  
COMP.  
HOLDERS

DRILL  
CHUCKS

TAP  
HOLDERS

BLANK  
BARS

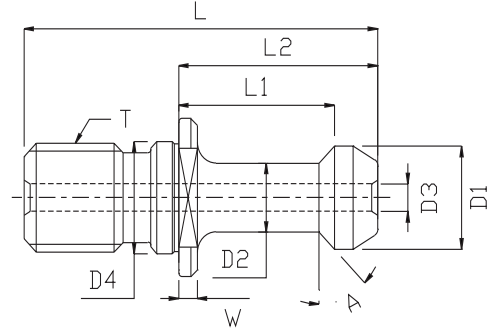
RETENTION  
STUDS

ACCESSORIES

TECHNICAL  
INFO.

INDEX

SHELL MILL HOLDERS  
END MILL HOLDERS  
MILLING CHUCKS  
SHRINK FIT HOLDERS  
COLLET CHUCKS  
RADIAL COMP. HOLDERS  
DRILL CHUCKS  
TAP HOLDERS  
BLANK BARS  
RETENTION STUDS  
ACCESSORIES  
TECHNICAL INFO.  
INDEX

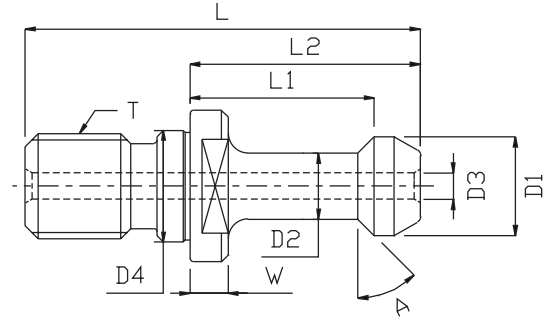


**CV40 & CV50 RETENTION STUDS**

PART NUMBER	A	L	ØD1	L1	ØD2	L2	ØD3	ØD4	W	T
CV40-RS45	45°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.118"	5/8-11
CV40-RS45H	45°	2.25"	.588"	.988"	.393"	1.265"	.157"	.640"	.118"	5/8-11
CV40-RS45S	45°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.236"	5/8-11
CV40-RS60	60°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.118"	5/8-11
CV40-RS60H	60°	2.25"	.588"	.988"	.393"	1.265"	.157"	.640"	.118"	5/8-11
CV40-RS60S	60°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.236"	5/8-11
CV40-RS75	75°	2.00"	.748"	.790"	.551"	1.019"	-	.640"	.275"	5/8-11
CV40-RS75H	75°	2.00"	.748"	.790"	.551"	1.019"	.268"	.640"	.275"	5/8-11
CV40-RS75ISO	75°	2.00"	.748"	.790"	.551"	1.019"	-	.640"	.157"	5/8-11
CV40-RS75ISOH	75°	2.00"	.748"	.790"	.551"	1.019"	.268"	.640"	.157"	5/8-11
CV40-RS90	90°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.118"	5/8-11
CV40-RS90H	90°	2.25"	.588"	.988"	.393"	1.265"	.157"	.640"	.118"	5/8-11
CV40-RS90S	90°	2.25"	.588"	.988"	.393"	1.265"	-	.640"	.236"	5/8-11
CV40-RSMAZAK	90°	2.03"	.588"	.777"	.393"	1.049"	-	.625"	.200"	5/8-11
CV40-RSSTD	45°	1.62"	.740"	.440"	.490"	.640"	-	.640"	.118"	5/8-11
CV40-RSSTDH	45°	1.62"	.740"	.440"	.490"	.640"	.268"	.640"	.118"	5/8-11
CV50-RS45	45°	3.35"	.905"	1.386"	.669"	1.779"	-	1.031"	.389"	1" - 8
CV50-RS45H	45°	3.35"	.905"	1.386"	.669"	1.779"	.268"	1.031"	.389"	1" - 8
CV50-RS60	60°	3.35"	.905"	1.386"	.669"	1.779"	-	1.031"	.389"	1" - 8
CV50-RS60H	60°	3.35"	.905"	1.386"	.669"	1.779"	.268"	1.031"	.389"	1" - 8
CV50-RS75ISO	75°	2.91"	1.101"	.984"	.825"	1.338"	-	1.031"	.197"	1" - 8
CV50-RS75ISOH	75°	2.91"	1.101"	.984"	.825"	1.338"	.468"	1.031"	.197"	1" - 8
CV50-RS90	90°	3.35"	.905"	1.386"	.669"	1.779"	-	1.031"	.389"	1" - 8
CV50-RS90H	90°	3.35"	.905"	1.386"	.669"	1.779"	.268"	1.031"	.389"	1" - 8
CV50-RSMAZAK	90°	3.35"	.905"	1.386"	.669"	1.779"	-	1.031"	.698"	1" - 8
CV50-RSSTD	45°	2.57"	1.140"	.700"	.820"	1.000"	-	1.031"	.197"	1" - 8
CV50-RSSTDH	45°	2.57"	1.140"	.700"	.820"	1.000"	-	1.031"	.197"	1" - 8

**NOTES:** • MAXIMUM TIGHTENING TORQUE: 40 TAPER - 85 ft./lbs.; 50 TAPER 110 ft./lbs.  
• H DENOTES COOLANT HOLE.  
• SPECIAL RETENTION STUDS AVAILABLE UPON REQUEST - SEE PAGE 140.

**WARNING:** ALL RETENTION STUDS ARE UNIQUE TO THEIR RESPECTIVE MACHINES. MANY RETENTION STUDS MAY APPEAR TO BE SIMILAR, PLEASE MAKE CERTAIN TO USE THE PROPER RETENTION STUD. USE OF THE INCORRECT RETENTION STUD, OVER TIGHTENING OR UNDER TIGHTENING THE RETENTION STUD MAY SEVERELY DAMAGE THE MACHINE SPINDLE AND RESULT IN OPERATOR INJURY.



## BT30 & BT40 RETENTION STUDS

PART NUMBER	A	L	ØD1	L1	ØD2	L2	ØD3	ØD4	W	T
BT30-RS45	45°	1.69"	.433"	.708"	.275"	.905"	-	.492"	.189"	M12-1.75
BT30-RS60	60°	1.69"	.433"	.708"	.275"	.905"	-	.492"	.189"	M12-1.75
BT40-RS45	45°	2.36"	.590"	1.102"	.393"	1.377"	-	.669"	.236"	M16-2
BT40-RS45H	45°	2.36"	.590"	1.102"	.393"	1.377"	.157"	.669"	.236"	M16-2
BT40-RS60	60°	2.36"	.590"	1.102"	.393"	1.377"	-	.669"	.236"	M16-2
BT40-RS60H	60°	2.36"	.590"	1.102"	.393"	1.377"	.157"	.669"	.236"	M16-2
BT40-RS75	75°	2.13"	.748"	.905"	.551"	1.140"	-	.669"	.275"	M16-2
BT40-RS75H	75°	2.13"	.748"	.905"	.551"	1.140"	.267"	.669"	.275"	M16-2
BT40-RS75ISO	75°	2.13"	.748"	.905"	.551"	1.140"	-	.669"	.157"	M16-2
BT40-RS75ISOH	75°	2.13"	.748"	.905"	.551"	1.140"	.267"	.669"	.157"	M16-2
BT40-RS90	90°	2.36"	.590"	1.102"	.393"	1.377"	-	.669"	.236"	M16-2
BT40-RS90H	90°	2.36"	.590"	1.102"	.393"	1.377"	.157"	.669"	.236"	M16-2
BT40-RSFADAL	45°	1.73"	.740"	.552"	.490"	.750"	-	.669"	.236"	M16-2
BT40-RSFADALH	45°	1.73"	.740"	.552"	.490"	.750"	.267"	.669"	.236"	M16-2
BT40-RSSTD	45°	1.62"	.740"	.429"	.490"	.640"	-	.669"	.118"	M16-2
BT40-RSSTDH	45°	1.62"	.740"	.429"	.490"	.640"	.267"	.669"	.118"	M16-2

- NOTES: • MAXIMUM TIGHTENING TORQUE: 30 TAPER - 40 ft./lbs.; 40 TAPER - 85 ft./lbs.  
 • H DENOTES COOLANT HOLE.  
 • SPECIAL RETENTION STUDS AVAILABLE UPON REQUEST - SEE PAGE 140.



## RETENTION STUD WRENCHES

PART NUMBER	DESCRIPTION
RSW30	Use for BT30 Studs
RSW40	Use for CV40 & BT40 Studs
RSW50A	Use for CV50-RSSTD
RSW50	Use for all other CV50 Studs

Retention Stud Wrenches are used to tighten retention studs to the recommended torque levels. They should be used with a 1/2" drive torque wrench. Impact wrenches should not be used because it will damage the wrench.

SHELL MILL  
HOLDERS

END MILL  
HOLDERS

MILLING  
CHUCKS

SHRINK FIT  
HOLDERS

COLLET  
CHUCKS

RADIAL  
COMP.  
HOLDERS

DRILL  
CHUCKS

TAP  
HOLDERS

BLANK  
BARS

RETENTION  
STUDS

ACCESSORIES

TECHNICAL  
INFO.

INDEX



**DRAW BAR EXTENDERS**

*PART NUMBER*                      *DESCRIPTION*

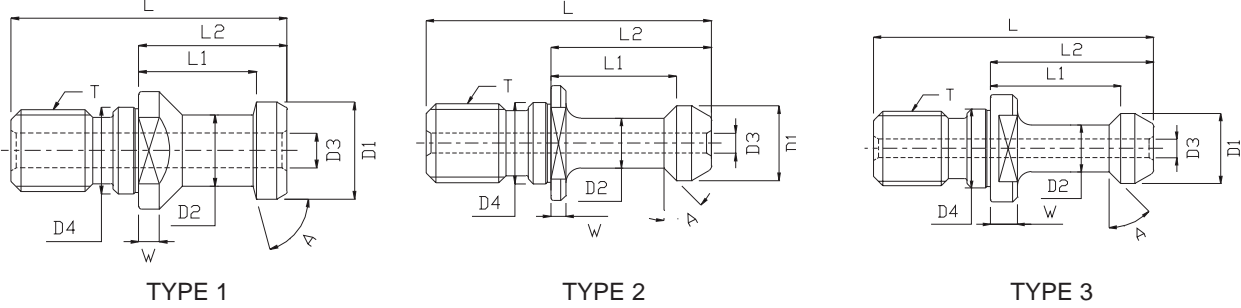
NT40-DBE	CV40 to NMTB40 Adapter
NT50-DBE	CV50 to NMTB50 Adapter

The drawbar extenders can be used on most mills to allow CV toolholders to be used in place of NMTB toolholders. They are not suitable for use with quick change spindles.

**RETENTION STUD LOG**

RETENTION STUD	MACHINE MAKE	MODEL	RETENTION STUD	MACHINE MAKE	MODEL

**SPECIAL RETENTION STUD REQUEST FORM**



**RETENTION STUD INFORMATION**

Machine Make:	_____	Machine Model:	_____
Stud Type:	_____	Spindle Size:	_____
"A"	_____	"T"	_____
"D1"	_____	"L"	_____
"D2"	_____	"L1"	_____
"L2"	_____	"W"	_____
"D3"	_____	"D4"	_____

FOR RETENTION STUDS NOT LISTED IN THE CATALOG, PLEASE COMPLETE ALL INFORMATION LISTED ABOVE AND FAX IT BACK TO OUR OFFICE AT (847) 550-9716 FOR A QUICK QUOTATION.