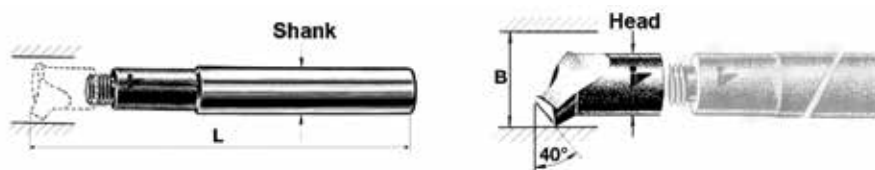


Boring Bars – Boring & Chamfering



High Speed Steel & Carbide

2 Piece Style ASB



Head and shank sold separately

Tool No.	B Minimum Bore (mm)	S Shank Diameter (mm)	HSS Head		Carbide Head		Shank Code
			L Length (mm)	Code	L Length (mm)	Code	
3	17	10	–	–	–	–	500202
3	17	12	200	500007	200	500034	500203
4	21	13	230	500008	230	500035	500204
5	24	15	260	500009	260	500036	500205
6	28	17	280	500010	280	500037	500206
7	31	19	310	500011	310	500038	500207
8	34	20	330	500012	330	500039	500208
9	37	22	360	500013	360	500040	500209
10	42	25	390	500014	390	500041	500210
11	50	30	430	500015	430	500042	500211
12	60	35	500	500016	500	500043	500212

Boring Bars – Boring & Facing



High Speed Steel & Carbide

Single Piece Style ECS



Tool No.	B Minimum Bore (mm)	S Shank Diameter (mm)	HSS Regular Length		HSS Long Length		Carbide	
			L Length (mm)	Code	L Length (mm)	Code	L Length (mm)	Code
0000	3.5	8	45	500051	52	500070	45	500078
000	4.5	8	49	500052	58	500071	49	500079
00	5.5	8	52	500053	64	500072	64	500080
0	7	8	56	500054	69	500073	69	500081
1	11	8	65	500055	82	500074	82	500082
2	13	8	72	500056	100	500075	72	500083

Boring Bars – Boring & Facing (continued) High Speed Steel & Carbide



2 Piece Style ECS



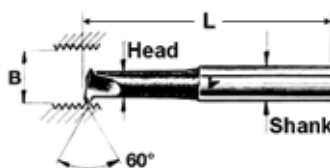
Head and shank sold separately

Tool No.	B Minimum Bore (mm)	S Shank Diameter (mm)	HSS Head		Carbide Head		Shank Code
			L Length (mm)	Code	L Length (mm)	Code	
3	17	10	–	–	–	–	500202
3	17	12	–	–	–	–	500203
4	21	13	230	500058	230	500085	500204
5	24	15	260	500059	260	500086	500205
6	28	17	280	500060	280	500087	500206
7	31	19	310	500061	310	500088	500207
8	34	20	330	500062	330	500089	500208
9	37	22	360	500063	360	500090	500209
10	42	25	390	500064	390	500091	500210
11	50	30	430	500065	430	500092	500211
12	60	35	500	500066	500	500093	500212

Threading Bars – 60° Threading High Speed Steel & Carbide



Single Piece Style GWS



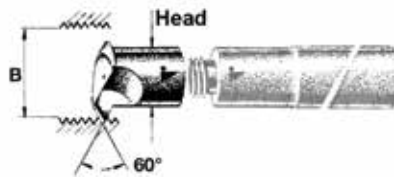
Tool No.	B Minimum Bore (mm)	S Shank Diameter (mm)	HSS Regular Length		HSS Long Length		Carbide	
			L Length (mm)	Code	L Length (mm)	Code	L Length (mm)	Code
000	5	8	46	500102	59	500122	46	500129
00	6.5	8	50	500103	64	500123	50	500130
0	9	8	52	500104	–	–	64	500131
1	11	8	56	500105	70	500124	70	500132
2	13	8	64	500106	80	500125	80	500133

Threading Bars – 60° Threading (continued)



High Speed Steel & Carbide

2 Piece Style GWS



Head and shank sold separately

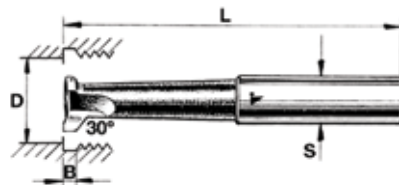
Tool No.	B Minimum Bore (mm)	S Shank Diameter (mm)	HSS Head		Carbide Head		Shank
			L Length (mm)	Code	L Length (mm)	Code	Code
3	17	10	—	—	—	—	500202
3	17	12	—	—	—	—	500203
4	21	13	230	500108	230	500135	500204
5	24	15	260	500109	260	500136	500205
6	28	17	280	500110	280	500137	500206
7	31	19	310	500111	310	500138	500207
8	34	20	330	500112	330	500139	500208
9	37	22	360	500113	360	500140	500209
10	42	25	390	500114	390	500141	500210
11	50	30	430	500115	430	500142	500211

Grooving Bars – Thread Relieving Tools



High Speed Steel

Single Piece Style GRS



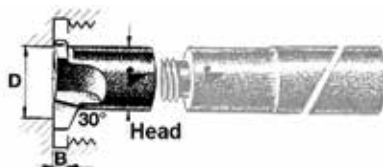
Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Code	Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Code
00	6	1.5	8	50	500173	1	11	2	8	55	500175
0	8	1.8	8	50	500174	2	14	2	8	64	500176

Grooving Bars – Thread Relieving Tools *(continued)*



High Speed Steel

2 Piece Style GRS



Head and shank sold separately

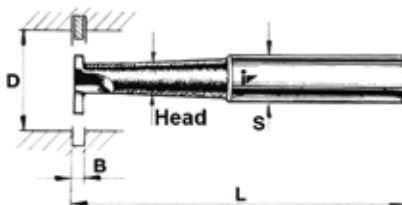
Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Head	Shank
					Code	Code
3	17	2.5	10	100	500177	500202
4	21	2.7	13	230	500178	500204
5	24	3	15	260	500179	500205
6	28	3.5	17	280	500180	500206
7	31	4	19	310	500181	500207
8	34	4.5	20	330	500182	500208
10	42	5	25	390	500184	500210
11	50	5.5	30	430	500185	500211

Grooving Bars – Circlip Grooving Tools



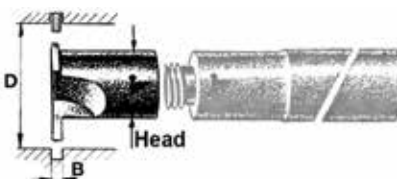
High Speed Steel

Single Piece Style SEN



Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Code	Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Code
0	8	0.9	8	52	500197	1	10	1.1	8	55	500192

2 Piece Style SEN



Head and shank sold separately

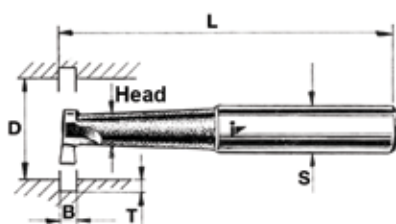
Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	S Shank Diameter (mm)	L Length (mm)	Head	Shank
					Code	Code
3	17	1	10	100	500193	500202
4	23	1.2	13	230	500194	500204
6	34	1.5	17	280	500195	500206
8	50	2	20	330	500196	500208

Grooving Bars – Groove Finishing Tools



High Speed Steel

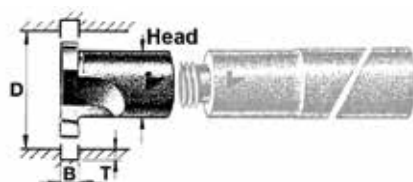
Single Piece Style HAS



Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	T Groove Depth (mm)	S Shank Diameter (mm)	L Length (mm)	Code
2	17	3.0	4	10	80	500186

Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	T Groove Depth (mm)	S Shank Diameter (mm)	L Length (mm)	Code
3	21	3.5	6	10	80	500187

2 Piece Style HAS



Head and shank sold separately

Tool No.	D Minimum Bore (mm)	B Groove Width (mm)	T Groove Depth (mm)	S Shank Diameter (mm)	L Length (mm)	Head	Shank
						Code	Code
4	25	4	7	13	230	500188	500204
6	34	5	10	17	280	500189	500206
8	40	6.5	11.5	20	330	500190	500208
10	48	8	13	25	390	500191	500210

Boring Bar Holders

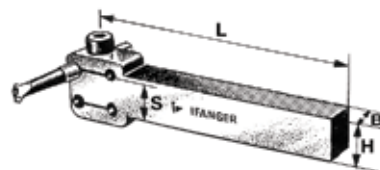


Series KG1



Model	Shank Size (mm)	Bore Size (mm)	Code
KG1	16 x 16 x 125	8/10	500230
KG1-A	12 x 12 x 100	8	500231
KG1-B	14 x 10 x 100	8	500232

Series IDH



Model	Shank Size H x B x L (mm)	S (mm)	Bore Size (mm)	Code
IDH-A	13.2 x 21 x 150	13	8/10	500233
IDH-B	25.0 x 22 x 175	23	8/10	500234

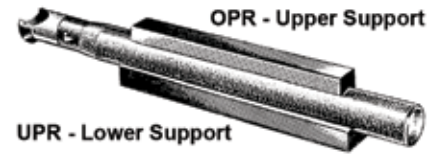
Boring Bar Holders (continued)



Series IDH



Upper/Lower Support



Model	Shank Size H x B x L (mm)	Bore Size (mm)	Code
IDH-C	20 x 10 x 100	8	500235

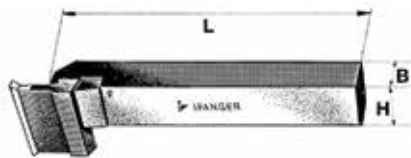
For B Bar Shank Diameter (mm)	OPR – Upper Support		UPR – Lower Support	
	Size (mm)	Code	Size (mm)	Code
8	8 x 10 x 50	500236	8 x 10 x 50	500239
10 - 20	8 x 14 x 100	500237	12 x 22 x 130	500240
20 - 30	8 x 14 x 150	500238	20 x 25 x 180	500241

Grooving Tools & Blades

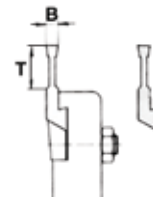


High Speed Steel

Shanks



Blades



Tool No.	Size H x B x L (mm)	Code
1	16 x 12 x 110	500351
2	20 x 15 x 140	500352
3	25 x 18 x 160	500353
4	30 x 21 x 180	500354
5	36 x 25 x 200	500355

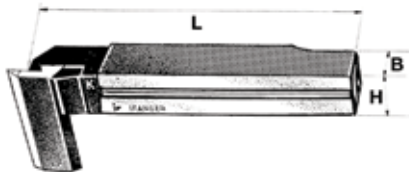
For Tool No.	B (mm)	Regular Length		Long Length	
		T (mm)	Code	T (mm)	Code
1	3	11	500361	16	500371
2	3.5	14	500362	19	500372
3	4	17	500363	24	500373
4	4.5	23.5	500364	33.5	500374
5	5.5	30	500365	40	500375

Threading Tools & Blades

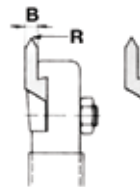


High Speed Steel & Carbide

Shanks – Thread at 60°



Blades



Tool No.	Size H x B x L (mm)	Code
0	16 x 12 x 100	500300
1	18 x 15 x 110	500301
2	20 x 18 x 140	500302
3	25 x 22 x 160	500303
4	32 x 25 x 180	500304
5	36 x 28 x 200	500305

For Tool No.	HSS Regular Width			Carbide Regular Width		HSS Extra Width		
	B (mm)	R (mm)	Code	B (mm)	Code	B (mm)	R (mm)	Code
1	2.5	0.07	500310	–	–	3.5	0.3	500320
2	3	0.1	500312	3.5	500332	4.5	0.35	500322
3	3.5	0.12	500313	4.5	500333	5.5	0.45	500323
4	4.5	0.2	500314	5.5	500334	6.5	0.6	500324
5	5.5	0.2	500315	6.5	500335	8.5	0.75	500325



Boring Bar Sets

Cobalt

Shank Diameter (Inch)	No. of Bars	Minimum Bore (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code
3/8	8	3/16 – 3/8	9/16 – 1-7/8	1-13/16 – 3-1/8	513137
1/2	10	1/4 – 1/2	3/4 – 2-1/2	2-1/8 – 3-7/8	513150
5/8	10	3/8 – 5/8	1-1/8 – 3-1/8	2-5/8 – 4-5/8	513162
3/4	14	3/8 – 3/4	1-1/8 – 3-3/4	2-7/8 – 5-1/2	513175

Boring Bars with Precision Ground Shanks

Alloy Steel – Carbide Tipped



- High quality alloy steel for greater rigidity
- Offset taper to provide greater rigidity at cutting point

3/8" Shank – C6 for Steel

Min. Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code	Min. Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code
5/16	3/4	2	617025	3/8	1-13/32	2-21/32	617029
5/16	1-1/8	2-3/8	617026	3/8	1-7/8	3-1/8	617030
5/16	1-1/2	2-3/4	617027	7/16	1-1/8	2-3/8	617031
3/8	1-15/16	2-3/16	617028	7/16	1-11/16	3-15/16	617032
				7/16	2-1/4	3-1/2	617033

1/2" Shank – C6 for Steel

Min. Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code	Min. Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	Code
5/16	3/4	2-1/4	617043	7/16	1-11/16	3-3/16	617047
5/16	1-1/8	2-5/8	617044	7/16	2-1/4	3-3/4	617048
5/16	1-1/2	3	617045	9/16	1-1/2	3	617049
7/16	1-1/8	2-5/8	617046	9/16	2-1/4	3-3/4	617050
				9/16	3	4-1/2	617051

5/8" Shank

C2 for Non-Ferrous – C6 for Steel

Minimum Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	C2	C6
			Code	Code
5/16	3/4	2-1/4	617052	617064
5/16	1-1/8	2-5/8	617053	617065
5/16	1-1/2	3	617054	617066
7/16	1-1/8	2-5/8	617055	617067
7/16	1-11/16	3-3/16	617056	617068
7/16	2-1/4	3-3/4	617057	617069
9/16	1-1/2	3	617058	617070
9/16	2-1/4	3-3/4	617059	617071
9/16	3	4-1/2	617060	617072
11/16	1-7/8	3-3/8	617061	617073
11/16	2-13/16	4-3/16	617062	617074
11/16	3-3/4	5-1/4	617063	617075

3/4" Shank

C2 for Non-Ferrous – C6 for Steel

Minimum Diameter (Inch)	Length of Cut (Inch)	Overall Length (Inch)	C2	C6
			Code	Code
7/16	1-1/8	3-1/8	617076	617088
7/16	1-11/16	3-11/16	617077	617089
7/16	2-1/4	4-1/4	617078	617090
9/16	1-1/2	3-1/2	617079	617091
9/16	2-1/4	4-1/4	617080	617092
9/16	3	5	617081	617093
11/16	1-7/8	3-7/8	617082	617094
11/16	2-13/16	4-13/16	617083	617095
11/16	3-3/4	5-3/4	617084	617096
13/16	2-1/4	4-1/4	617085	617097
13/16	3-3/8	5-3/8	617086	617098
13/16	4-1/2	6-1/2	617087	617099



Boring Bar Sets

Carbide Tipped

Shank Diameter (Inch)	No. of Pieces	Overall Length (Inch)	Minimum Bore (Inch)	Bore Depth (Inch)	Code
3/8	9	2 – 3-1/2	5/16 – 7/16	3/4 – 2-1/4	510405
1/2	9	2-1/4 – 4-1/2	5/16 – 9/16	3/4 – 3	510406
5/8	12	2-1/4 – 5-1/4	5/16 – 11/16	3/4 – 3-3/4	510407
3/4	12	3-1/8 – 6-1/2	7/16 – 13-16	1-1/8 – 4-1/2	510408
1	5	4 – 9-1/2	9/16 – 1-5/8	1-3/4 – 7-1/2	510409

Miniature Bores

Solid Carbide Stems with Steel Shanks



3/8" Shank

1/2" Shank

Minimum Bore (Inch)	Bore Depth (Inch)	Overall Length (Inch)	Code	Minimum Bore (Inch)	Bore Depth (Inch)	Overall Length (Inch)	Code
1/16	5/16	1-9/16	606250	1/16	5/16	1-13/16	606256
3/32	15/32	1-23/32	606251	3/32	15/32	1-15/16	606257
1/8	5/8	1-7/8	606252	1/8	5/8	2-1/8	606258
5/32	25/32	2-1/32	606253	5/32	25/32	2-1/4	606259
3/16	15/16	2-3/16	606254	3/16	15/16	2-7/16	606260
1/4	1-1/4	2-1/2	606255	1/4	1-1/4	2-13/16	606261

Boring Bars – Tool Bit Mounted

Single & Double Ended – 45° & 90°

- The tool bits are firmly held in place by a set screw
- These popular boring bars have precision broached holes that accept standard high speed, carbide, or stellite tool bits

Single End – 45°



Single End – 90°



Bar Diameter (Inch)	Overall Length (Inch)	Tool Bit (Inch)	Code	Bar Diameter (Inch)	Overall Length (Inch)	Tool Bit (Inch)	Code
3/8	3	3/16 sq.	513270	3/8	3	1/8 sq.	513280
1/2	4	3/16 sq.	513271	1/2	4	3/16 sq.	513281
5/8	5	1/4 sq.	513272	5/8	5	1/4 sq.	513282
3/4	5	1/4 sq.	513273	3/4	5	1/4 sq.	513283
3/4	7	1/4 sq.	513274	3/4	7	1/4 sq.	513284
1	8	5/16 sq.	513275	1	8	5/16 sq.	513285

Double End – 45° & 90°



Double End – 45° & 90° – 5 Piece Set



Bar Diameter (Inch)	Overall Length (Inch)	Tool Bit (Inch)	Code	Set Includes...	Code
3/8	6	3/16 sq.	513260	513260	513268
1/2	8	3/16 sq.	513261	513261	
5/8	10	1/4 sq.	513262	513262	
3/4	12	1/4 sq.	513263	513263	
1	16	5/16 sq.	513264	513264	
1-1/2	18	1/2 sq.	513266		