Rigibore Conversion Charts

(Metric)

For the Conversion from Rigibore to:
Madison
Microbore
Tenthset
Valenite
Rigibore Ltd

Tel: +44 (0)1736 755355
Fax: +44 (0)1736 756100
E-mail: mail@rigibore.com
Web: www.rigibore.com

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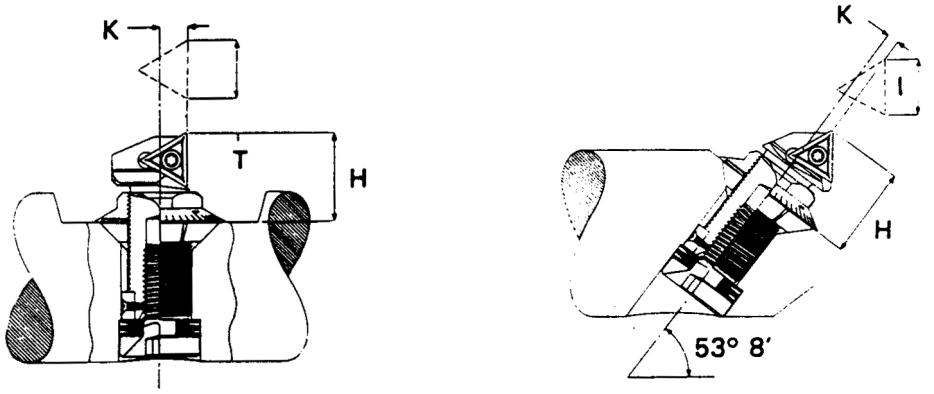
Microbore – Rigibore Dimensions K, l, H



The above dimensions (K, l and H) are essential when comparing our Rigibore Units to Microbore ones.

Some of these dimensions are the same on both Rigibore and Microbore and some differ to a greater or lesser degree. Where dimensions do vary, look at the application.

For example, Style 3 (ANG) and styles 6 and 7 (SQ) are variations on styles 2 and 5 respectively, but only for a longer cutting edge for facing applications.

Some users take styles 3, 6 and 7 for facing: others choose them for greater range (maximum bore) or for more regrinds per tool. It is, therefore, vital that you look at the application.

Rigibore/Microbore conversions – Brazed Microbore and Rigibore TCMM & TCMA

Size 2

Microbore-Brazed				**Rigibore**					
Style	H mm min height	l mm Cutting Edge	K mm Offset	Style of Rigibore Unit	H mm	l mm 06 TCMM	K mm	Approach Angle	Ang/Sq mounting
2A2	8.7	3.2	0.4	R2A2 TR2A2	9.4	6.6	1.35	90°	Ang – 53°8’
2B2	8.7	3.2	0.4	R2B2 TR2B2	9.4	6.6	1.35	90°	Ang – 53°8’
2A2L	8.7	4.0	–0.8	R2A2L TR2A2L	10.0	6.6	–1.50	90°	Ang – 53°8’
2B2L	8.7	4.0	–0.8	R2B2L TR2B2L	10.0	6.6	–1.50	90°	Ang – 53°8’
2A5	8.7	4.0	2.0	R2A5 TR2A5	9.4	6.6	2.00	90°	Sq – 90°
2B5	8.7	4.0	2.0	R2B5 TR2B5	9.4	6.6	2.00	90°	Sq – 90°
2A5L	8.7	4.0	1.2	R2A5L TR2A5L	9.4	6.6	2.00	75°	Sq – 90°
2B5L	8.7	4.0	1.2	R2B5L TR2B5L	9.4	6.6	2.00	75°	Sq – 90°
2A9	7.9	4.0						Plunge Facer	
2B9	7.9	4.0						Plunge Facer	
2A24	8.7	2.4	–0.8					45°	Ang – 53°8’
2B24	8.7	2.4	–0.8					45°	Ang – 53°8’
2A54	8.7	3.6	–0.8					45°	Sq – 90°
2B54	8.7	3.6	–0.8					45°	Sq – 90°

Note: opposite hand units are suffixed “-LH” (Left-Hand)

Rigibore/Microbore conversions – Brazed Microbore and Rigibore TCMM & TCMA

Size 3

Microbore-Brazed				**Rigibore**					
Style	H mm min height	l mm Cutting Edge	K mm Offset	Style of Rigibore Unit	H mm	l mm	K mm	Approach Angle	Ang/Sq mounting
3A2	11.1	3.6	0.8	R3A2/TR3A2 R3A2C/TR3A2C	13.45 11.1	9.0 6.3	0.8 0.2	90°	Ang – 53°8’
3B2	11.1	3.6	0.8	R3B2/TR3B2 R3B2C/TR3B2C R3B1/TR3B1	13.45 11.1 11.25	9.0 6.3 6.6	0.8 0.2 1.32	90°	Ang – 53°8’
3A2L	11.1	5.6	–1.6	R3A2L/TR3A2L	13.55	9.0	1.1	75°	Ang – 53°8’
3B2L	11.1	5.6	–1.6	R3B2L/TR3B2L	13.55	9.0	1.1	75°	Ang – 53°8’
3A5	11.1	5.6	2.4	R3A5/TR3A5 R3A5C/TR3A5C	12.3 11.1	9.0 6.3	3.0 4.0	90°	Sq – 90°
3B5	11.1	5.6	2.4	R3B5/TR3B5 R3B5C/TR3B5C	12.3 11.1	9.0 6.3	3.0 4.0	90°	Sq – 90°
3A5L	11.1	5.6	1.2	R3A5L/TR3A5L	12.3	9.0	2.00	75°	Sq – 90°
3B5L	11.1	5.6	1.2	R3B5L/TR3B5L	12.3	9.0	2.00	75°	Sq – 90°
3A7	18.3	12.7	2.8					90°	Sq – 90°
3B7	18.3	12.7	2.8					90°	Sq – 90°
3A9	9.5	5.6						Plunge Facer	
3B9	9.5	5.6						Plunge Facer	
3A24	11.1	3.2	–0.8					45°	Ang – 53°8’
3B24	11.1	3.2	–0.8					45°	Ang – 53°8’
3A54	11.1	4.4	–0.8					45°	Sq – 90°
3B54	11.1	4.4	–0.8					45°	Sq – 90°

Note: opposite hand units are suffixed “-LH” (Left-Hand)

Rigibore/Microbore conversions – Brazed Microbore and Rigibore TCMM & TCMA

Size 7

Microbore-Brazed				**Rigibore**					
Style	H mm min height	l mm Cutting Edge	K mm Offset	Style of Rigibore Unit	H mm	l mm	K mm	Approach Angle	Ang/Sq mounting
7A2	25.4	15.1	1.6	R7A2/TR7A2	25.55	15.25	–0.4	90°	Ang – 53°8’
7B2	25.4	15.1	1.6	R7B2/TR7B2	25.55	15.25	–0.4	90°	Ang – 53°8’
7A2L	25.4	15.1	–4.8	R7A2L/TR7A2L	23.4	15.25	–3.2	75°	Ang – 53°8’
7B2L	25.4	15.1	–4.8	R7B2L/TR7B2L	23.4	15.25	–3.2	75°	Ang – 53°8’
7A5	25.4	15.9	6.4	R7A5/TR7A5	25.5	15.25	8.35	90°	Sq – 90°
7B5	25.4	15.9	6.4	R7B5/TR7B5	25.5	15.25	8.35	90°	Sq – 90°
7A5L	25.4	15.9	3.6	R7A5L/TR7A5L	25.5	15.25	6.2	75°	Sq – 90°
7B5L	25.4	15.9	3.6	R7B5L/TR7B5L	25.5	15.25	6.2	75°	Sq – 90°
7A6	35.7	25.4	7.1					90°	Sq – 90°
7B6	35.7	25.4	7.1					90°	Sq – 90°
7A7	42.1	31.8	7.1					90°	Sq – 90°
7B7	42.1	31.8	7.1					90°	Sq – 90°
7A9	22.2	15.1						Plunge Facer	
7B9	22.2	15.1						Plunge Facer	
7A24	25.4	9.9	–3.2					45°	Ang – 53°8’
7B24	25.4	9.9	–3.2					45°	Ang – 53°8’
7A54	25.4	11.5	–1.6					45°	Sq – 90°
7B54	25.4	11.5	–1.6					45°	Sq – 90°
				R7F5/TR7F5	25.4	15.25	20.0	90°	Sq – 90°

Note: opposite hand units are suffixed “-LH” (Left-Hand)

Rigibore/Microbore conversions – Brazed Microbore and Rigibore TCMM & TCMA

Size 10

Microbore-Brazed				**Rigibore**					
Style	H mm min height	l mm Cutting Edge	K mm Offset	Style of Rigibore Unit	H mm	l mm	K mm	Approach Angle	Ang/Sq mounting
10A2	31.8	17.5	0.8	R10A2/TR10A2	31.7	15.25	–0.4	90°	Ang – 53°8’
10B2	31.8	17.5	0.8	R10B2/TR10B2	31.7	15.25	–0.4	90°	Ang – 53°8’
10A2L	31.8	19.1	–5.6	R10A2L TR10A2L	31.1	15.25	–0.9	75°	Ang – 53°8’
10B2L	31.8	19.1	–5.6	R10B2L TR10B2L	31.1	15.25	–0.9	75°	Ang – 53°8’
10A3	38.1	27.8	–6.4					90°	Ang – 53°8’
10B3	38.1	27.8	–6.4					90°	Ang – 53°8’
10A5	31.8	19.1	9.5	R10A5/TR10A5	31.8	15.25	9.5	90°	Sq – 90°
10B5	31.8	19.1	9.5	R10B5/TR10B5	31.8	15.25	9.5	90°	Sq – 90°
10A5L	31.8	19.1	4.8	R10A5L TR10A5L	31.8	15.25	4.8	75°	Sq – 90°
10B5L	31.8	19.1	4.8	R10B5L TR10B5L	31.8	15.25	4.8	75°	Sq – 90°
10A6	38.1	28.6	9.5					90°	Sq – 90°
10B6	38.1	28.6	9.5					90°	Sq – 90°
10A7	47.6	38.1	9.5					90°	Sq – 90°
10B7	47.6	38.1	9.5					90°	Sq – 90°
10A9	28.6	20.6						Plunge Facer	
10B9	28.6	20.6						Plunge Facer	
10A24	31.8	11.9	–3.2					45°	Ang – 53°8’
10B24	31.8	11.9	–3.2					45°	Ang – 53°8’
10A54	31.8	14.7	–1.6					45°	Sq – 90°
10B54	31.8	14.7	–1.6					45°	Sq – 90°
				R10F5 TR10F5	31.8	15.25	25.4	90°	Sq – 90°

Note: opposite hand units are suffixed “-LH” (Left-Hand)

Rigibore/Microbore conversions – Indexable Inserts

Sizes 3-10

DeVlieg Lock Pin/Clamp						Rigibore						
Size/Style	Insert		H mm	l mm	K mm	Size/Style	Insert		H mm	l mm	K mm	Mount & Approach
	Size	Style					Style	Size				
030 BA090 TN2C – 40	TNMM or TNMA	11	14.0	10.5	2.7	R3A2 R3B2	TCMM or TCMA	09	13.45	9.0	0.8	3 Ang – 90°
030 BA080 TN2C – 40			14.0	10.5	1.4	R3A2L R3B2L			13.55	9.0	1.2	3 Ang – 75°
030 BS090 TN2C – 50			13.5	10.5	9.4	R3A5 R3B5			12.3	9.0	3.0	3 Sq – 90°
030 BS090 TN2C – 40			13.5	10.5	7.1	R3A5L R3B5L			12.3	9.0	2.0	3 Sq – 75°
050 BA090 TN2E – 40	TNMM or TNMA	11	16.2	10.5	5.0	R5A2 R5B2	TCMM or TCMA	11	16.95	10.5	2.3	5 Ang – 90°
050 BA075 TN2E – 40			16.2	10.5	3.0	R5A2L R5B2L			16.55	10.5	1.3	5 Ang – 75°
050 BS090 TN2E – 50			17.0	10.5	15.0	R5A5 R5B5 R5F5			16.1 16.1	10.5 10.5	5.4 15.0	5 Sq – 90°
050 BS075 TN2E – 40			17.0	10.5	11.4	R5A5L R5B5L			16.1	10.5	3.2	5 Sq – 75°
070 BA090 TN3F – 80	TNMM or TNMA	16	26.4	15.25	5.6	R7A2 R7B2	TCMM or TCMA	16	23.4	15.25	–0.4	7 Ang – 90°
070 BA075 TN3F – 80			26.4	15.25	3.6	R7A2L R7B2L			23.4	15.25	–3.2	7 Ang – 75°
070 BS090 TN3F – 100			25.4	15.25	19.8	R7A5 R7B5 R7F5			25.5 25.4	15.25 15.25	8.35 20.0	7 Sq – 90°
070 BS075 TN3F – 100			25.4	15.25	15.75	R7A5L R7B5L			25.5	15.25	6.2	7 Sq – 75°
100 BA090 TN3F – 80 100 BA090 TN4F - 80	TNMM or TNMA	16 22	29.2 33.4	15.25 20.5	8.2 6.1	R10A2 R10B2	TCMM or TCMA	16	 31.7	15.25	–0.4	10 Ang – 90°
100 BA075 TN3F – 80		16	29.2	15.25	5.8	R10A2L R10B2L			31.1	15.25	–0.9	10 Ang – 75°
100 BS090 TN3F – 100 100 BS090 TN4F – 100		16 22	27.0 31.8	15.25 20.5	25.4 25.4	R10A5 R10B5 R10F5			31.8 31.8	15.25 15.25	9.5 15.4	10 Sq – 90°
0 BS075 TN3F – 100		16	27.0	15.25	20.06	R10A5L R10B5L			31.8	15.25	4.8	10 Sq – 75°

Note: DeVlieg Lock Pin/Clamp Units are of one length only – halfway between the ‘A’ and ‘B’ lengths of a Rigibore unit. When fitted to standard stock boring bars they are fitted to ‘A’ length holes, so Rigibore ‘A’ length units can be used. When the hole is produced to take a DeVlieg unit, Rigibore ‘B’ length units may be used.

Rigibore/Microbore conversions – Indexable Inserts

Sizes 3-10

DeVlieg Stellram					Rigibore					
Size/Style	Insert	H mm	l mm	K mm	Size/Style	Insert	H mm	l mm	K mm	Mount & Approach
3A2V	EPEA 06 & EPEX 06	13.0	6.3	0.2	R or TR 3A2C R or TR 3A2	TCMM 09 & CCMM 06	11.1 13.45	6.3 9.0	0.2 0.8	3 Ang – 90°
3B2V		13.0	6.3	0.2	R or TR 3B2C R or TR 3B2 R or TR 3B1		11.1 13.45 11.25	6.3 9.0 6.6	0.2 0.8 1.32	3 Ang – 90°
3A2LV 3B2LV		13.0	6.3		R or TR 3A2L R or TR 3B2L		13.55	9.0	1.1	3 Ang – 75°
3A5V		12.0	6.3	4.0	R or TR 3A5C R or TR 3A5		11.1 12.3	6.3 9.0	4.0 3.0	3 Sq – 90°
3B5V		12.0	6.3	4.0	R or TR 3B5C R or TR 3B5		11.1 12.3	6.3 9.0	4.0 4.0	3 Sq – 90°
3A5LV 3B5LV		12.0	6.3		R or TR 3A5L R or TR 3B5L		12.3	9.0	2.0	3 Sq – 75°
5A2V	EPEPMM 08, EPMA 08 & EPMX 08	16.0	8.3	1.2	R or TR 5A2C R or TR 5A2	TCMM 11 & CCMM 06	15.9 16.95	6.3 10.5	1.2 2.3	5 Ang – 90°
5B2V		16.0	8.3	1.2	R or TR 5B2C R or TR 5B2		15.9 16.95	6.3 10.5	1.2 2.3	5 Ang – 90°
5A2LV 5B2LV		16.0	8.3	–2.4	R or TR 5A2L R or TR 5B2L		16.55	10.5	1.3	5 Ang – 75°
5A5V		16.0	8.3	4.0	R or TR 5A5C R or TR 5A5		15.9 16.1	6.3 10.5	5.4 5.4	5 Sq – 90°
5B5V		16.0	8.3	4.0	R or TR 5B5C R or TR 5B5		15.9 16.1	6.3 10.5	5.4 5.4	5 Sq – 90°
5A5LV 5B5LV		16.0	8.3	2.8	R or TR 5A5L R or TR 5B5L		16.1	10.5	3.2	5 Sq – 90°
7A2V 7B2V	EPEPTCMM 16, TCMA 16 & TCMX 16	25.0	15.25	1.6	R or TR 7A2 R or TR 7B2	TCMM 16 & TCMA 16	25.55	15.25	–0.4	7 Ang – 90°
7A2LV 7B2LV		25.0	15.25	–4.8	R or TR 7A2L R or TR 7B2L		23.4	15.25	–3.2	7 Ang – 75°
7A5V 7B5V		25.0	15.25	6.3	R or TR 7A5 R or TR 7B5		25.5	15.25	8.35	7 Sq – 90°
7A5LV 7B5LV		25.0	15.25	3.6	R or TR 7A5L R or TR 7B5L		25.5	15.25	6.2	7 Sq – 75°
10A2V 10B2V		31.5	15.25	0.8	R or TR 10A2 R or TR 10B2		31.7	15.25	–0.4	10 Ang – 90°
10A2LV 10B2LV		31.5	15.25	–5.6	R or TR 10A2L R or TR 10B2L		31.1	15.25	–0.9	10 Ang – 75°
10A5V 10B5V		31.5	15.25	9.5	R or TR 10A5 R or TR 10B5		31.8	15.25	9.5	10 Sq – 90°
10A5LV 10B5LV		31.5	15.25	4.8	R or TR 10A5L R or TR 10B5L		31.8	15.25	4.8	10 Sq – 75°

Rigibore/Microbore conversions – Indexable Inserts

Sizes 5-10

NP Indexable					**Rigibore**						
Size/Style	Insert	H mm	l mm	K mm	R or TR Unit	Insert	H mm	l mm	K mm	Approach Angle	Ang/Sq Mounting
5A NP 2	DeVlieg-Kennametal Codes T221S/T221P (¼ I.C.)	16.00	9.90	0.84	5A2 5A2C	TCMM 11 & CCMM 06	16.95 15.90	10.5 6.3	2.3 1.2	90°	Ang – 53°8’
5B NP 2		16.00	9.90	–1.3	5A2L 5B2L		16.55	10.5	1.3	75°	Ang – 53°8’
5A NP 2L 5B NP 2L		16.00	9.90	–1.3	5A2L 5B2L		16.55	10.5	1.3	75°	Ang – 53°8’
5A NP 5		16.00	9.90	6.3	5A5 5A5C		16.10 15.90	10.5 6.3	5.4 5.4	90°	Sq – 90°
5B NP 5		16.00	9.90	6.3	5B5 5B5C		16.10 15.90	10.5 6.3	5.4 5.4	90°	Sq – 90°
5A NP 5L 5B NP 5L		16.00	9.90	4.0	5A5L 5B5L		16.10	10.5	3.2	75°	Sq – 90°
5A NP 9 5B NP 9		15.00	9.60							Plunge 0°	
5A NP 24 5B NP 24		16.00	9.90	–3.1						45°	Ang – 53°8’
5A NP 54 5B NP 54		16.00	9.90	–0.4						45°	Sq – 90°
7A NP 2 7B NP 2	DeVlieg-Kennametal Codes T321S/T321P (⅜ I.C.)	25.40	15.50	1.1	7A2 7B2	TCMM 16	25.50	15.25	–0.4	90°	Ang – 53°8’
7A NP 2L 7B NP 2L		23.60	15.50	–1.3	7A2L 7B2L		23.40	15.25	–3.2	75°	Ang – 53°8’
7A NP 5 7B NP 5		23.60	15.50	8.6	7A5 7B5		25.50	15.25	8.4	90°	Sq – 90°
7A NP 5L 7B NP 5L		23.60	15.50	5.5	7A5L 7B5L		25.50	15.25	6.2	75°	Sq – 90°
7A NP 9 7B NP 9		22.40	15.50							Plunge 0°	
7A NP 24 7B NP 24		22.90	15.50	–4.6						45°	Ang – 53°8’
7A NP 54 7B NP 54		23.6	15.50	–0.9						45°	Sq – 90°
10A NP 2 10B NP 2	DeVlieg-Kennametal Codes T431S/T431P (½ I.C.)	31.80	21.10	0.6	10A2 10B2	TCMM 16	31.80	15.25	–0.4	90°	Ang – 53°8’
10A NP 2L 10B NP 2L		29.50	21.10	–2.6	10A2L 10B2L		31.10	15.25	–0.9	75°	Ang – 53°8’
10A NP 5 10B NP 5		30.20	21.10	11.7	10A5 10B5		31.80	15.25	9.5	90°	Sq – 90°
10A NP 5L 10B NP 5L		30.20	21.10	7.5	10A5L 10B5L		31.80	15.25	4.8	75°	Sq – 90°
10A NP 9 10B NP 9		28.50	20.60							Plunge 0°	
10A NP 24 10B NP 24		29.50	21.10	–8.4						45°	Ang – 53°8’
10A NP 54 10B NP 54		30.20	21.10	–1.9						45°	Sq – 90°

Rigibore/Microbore conversions – Indexable Inserts

Sizes 3-10

Microbore Seco					**Rigibore**					
Size/Style	Insert	H mm	l mm	K mm	R or TR Unit	Insert	H mm	l mm	K mm	Mount & Approach
M3A2 C06 – 40S	CCMM06	11.1	6.3	0.2	3A2C 3A2	CCMM06 TCMM09	11.1 13.45	6.3 9.0	0.2 0.8	3 Ang – 90°
M3B2 C06 – 40S	CCMM06	11.1	6.3	0.2	3B2C 3B2 3B1	CCMM06 TCMM09 TCMM06	11.1 13.45 11.25	6.3 9.0 6.6	0.2 0.8 1.32	3 Ang – 90°
M3A5 C06 – 50S	CCMM06	11.1	6.3	4.0	3A5C 3A5	CCMM06 TCMM09	11.1 12.3	6.3 9.0	4.0 3.0	3 Sq – 90°
M3B5 C06 – 50S	CCMM06	11.1	6.3	4.0	3B5C 3B5	CCMM06 TCMM09	11.1 12.3	6.3 9.0	4.0 3.0	3 Sq – 90°
M5A2 C06 – 40S	CCMM06	15.9	6.3	1.2	5A2C 5A2	CCMM06 TCMM11	15.9 16.95	6.3 10.5	1.2 2.3	5 Ang – 90°
M5B2 C06 – 40S	CCMM06	15.9	6.3	1.2	5B2C 5B2	CCMM06 TCMM11	15.9 16.95	6.3 10.5	1.2 2.3	5 Ang – 90°
M5A5 C06 – 50S	CCMM06	15.9	6.3	5.4	5A5C 5A5	CCMM06 TCMM11	15.9 16.1	6.3 10.5	5.4 5.4	5 Sq – 90°
M5B5 C06 – 50S	CCMM06	15.9	6.3	5.4	5B5C 5B5	CCMM06 TCMM11	15.9 16.1	6.3 10.5	5.4 5.4	5 Sq – 90°
M7A2 C09 – 80S	CCMM09	25.4	9.6	1.6	7A2	TCMM16	25.55	15.25	–0.4	7 Ang – 90°
M7B2 C09 – 80S	CCMM09	25.4	9.6	1.6	7B2	TCMM16	25.55	15.25	–0.4	7 Ang – 90°
M7A5 C09 – 100S	CCMM09	25.4	9.6	6.4	7A5	TCMM16	25.5	15.25	8.35	7 Sq – 90°
M7B5 C09 – 100S	CCMM09	25.4	9.6	6.4	7B5	TCMM16	25.5	15.25	8.35	7 Sq – 90°
M10A2 C12 – 80S	CCMM12	31.8	12.6		10A2	TCMM16	31.7	15.25	–0.4	10 Ang – 90°
M10B2 C12 – 80S	CCMM12	31.8	12.6		10B2	TCMM16	31.7	15.25	–0.4	10 Ang – 90°
M10A5 C12 – 100S	CCMM12	31.8	12.6		10A5	TCMM16	31.8	15.25	9.5	10 Sq – 90°
M10B5 C12 – 100S	CCMM12	31.8	12.6		10B5	TCMM16	31.8	15.25	9.5	10 Sq – 90°

Note: Opposite Hand units are suffixed “-LH” (Left Hand) and Rigibore units may be Standard (R), or Top-adjusting (TR).

Rigibore/Microbore conversions – Indexable Inserts

Sizes 3-10

Kendex screw-on					**Rigibore**						
Size/Style	Insert	H mm	l mm	K mm	R or TR Unit	Insert	H mm	l mm	K mm	Approach Angle	Ang/Sq Mounting
3A2S	DeVlieg-Kennametal Codes TX/TN21 – (5/32 I.C.)	11.10	5.95	0.00	R3A2 R3A2C	TCMM 09 & CCMM 06	13.45 11.10	9.0 6.3	0.80 0.20	90°	Ang – 53°8’
3B2S		11.10	5.95	0.00	R3B2 R3B2C R3B1		13.45 11.10 11.25	9.0 6.3 6.6	0.80 0.20 1.32	90°	Ang – 53°8’
3A2LS 3B2LS		11.10	5.95	–1.60	R3A2L R3B2L		13.55	9.0	1.10	75°	Ang – 53°8’
3A5S		11.10	5.95	3.60	R3A5 R3A5C		12.30 11.10	9.0 6.3	3.00 4.00	90°	Sq – 90°
3B5S		11.10	5.95	3.60	R3B5 R3B5C		12.30 11.10	9.0 6.3	3.00 4.00	90°	Sq – 90°
3A5LS 3B5LS		11.10	5.95	2.00	R3A5L R3B5L		12.30	9.0	2.00	75°	Sq – 90°
5A2S	DeVlieg-Kennametal Codes TX/TN/TP41 – (1/4 I.C.)	15.90	9.50	–1.20	5A2 5A2C	TCMM 11 & CCMM 06	16.95 15.90	10.5 6.3	2.30 1.20	90°	Ang – 53°8’
5B2S		15.90	9.50	–1.20	5B2 5B2C		16.95 15.90	10.5 6.3	2.30 1.20	90°	Ang – 53°8’
5A2LS 5B2LS		15.90	9.50	–2.40	5A2L 5B2L		16.55	10.5	1.30	75°	Ang – 53°8’
5A5S		15.90	9.50	4.00	5A5 5A5C		16.10 15.90	10.5 6.3	5.40 5.40	90°	Sq – 90°
5B5S		15.90	9.50	4.00	5B5 5B5C		16.10 15.90	10.5 6.3	5.40 5.40	90°	Sq – 90°
5A5LS 5B5LS		15.90	9.50	2.80	5A5L 5B5L		16.10	10.5	3.20	75°	Sq – 90°
7A2S 7B2S	DeVlieg-Kennametal Codes TX/TN/TP62 – (3/8 I.C.)	25.40	14.30	–1.60	7A2 7B2	TCMM 16	25.50	15.25	–0.40	90°	Ang – 53°8’
7A2LS 7B2LS		25.40	14.30	–4.70	7A2L 7B2L		23.40	15.25	–3.20	75°	Ang – 53°8’
7A5S 7B5S		25.40	14.30	0.63	7A5S 7B5S		25.40	15.25	8.35	90°	Sq – 90°
7A5LS 7B5LS		25.40	14.30	3.60	7A5L 7B5L		25.50	15.25	6.20	75°	Sq – 90°
10A2S 10B2S		31.80	14.30	–0.80	10A2 10B2		31.80	15.25	–0.40	90°	Ang – 53°8’
10A2LS 10B2LS		31.80	14.30	–5.50	10A2L 10B2L		31.10	15.25	–0.90	75°	Ang – 53°8’
10A5S 10B5S		31.80	14.30	9.50	10A5 10B5		31.80	15.25	9.50	90°	Sq – 90°
10A5LS 10B5LS		31.80	14.30	14.30	10A5L 10B5L		31.80	15.25	4.80	75°	Sq – 90°

Rigibore/Microbore conversions – Indexable Inserts

Sizes 7-10

Kendex clamp-on					**Rigibore**						
Size & Style	Insert	H mm Min Height	l mm Insert Edge	K mm Offset	Size & Style R/TR	Insert	H mm Min Height	l mm Insert Edge	K mm Offset	Approach Angle	Ang/Sq Mounting
7A2C	TX/TN/TP 41(¼ I.C.) DeVlieg-Kennametal Codes	27.8	9.5	–1.6	R7A2	TCMM 16	25.5	15.25	–0.4	90°	Ang – 53°8’
7B2C		27.8	9.5	–1.6	R7B2		25.5	15.25	–0.4	90°	Ang – 53°8’
7A2LC		27.8	9.5	–4.7	R7A2L		23.4	15.25	–3.2	75°	Ang – 53°8’
7B2LC		27.8	9.5	–4.7	R7B2L		23.4	15.25	–3.2	75°	Ang – 53°8’
7A5C		27.8	9.5	6.3	R7A5		25.5	15.25	8.35	90°	Sq – 90°
7B5C		27.8	9.5	6.3	R7B5		25.5	15.25	8.35	90°	Sq – 90°
7A5LC		27.8	9.5	3.6	R7A5L		25.5	15.25	6.2	75°	Sq – 90°
7B5LC		27.8	9.5	3.6	R7B5L		25.5	15.25	6.2	75°	Sq – 90°
10A2C	TXG/TNG/TPG – 322(⅜I.C.) DeVlieg-Kennametal Codes	33.3	14.3	–1.6	R10A2		31.8	15.25	–0.4	90°	Ang – 53°8’
10B2C		33.3	14.3	–1.6	R10B2		31.8	15.25	–0.4	90°	Ang – 53°8’
10A2LC		33.3	14.3	–4.7	R10A2L		31.1	15.25	–0.9	75°	Ang – 53°8’
10B2LC		33.3	14.3	–4.7	R10B2L		31.1	15.25	–0.9	75°	Ang – 53°8’
10A5C		33.3	14.3	6.3	R10A5		31.8	15.25	9.5	90°	Sq – 90°
10B5C		33.3	14.3	6.3	R10B5		31.8	15.25	9.5	90°	Sq – 90°
10A5LC		33.3	14.3	3.6	R10A5L		31.8	15.25	4.8	75°	Sq – 90°
10B5LC		33.3	14.3	3.6	R10B5L		31.8	15.25	4.8	75°	Sq – 90°

Note: Rigibore Units may be standard (R) or Top-adjusting (TR).

Conversions from Microbore

Notes:

1.)For the difference in dimensions of H (Minimum Height), l (Insert Edge), and K (Offset), please refer to the notes on page 1.
2.)Apart from conversions from DeVlieg Lock Pin/Clamp (Negative Rake) to Rigibore (nearest equivalent – positive or zero degrees with TCMA) all Rigibore units may be standard or Top-adjusting.
3.)Some Microbore units may be prefixed with the letter ‘M’ which indicated a metric unit.
4.)All left hand or opposite hand units are suffixed with the letter “-LH”.

METRIC (Bushed) FINE BORING UNITS

Rigibore MBTR			Tenthset		Valenite		
Unit		Hole	Unit	Hole	Unit	Cartridge	Hole
MBTR2B2	Ang 90°	2 Ang	82.336-102-1	3 Ang	M-BUAA	M-AHACS	A-Ang
MBTR2B2L	Ang 75°		82.336-202-1		M-BUAA	M-ASACS (85°)	
MBTR2B5	Sq 90°	2 Sq	82.336-302-1	3 Str	M-BUAV	M-AHVCS	A-Vert
MBTR2B5L	Sq 75°		82.336-402-1		M-BUAV	M-ASVCS (85°)	
MBTR3B1	Ang 90°	3		4	M-BUBA	M-BHACS	B
MBTR3B2	Ang 90°		82.436-102-1		M-BUBA	M-BHACS	
MBTR3B2L	Ang 75°		82.436-202-1		M-BUBA	M-BSACS (85°)	
MBTR3B5	Sq 90°		82.436-302-1		M-BUBV	M-BHVCS	
MBTR3B5L	Sq 75°		82.436-402-1		M-BUBV	M-BSVCS (85°)	
MBTR5B2	Ang 90°	5	82.536-102-1	5	M-BUCA	M-CHACS M-CLAC-1	C
MBTR5B2L	Ang 75°		82.536-202-1				
MBTR5B5	Sq 90°		82.536-302-1		M-BUCA	M-CSACS (85°) M-CLAC-2	
MBTR5B5L	Sq 75°		82.536-402-1		M-BUCV	M-CHVCS M-CLVC-1	
					M-BUCV	M-CSVCS (85°) M-CLVC-2	
MBTR7B2	Ang 90°	7	82.736-102-1	7	M-BUEA	M-EHACS M-ELAC-1	E
MBTR7B2L	Ang 75°		82.736-202-1				
MBTR7B5	Sq 90°		82.736-302-1		M-BUEA	M-ESACS (85°) M-ELAC-2	
MBTR7B5L	Sq 75°		82.736-402-1		M-BUEV	M-EHVCS M-ELVC-1	
					M-BUEV	M-ESVCS (85°) M-ELVC-2	
MBTR10B2	Ang 90°	10	82.036-102-1	10	M-BUGA	M-GHACS M-GLAC-1	G
MBTR10B2L	Ang 75°		82.036-202-1				
MBTR10B5	Sq 90°		82.036-302-1		M-BUGA	M-GSACS (85°) M-GLAC-2	
MBTR10B5L	Sq 75°		82.036-402-1				

Conversion of Tenthset to Rigibore

Tenthset (Erickson/Nikken) mountings are of two types:

1.) As a cartridge fitted into a cartridge hole machined into the bar.
2.) As a bushed unit fitted in the bushed hole, adopted as a standard by Valenite, Erickson, Madison, Rigibore and so on.

The Rigibore 'BTR' and 'MBTR' bushed units are directly interchangeable with Tenthset bushings, but the Rigibore 'R' and 'TR' units are **NOT** interchangeable with Tenthset standard cartridges.

It is possible to modify a Tenthset cartridge hole to accept a Rigibore unit with a very small loss of rigidity and a small reduction in maximum tool extension.

There are three essential modifications and one optional one:

1.) To produce an accurate 90° cone for the collet seating (due to the design of the Tenthset cartridge hole it is possible to produce a cone which mates with a third to a half of the Rigibore collet – which in application causes only slightly loss of rigidity).
2.) To produce a keyway through the hole, directly opposite the existing Tenthset keyway.
3.) To produce a back counterbore to accept the Rigibore bolt (although this feature may already exist).
4.) The optional modification is to produce a flat to stamp a graduation mark with. This is essential for Vernier graduation stamping, though for single marks it is possible to mark a line near the existing screw-hole.

Dimensional data for these modifications can be found on pages 47 and 48 of the standard Rigibore catalogue.

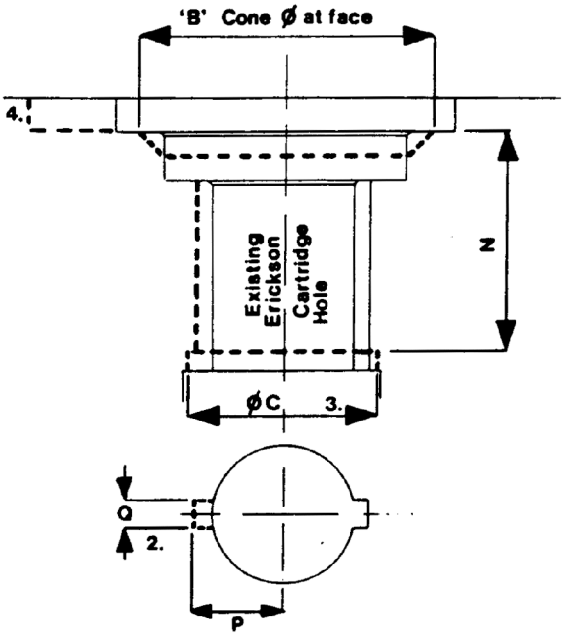
There are often factors which can adversely affect a successful modification so each application should be carefully assessed with due regard to the range required, the condition of the existing hole, the accessibility of the hole and so on.

It should be noted that the conversion does not preclude the reversion to Tenthset if required, and therefore endows the hole with dual capability.

Given normal, straight-line accessibility to back counterbore and broach these modifications are easily made and will be quoted on request.

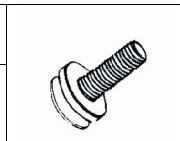
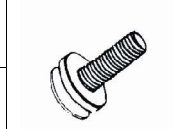
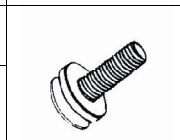
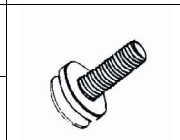
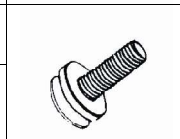
Modification to Erickson Tenthset cartridge hole to accept Rigibore units

1.) Cone to diameter 'B' (see Rigibore standard hole dimensions).
2.) Machine (broach) keyway
3.) Machine back counterbore (if not already in existence).
4.) Remove portion of the existing top face (this is only to allow the stamping of a graduation mark in the space provided).



R to TR Conversions Chart

Conversion of Standard Units to Top-adjusting Units

From	To	Screw and Washer		Adj. Spring Stack		Collet		Collet Spring	
R2A	TR2A	R23AT		R29					
R2B	TR2B	R23BT							
R3A	TR3A	R33AT		R39		R32T			
R3B	TR3B	R33BT							
R5A	TR5A	R53AT		R59		R52T		R55T	
R5B	TR5B	R53BT							
R7A	TR7A	R73AT		R79		R72T		R75T	
R7B	TR7B	R73BT							
R10A	TR10A	R103AT		R109		R102T			
R10B	TR10B	R103BT							