



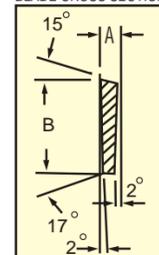
13 PARTING OFF BLADES HIGH SPEED STEEL

MADE FROM FINEST QUALITY
SELECTED HIGH SPEED STEEL

AVAILABLE IN TWO GRADES:

- MADE FROM FINEST QUALITY SELECTED HIGH SPEED STEEL
- PB-1X GRADE (QUALITY M2)
- &
- PB-2X GRADE (QUALITY M35)

BLADE CROSS SECTION



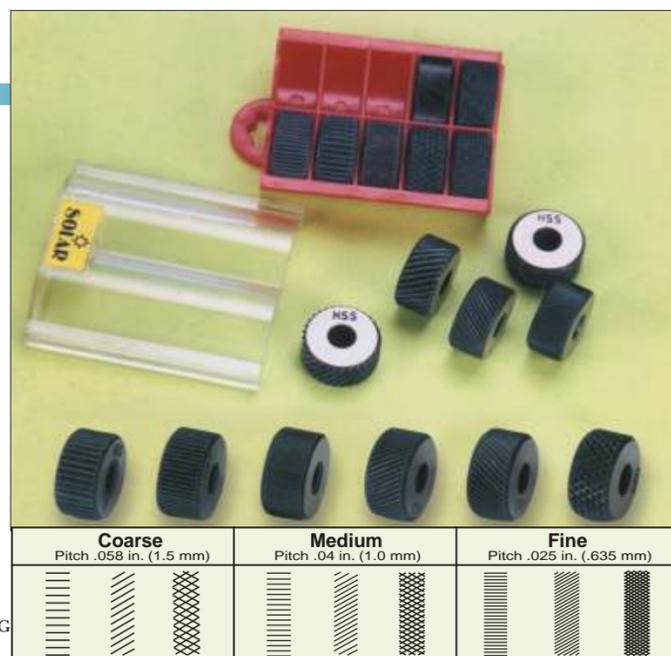
CAT. NO.		NOMINAL SIZE				OVERALL LENGTH		UNIT OF PACK (PIECES)
PB-1 X	PB-2 X	THICKNESS (A)		WIDTH (B)		INCHES	mm	
(6-5-2)	(5% COBALT)	INCHES	mm	INCHES	mm			
PB-1X-A	PB-2X-A	1/16	1.5	5/16	7.9	3 1/2	89	50
PB-1X-B	PB-2X-B	3/32	2.3	1/2	12.7	4	101	50
PB-1X-C	PB-2X-C	3/32	2.3	5/8	15.8	5	127	50
PB-1X-D	PB-2X-D	1/8	3.1	3/4	19	6	152	50
PB-1X-E	PB-2X-E	1/8	3.1	7/8	22.2	6	152	10
PB-1X-F	PB-2X-F	3/16	4.7	1	25.4	6	152	10
PB-1X-G	PB-2X-G	3/16	4.7	1 1/8	28.5	6	152	10

14 KNURLS - SPARE HIGH SPEED STEEL

- MANUFACTURED OF FINEST QUALITY HIGH SPEED STEEL
- PRECISION MACHINE CUT KNURLS
- SHAPES AVAILABLE : STRAIGHT, SPIRAL (LEFT OR RIGHT) & CHECKERED
- PITCHES AVAILABLE : COARSE (16 TPI), MEDIUM (24 TPI) & FINE (40 TPI)

CAT. NO.	KNURL DIMENSIONS		
	DIA. Ø	WIDTH	BORE
SSK-37A	3/4" (19mm)	1/4" (6.3mm)	1/4" (6.3mm)
SSK-37B	3/4" (19mm)	3/8" (9.5mm)	1/4" (6.3mm)
SSK-37C	5/8" (16mm)	5/16" (8mm)	1/4" (6.3mm)
SSK-37D	5/8" (16mm)	3/16" (4.8mm)	1/4" (6.3mm)

* SPECIFY PITCH AND SHAPE ALONG WITH CAT. NO., WHILE ORDERING
UNIT OF PACK : TEN



1 TURNING TOOL HOLDERS

- MADE FROM HIGH GRADE STEEL
- CASE HARDENED & GROUND
- SUPPLIED WITH ONE WRENCH BUT, WITHOUT TOOLBIT
- AVAILABLE IN STRAIGHT (ST), RIGHT (RT) AND LEFT (LT) HAND SHANK

ENGLISH TYPE

CAT. NO.	SHANK SIZE Width x Height		OVERALL LENGTH		SQUARE TOOL BIT CAPACITY	
	INCHES	mm	INCHES	mm	INCHES	mm
STH-31B	1/2 x 9/16	12.7 x 14.3	4 1/2	114	3/16	4.7
STH-31C	5/8 x 3/4	16 x 19	7 1/2	190	1/4	6.3
STH-31D	3/4 x 7/8	19 x 22	8 1/2	216	5/16	8
STH-31E	7/8 x 1	22 x 25.4	9 1/2	241	3/8	9.5
STH-31G SB	1 1/8 x 1 1/4	28 x 32	11 1/2	292	1/2	12.7
STH-31H	1 1/4 x 1 3/8	32 x 35	12 1/2	317	5/8	15.8

* SPECIFY ST., RT. OR LT. HAND SHAPE ALONG WITH CAT. NO., WHILE ORDERING
UNIT OF PACK : ONE



AMERICAN TYPE

CAT. NO.			SHANK SIZE Width x Height		OVERALL LENGTH		SQUARE TOOL BIT CAPACITY	
STRAIGHT	LEFT	RIGHT	INCHES	mm	INCHES	mm	INCHES	mm
SATH-BOS	SATH-BOL	SATH-BOR	5/16 x 3/4	8 x 19	4 1/2	114	3/16	4.7
SATH-COS	SATH-COL	SATH-COR	3/8 x 7/8	9.5 x 22	5	127	1/4	6.3
SATH-DOS	SATH-DOL	SATH-DOR	1/2 x 1 1/8	12.7 x 28	6	152	5/16	8
SATH-EOS	SATH-EOL SB	SATH-EOR	5/8 x 1 3/8	16 x 35	7	178	3/8	9.5
SATH-GOS	SATH-GOL	SATH-GOR	7/8 x 1 3/4	22 x 44	9	228	1/2	12.7
SATH-HOS	SATH-HOL	SATH-HOR	1 5/16 x 1 1/4	23.8 x 47.6	10	254	5/8	15.8

UNIT OF PACK : ONE



2 TOOL BIT HOLDERS

- ✓ ALL FACES ARE MACHINED AND GROUND
- ✓ HOLDS TOOL BIT SECURELY & RIGIDLY
- ✓ FOR USE ON ENGLISH TYPE LATHES WITH FLAT TOOL RESTS OR 4-WAY TURRET TOOL POSTS
- ✓ SUPPLIED WITH ALLEN KEY, BUT, WITHOUT TOOL BIT

CAT. NO.	SHAPE	SHANK SIZE Width x Height		OVERALL LENGTH		SQUARE TOOL BIT CAPACITY	
		INCHES	mm	INCHES	mm	INCHES	mm
SBH-523 GD	STRAIGHT	9/16 x 3/32	14 x 24	5	127	3/16 To 1/4	4.7 To 6.3
SBH-522	LEFT	9/16 x 13/16	14 x 20	5	127	3/16 To 1/4	4.7 To 6.3
SBH-521 GD	RIGHT	9/16 x 13/16	14 x 20	5	127	3/16 To 1/4	4.7 To 6.3
SBH-533	STRAIGHT	5/8 x 1/16	16 x 27	6	152	5/16 To 3/8	8 To 9.5
SBH-532	LEFT	5/8 x 3/32	16 x 24	6	152	5/16 To 3/8	8 To 9.5
SBH-531 GD	RIGHT	5/8 x 3/32	16 x 24	6	152	5/16 To 3/8	8 To 9.5
SBH-543	STRAIGHT	19/32 x 7/8	15 x 22	5 1/2	140	1/4 To 5/16	6.3 To 8
SBH-542	LEFT	9/16 x 7/8	14 x 22	5 1/2	140	1/4 To 5/16	6.3 To 8
SBH-541	RIGHT	9/16 x 7/8	14 x 22	5 1/2	140	1/4 To 5/16	6.3 To 8
SBH-553	STRAIGHT	23/32 x 13/16	18 x 30	8	203	3/8 To 1/2	9.5 To 12.7
SBH-552 GD	LEFT	23/32 x 1/6	18 x 27	8	203	3/8 To 1/2	9.5 To 12.7
SBH-551	RIGHT	23/32 x 1/6	18 x 27	8	203	3/8 To 1/2	9.5 To 12.7

UNIT OF PACK : ONE

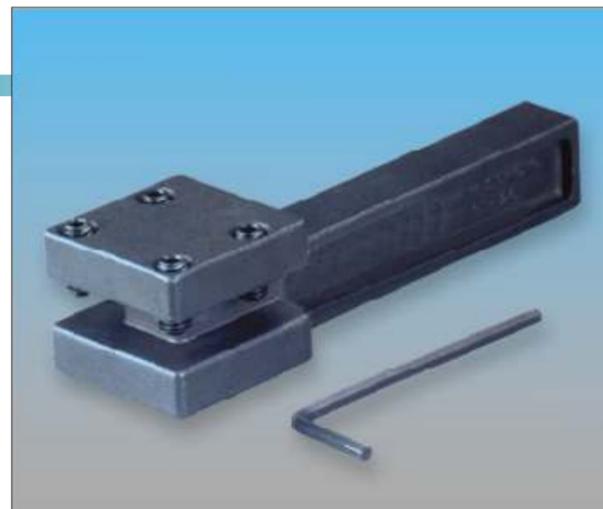
3 TOOL HOLDERS - UNIVERSAL

(3-WAY HOLDING)

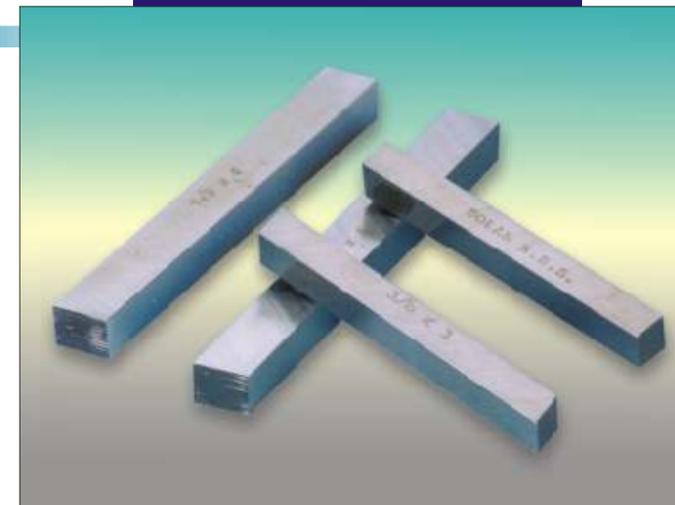
- ✓ MADE OF HIGH GRADE STEEL, FULLY HARDENED
- ✓ FOR HOLDING SQUARE TOOLS IN THREE DIFFERENT DIRECTIONS
- ✓ SUPPLIED COMPLETE WITH ALLEN BOLTS & KEY

CAT. NO.	CAPACITY (SQUARE TOOL)		HOLDER SIZE L x W x H mm
	INCHES	mm	
UTH - 14	1/4	6	110 x 12 x 16
UTH - 38	3/8	9.5	120 x 14 x 18
UTH - 12	1/2	12.7	145 x 18 x 20
UTH - 58	5/8	16	175 x 20 x 25
UTH - 34	3/4	19	250 x 25 x 32

UNIT OF PACK : ONE



H.S.S.



12 TOOL BITS - SQUARE

HIGH SPEED STEEL

- ✓ MADE FROM FINEST QUALITY SELECTED HIGH SPEED STEEL
- ✓ AVAILABLE IN TWO GRADES - TB-1X GRADE (QUALITY M2) & TB-2X GRADE (QUALITY M35)
- ✓ **TB-1X (M2)** : EXCELLENT PERFORMANCE FOR MACHINING MILD STEEL, GREY CAST IRON, BRASS AND ALUMINIUM etc.
- ✓ **TB-2X (M35)** : HIGH SPEED STEEL WITH 5% COBALT GIVES OPTIMUM HARDNESS & TOUGHNESS, MOST SUITABLE FOR HEAVIER CUTS AT HIGHER SPEEDS

CAT. NO.	TB-1 X (6-5-2)	TB-2 X (5% COBALT)	NOMINAL DIMENSIONS				UNIT OF PACK (PIECES)
			SQUARE SIZE		LENGTH		
			INCHES	mm	INCHES	mm	
TB-1X-A GD		TB-2X-A	1/8	3.1	2 1/2	63.5	25
TB-1X-B		TB-2X-B	3/16	4.7	2	50.8	25
TB-1X-C		TB-2X-C	3/16	4.7	2 1/2	63.5	25
TB-1X-D		TB-2X-D	3/16	4.7	3	76.2	10
TB-1X-E		TB-2X-E	3/16	4.7	4	101.6	10
TB-1X-F		TB-2X-F	1/4	6.3	2	50.8	25
TB-1X-G		TB-2X-G	1/4	6.3	2 1/2	63.5	25
TB-1X-H		TB-2X-H	1/4	6.3	3	76.2	10
TB-1X-I		TB-2X-I	1/4	6.3	4	101.6	10
TB-1X-J		TB-2X-J	1/4	6.3	6	152.4	10
TB-1X-K		TB-2X-K	5/16	7.9	2 1/2	63.5	25
TB-1X-L		TB-2X-L	5/16	7.9	3	76.2	10
TB-1X-M		TB-2X-M	5/16	7.9	4	101.6	10
TB-1X-N		TB-2X-N	5/16	7.9	6	152.4	10
TB-1X-O		TB-2X-O	3/8	9.5	3	76.2	10
TB-1X-P		TB-2X-P	3/8	9.5	4	101.6	10
TB-1X-Q		TB-2X-Q	3/8	9.5	6	152.4	10
TB-1X-R		TB-2X-R	3/8	9.5	8	203.2	10
TB-1X-S		TB-2X-S	1/2	12.7	3	76.2	5
TB-1X-T		TB-2X-T	1/2	12.7	4	101.6	5
TB-1X-U GD		TB-2X-U	1/2	12.7	6	152.5	5
TB-1X-V		TB-2X-V	1/2	12.7	8	203.2	5
TB-1X-W		TB-2X-W	5/8	15.8	4	101.6	5
TB-1X-X		TB-2X-X	5/8	15.8	6	152.4	5
TB-1X-Y		TB-2X-Y	5/8	15.8	8	203.2	5
TB-1X-Z		TB-2X-Z	3/4	19	6	152.4	5

6 BORING BARS - WITH HOLDERS

- DOUBLE ENDED BARS WITH 90° AND 45° ANGULAR SQ. HOLES AT EITHER END
- ACCURATELY BROACHED SQUARE HOLES TO ACCEPT STANDARD HIGH SPEED STEEL OR CARBIDE TOOL BITS
- SUPPLIED FITTED WITH SCREWS & ALIEN KEY



CAT. NO.	SQUARE BIT CAPACITY		NOMINAL SIZE OF BAR LENGTH x DIA. Ø		NOMINAL SIZE OF HOLDER LENGTH x SQUARE	
	INCHES	mm	INCHES	mm	INCHES	mm
SBB-34A	1/8	3	4 1/2 x 3/8	114 x 9.5	2 1/8 x 1/2	54 x 12.7
SBB-34B	3/16	4.7	5 1/4 x 7/16	133 x 11	2 1/2 x 5/8	63 x 16
SBB-34C	1/4	6.3	6 3/4 x 9/16	171 x 14.3	3 x 3/4	76 x 19
SBB-34D SB	5/16	8	9 x 3/4	228 x 19	3 3/4 x 1	95 x 25.4
SBB-34E	3/8	9.5	11 1/2 x 15/16	292 x 23.8	4 1/2 x 1 1/4	114 x 32
SBB-34F	1/2	12.7	15 1/2 x 1 5/16	394 x 33.3	6 x 1 3/4	152 x 44

UNIT OF PACK : ONE

7 BORING BARS

- DOUBLE ENDED BARS WITH 90° AND 45° ANGULAR SQ. HOLES AT EITHER END



CAT. NO.	BAR DIA. Ø	LENGTH	BIT CAPACITY	
	INCHES		INCHES	INCHES
BB-6A	3/8	6	1/8	SQUARE
BB-6B	3/8	6	3/16	ROUND
BB-9A	1/2	9	3/16	SQUARE
BB-9B	9/16	9	3/16	SQUARE
BB-9C	1/2	9	1/4	SQUARE
BB-10A	5/8	10	1/4	SQUARE
BB-12A	3/4	12	1/4	SQUARE
BB-12B	1	12	5/16	SQUARE
BB-16A	1 1/4	16	1/2	SQUARE
BB-18A	1 1/2	18	1/2	SQUARE

UNIT OF PACK : ONE

8 FLY TOOL CUTTER HOLDERS

- SINGLE PIECE BODY PRECISION MACHINED AND GROUND
- COUNTER BALANCED FOR FASTER FEEDS AND SMOOTH FINISH
- MACHINES UP TO 6" WIDE SURFACE WITH STD. TOOL BITS
- CAT. NO. SFT-59S1 & SFT-59S2 ARE SUPPLIED IN A SET OF 3 PIECES COMPLETE WITH ALIEN WRENCH, BUT, WITHOUT TOOL BIT



CAT. NO.	SHANK DIA. Ø		HEAD SIZE		SQUARE TOOL BIT CAPACITY	
	INCHES	mm	INCHES	mm	INCHES	mm
SFT-59S1	1/2	12.7	3/4	19	3/16	4.7
			1 1/8	28	1/4	6.3
			1 1/2	38	5/16	8
SFT-59S2	3/4	19	1 1/2	38	5/16	8
			2	50		
			2 1/2	63		
SFT-R8	R-8		2 1/2	63	3/8	9.5

UNIT OF PACK : ONE

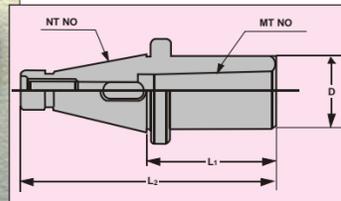
9 PARTING OFF & SIDE TOOL HOLDERS

- CASE HARDENED & GROUND
- POSITIVE LOCKING OF THE BLADE ENSURES LONGER LIFE OF THE BLADE HEID
- SUPPLIED WITH WRENCH, BUT WITHOUT PARTING OFF BLADE
- AVAILABLE IN ST., RT., & LT. HAND SHAPE



CAT. NO.	SHANK SIZE Width x Height		OVERALL LENGTH		BLADE HOLDING CAPACITY	
	INCHES	mm	INCHES	mm	INCHES	mm
SCH-32A SB	3/8 x 7/8	9.5 x 22	5	127	3/32 x 1/2	2.3 x 12.7
SCH-32B SB	3/8 x 31/32	9.5 x 24	5 1/2	140	3/32 x 5/8	2.3 x 15.8
SCH-32C SB GD	1/2 x 1 1/16	12.7 x 30	6	152	1/8 x 3/4	3 x 19
SCH-32D	5/8 x 1 1/8	16 x 35	7	178	1/8 x 7/8	3 x 22
SCH-32E	3/4 x 1 5/8	19 x 41	8	203	3/16 x 1	4.7 x 25.4
SCH-32F	7/8 x 1 3/4	22 x 44	9	228	3/16 x 1 1/8	4.7 x 28.5

* SPECIFY ST., RT. OR LT. HAND SHAPE ALONG WITH CAT. NO., WHILE ORDERING
UNIT OF PACK : ONE



29 NT ADAPTERS (NT TO MORSE TAPER)

- ✓ MADE FROM CASE HARDENED STEEL
- ✓ FULLY HARDENED 52/56 HRC
- ✓ PRECISION GROUND & TESTED TO GAUGES FOR EXTREME ACCURACY
- ✓ CONCENTRICITY WITHIN 0.010mm

CAT. NO.	SHANK	INSIDE TAPER	DIMENSIONS (mm)			DRAWBAR THREADS
			D Ø	L1	L2	
N3 - M2	NT - 30	MT - 2	32	50	120	M12 x 1.75 P
N3 - M3	NT - 30	MT - 3	40	70	140	M12 x 1.75 P
N4 - M2	NT - 40	MT - 2	32	30	125	M16 x 2.0 P
N4 - M3	NT - 40	MT - 3	40	43	138	M16 x 2.0 P
N4 - M4	NT - 40	MT - 4	50	90	185	M16 x 2.0 P

UNIT OF PACK : ONE

30 TURRET (SOLID) SOCKETS (STRAIGHT TO MORSE TAPER)

- ✓ MADE FROM CASE HARDENED STEEL
- ✓ FULLY HARDENED & GROUND INTERNALLY AND EXTERNALLY
- ✓ FOR HOLDING M. T. SHANK TOOLS IN CAPSTANS, TURRETS & AUTO LATHES



CAT. NO.		INSIDE TAPER	SHANK DIAMETER		OVERALL LENGTH	
INCHES	mm		INCHES	mm	INCHES	mm
TS - 1A	TS - 2A	MT - 1	3/4	20	3 1/8	80
TS - 1B	TS - 2B	MT - 1	1	25	3 1/2	90
TS - 1C	TS - 2C	MT - 1	1 1/2	38	3 1/2	90
TS - 1D	TS - 2D	MT - 2	1	25	4	100
TS - 1E	TS - 2E	MT - 2	1 1/2	38	4	100
TS - 1F	TS - 2F	MT - 2	1 3/4	44	4	100
TS - 1G	TS - 2G	MT - 2	2	50	4	100
TS - 1H	TS - 2H	MT - 3	1 1/2	38	4 3/4	120
TS - 1I	TS - 2I	MT - 3	1 3/4	44	4 3/4	120
TS - 1J	TS - 2J	MT - 3	2	50	4 3/4	120
TS - 1K	TS - 2K	MT - 3	2 1/2	64	4 3/4	120
TS - 1L	TS - 2L	MT - 4	1 1/2	38	6	150
TS - 1M	TS - 2M	MT - 4	1 3/4	44	6	150
TS - 1N	TS - 2N	MT - 4	2	50	6	150

UNIT OF PACK : ONE



15 KNURLING TOOL HOLDERS

FOR KNURLING CYLINDRICAL OBJECTS OF ALL DIAMETERS AND LENGTHS

15

- SKH-35H: REVOLVING FORK HEAD FOR PRODUCTION KNURLING COMPLETE WITH A PAIR OF EACH MEDIUM, COARSE AND FINE CUT KNURLS (ALSO SKH-35G)
- SKH-36E: SIX WHEELER HOLDER GIVES THREE DIAMOND KNURLING PITCHES BY JUST REVOLVING THE HEAD
- SKH-35C: FOR USE WITH AMERICAN TYPE BENCH LATHES WITH SELF CENTRING FORK HEAD FOR DIAMOND PATTERN KNURLING (ALSO SKH-35B & SKH-35D)
- SKH-36B: FOR USE WITH ENGLISH TYPE BENCH LATHES WITH SELF CENTRING FORK HEAD FOR DIAMOND PATTERN KNURLING
- SKH-8144: LIGHT DUTY WITH SELF CENTRING FORK HEAD FOR DIAMOND PATTERN KNURLING
- SCT-002: ADJUSTABLE CLAMP KNURLING HOLDER IS MOST SUITABLE FOR SMALL DIAMETERS AND TUBES. ADJUSTMENT RANGE 1/8" - 1"
- SKH-35A: SINGLE KNURL HOLDER FOR HOLDING STRAIGHT, CHECKERED OR SPIRAL KNURL

DESCRIPTION OF HOLDERS

CAT. No.	Holder Size L x W x H INCHES	No. of Knurls fitted
SKH-35A SB	4 x 1/2 x 1/2	1
SKH-35B	5 x 5/16 x 3/4	2
SKH-35C	5 1/2 x 3/8 x 7/8	2
SKH-35D	6 1/2 x 1/2 x 1 1/8	2
SKH-36B	4 7/8 x 5/8 x 5/8	2
SKH-8144	5 x 1/2 x 1/2	2
SCT-002	3 x 3/8 x 5/8	2
SKH-35G	5 1/2 x 3/8 x 7/8	6
SKH-35H	6 1/2 x 1/2 x 1 1/8	6
SKH-36E SB	6 1/2 x 1/2 x 7/8	6

DESCRIPTION OF KNURLS FITTED

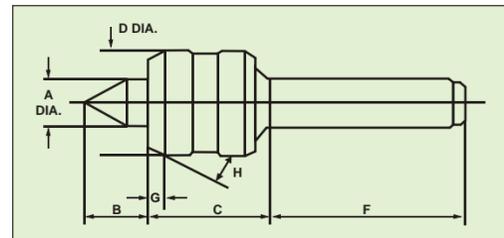
CAT. No.	Size of Knurls Dia. x Width x Bore INCHES	Pattern	Pitch
SSK-37A	3/4 x 1/4 x 1/4	Straight	Medium
SSK-37C	5/8 x 5/16 x 1/4	Spiral (Rt. & Lt.)	Medium
SSK-37C	5/8 x 5/16 x 1/4	Spiral (Rt. & Lt.)	Medium
SSK-37B	3/4 x 3/8 x 1/4	Spiral (Rt. & Lt.)	Medium
SSK-37B	3/4 x 3/8 x 1/4	Spiral (Rt. & Lt.)	Medium
SSK-37B	3/4 x 3/8 x 1/4	Spiral (Rt. & Lt.)	Medium
SSK-37C	5/8 x 5/16 x 1/4	Spiral (Rt. & Lt.)	Coarse, Medium & Fine
SSK-37B	3/4 x 3/8 x 1/4	Spiral (Rt. & Lt.)	Coarse, Medium & Fine
SSK-37D	5/8 x 3/16 x 1/4	Spiral (Rt. & Lt.)	Coarse, Medium & Fine

UNIT OF PACK : ONE



16 REVOLVING CENTRES (STANDARD MODEL)

- ✓ **BODY** : ALLOY STEEL HEAT TREATED IN SINGLE PIECE CONSTRUCTION
- ✓ **SPINDLE** : CHROME CARBON STEEL HARDENED, TEMPERED AND PRECISION GROUND 60° POINT ANGLE
- ✓ **BEARINGS** : ONE TAPER ROLLER BEARING TAKES THRUST AND SHARES RADIAL LOAD WITH ONE BALL BEARING
- ✓ **MAX. RUN OUT** : WITHIN 0.010 mm



CAT. NO.	SHANK	DIMENSIONS (mm)						H
		A	B	C	F	D	G	
SRC - 1	MT - 1	18	27	37.5	56	40	0.5	45°
SRC - 2	MT - 2	21	28	51	70	50	4.4	30°
SRC - 3	MT - 3	24	33	57	86	59	5.2	30°
SRC - 4	MT - 4	28	38	65	108	64	5.5	30°
SRC - 5	MT - 5	36	43	80	136	79	7	30°
SRC - 6 GD	MT - 6	56	56	90	190	100	8	30°

UNIT OF PACK : ONE

17 REVOLVING CENTRES (HIGH SPEED)

- ✓ **BODY** MANUFACTURED OUT OF FULLY CASE HARDENED STEEL
- ✓ **THE ROTATING SPINDLE** IS EXTENDED TILL THE TAIL END & GROUND 60° POINT ANGLE
- ✓ **NEEDLE ROLLER BEARING** AT THE TAIL END CARRY ALL RADIAL LOADS
- ✓ **HEAVY DUTY BALL THRUST BEARING** TAKES ALL AXIAL THRUST
- ✓ **MAX. RUN OUT** : WITHIN 0.007 mm

CAT. NO.	SHANK	BODY DIA. ∅	OVERALL LENGTH (mm)
RC - HD2	MT - 2	50	128
RC - HD3	MT - 3	51	167
RC - HD4	MT - 4	66	214
RC - HD5	MT - 5	80	234

UNIT OF PACK : ONE



27 MORSE TAPER SLEEVES (DRILL SLEEVES)

- ✓ **WORKSHOP GRADE** : MADE FROM MILD STEEL, EXTERNALLY GROUND AND INTERNALLY REAMED
- ✓ **REGULAR GRADE** : MADE FROM CARBON STEEL, HARDENED AND TEMPERED-35/50 HRC GROUND EXTERNALLY AND INTERNALLY CONCENTRICITY : 0.025mm
- ✓ **PRECISION GRADE** : MADE FROM CASE HARDENED STEEL (DIN-2185) HARDENED 52/55 HRC. PRECISION GROUND EXTERNALLY & INTERNALLY TO CLOSE LIMITS CONCENTRICITY : 0.010mm

CAT. NO.			MORSE TAPER NO.		NOMINAL OVERALL LENGTH mm
WORKSHOP GRADE	REGULAR GRADE	PRECISION GRADE	INSIDE	OUTSIDE	
WG - 12 SB	STS-112A GD	PG - 12	1	2	92
WG - 13 SB	STS-112B	PG - 13	1	3	99
---	STS-112C	---	1	4	124
WG - 23 SB	STS-112E	PG - 23	2	3	112
WG - 24 SB	STS-112F GD	PG - 24	2	4	124
---	STS-112G	---	2	5	156
WG - 34 SB	STS-112H GD	PG - 34	3	4	140
WG - 35 SB	STS-112I	PG - 35	3	5	156
WG - 45 SB	STS-112J GD	PG - 45	4	5	171
---	STS-112K	---	5	6	218
---	STS-112L	---	3	6	218
---	STS-112M	---	4	6	218

UNIT OF PACK : FIVE

28 R-8 MT ADAPTERS (R-8 TO MORSE TAPER)

- ✓ **MADE OF CASE HARDENED STEEL, FULLY HARDENED 50/55 HRC**
- ✓ **PRECISION GROUND INTERNALLY & EXTERNALLY**
- ✓ **CONCENTRICITY WITHIN 0.010mm**
- ✓ **DRAWBAR THREAD - 7/16" NF 20**

CAT. NO.	SHANK	INSIDE TAPER	OVERALL LENGTH mm
R8-2	R-8	MT-2	122
R8-3	R-8	MT-3	155

UNIT OF PACK : ONE





24 NT ARBORS FOR DRILL CHUCKS

- MADE OF CASE HARDENED STEEL
- FULLY HARDENED & PRECISION GROUND

CAT. NO.	SHANK	CHUCK MOUNT	DRAWBAR THREADS
N3-J3	NT-30	JT-3	M12 x 1.75P
N3-J6 SB	NT-30	JT-6	M12 x 1.75P
N3-B16	NT-30	B-16	M12 x 1.75P
N4-J3	NT-40	JT-3	M16 x 2.0 P
N4-J6	NT-40	JT-6	M16 x 2.0 P
N4-B16	NT-40	B-16	M16 x 2.0 P

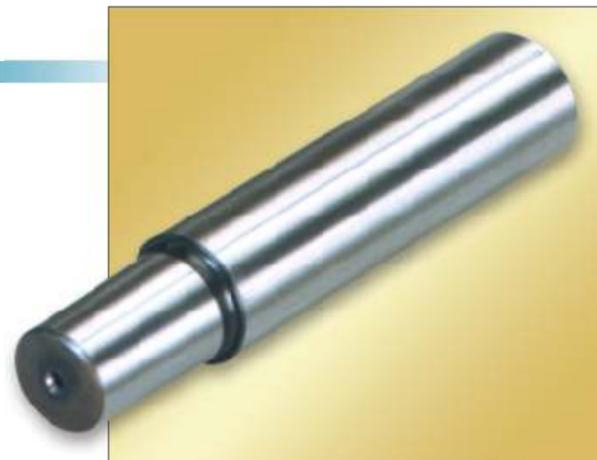
UNIT OF PACK : ONE

25 ARBORS (STRAIGHT SHANK) (JACOBS TAPER)

- FULLY HARDENED & PRECISION GROUND
- CONCENTRICITY : 0.005mm

CAT. NO.	CHUCK MOUNT	SHANK (mm)
	J. T. NOS.	DIA. x LENGTH
ST - 10	# 1, # 2, # 6	10 x 55
ST - 12	# 1, # 2, # 6	12 x 64
ST - 16	# 1, # 2, # 3, # 6	16 x 64
ST - 20	# 1, # 2, # 3, # 6	20 x 76
ST - 25	# 1, # 2, # 3, # 6	25 x 80

* SPECIFY J.T. Nos. ALONG WITH CAT. NO., WHILE ORDERING
UNIT OF PACK : ONE



26 THREADED ARBORS FOR THREADED CHUCKS

- FULLY HARDENED & PRECISION GROUND

CAT. NO.	SHANK	CHUCK MOUNT
		(INTERNAL THREAD)
SAT - 1A	MT - 1	3/8" x 24 TPI
SAT - 1B	MT - 1	1/2" x 20 TPI
SAT - 2A	MT - 2	3/8" x 24 TPI
SAT - 2B	MT - 2	1/2" x 20 TPI
SAT - 2C	MT - 2	5/8" x 16 TPI
SAT - 3A	MT - 3	1/2" x 20 TPI
SAT - 3B	MT - 3	5/8" x 16 TPI
SAT - 3C	MT - 3	3/4" x 16 TPI

UNIT OF PACK : ONE



18 REVOLVING PIPE CENTRES (BEVEL ROLLING CENTRE)

- LIVE CENTRE FOR MACHINING PIPES AND SIMILAR HOLLOW SHAFT MATERIALS WITH A HIGH THRUST CAPACITY
- FULLY HARDENED AND TEMPERED ALLOY STEEL BODY
- BEVEL SECTION IS GROUND AFTER ASSEMBLY RUNNING IN ITS OWN BEARINGS



CAT. NO.	SHANK	BEVEL DIAMETER (mm)		OVERALL LENGTH mm	ANGLE OF BEVEL
		MINIMUM	MAXIMUM		
RPC - 2	MT - 2	19	80	135	75°
RPC - 3	MT - 3	20	95	170	75°
RPC - 4	MT - 4	29	125	200	75°
RPC - 5	MT - 5	32	150	240	75°

UNIT OF PACK : ONE

19 REVOLVING TUBE CENTRES

- FULLY HARDENED AND TEMPERED ALLOY STEEL BODY
- 60° CONE ANGLE IS PRECISION GROUND

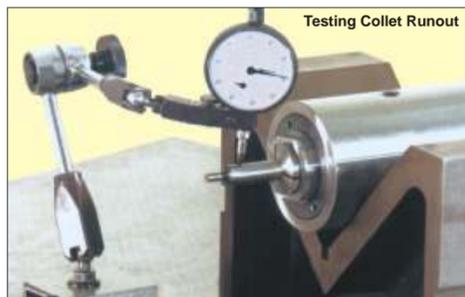


CAT. NO.	SHANK	CAPACITY			
		MINIMUM		MAXIMUM	
		INCHES	mm	INCHES	mm
RTC-2A	MT-2	1	26	2	50
RTC-2B	MT-2	1 1/2	38	3	75
RTC-3A	MT-3	1	26	2	50
RTC-3B	MT-3	1 1/2	38	3	75
RTC-3C	MT-3	2 1/2	64	4	100
RTC-4A	MT-4	1	26	2	50
RTC-4B	MT-4	1 1/2	38	3	75
RTC-4C	MT-4	2	51	3 1/2	88
RTC-4D	MT-4	2 1/2	64	4	100
RTC-4E	MT-4	3	76	6	150
RTC-5A	MT-5	2	51	3 1/2	88
RTC-5B	MT-5	2 1/2	64	4	100
RTC-5C	MT-5	3	76	6	150
RTC-6A	MT-6	2 1/2	64	4	100
RTC-6B	MT-6	3	76	6	150
RTC-6C	MT-6	4	102	8	200

UNIT OF PACK : ONE

33 R-8 COLLETS

- ✓ MADE OF ALLOY STEEL - HARDENED 45/50 HRC
- ✓ PRECISION GROUND BORE WITH TESTED CONCENTRICITY OF WITHIN 0.025mm PER 25mm
- ✓ DRAWBAR THREAD - 7/16" NF20



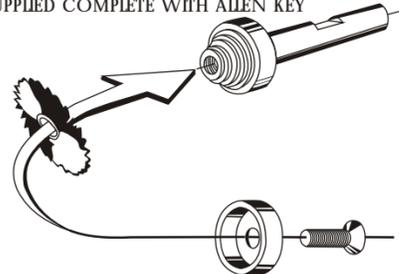
CAT. NO.	BORE SIZES AVAILABLE	OVERALL LENGTH
R8 x mm	3, 4, 6, 8, 10, 12, 14, 16, 18 & 20 mm	104mm
R8 x INCH	1/8", 5/32", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", 5/8" & 3/4"	104mm

* SPECIFY BORE SIZE ALONG WITH CAT. NO., WHILE ORDERING
UNIT OF PACK : FIVE



34 SLITTING SAW HOLDERS (VARI ARBORS)

- ✓ SPRING LOADED MECHANISM ACCEPTS SAWS & CUTTERS WITH BORE SIZES OF : 1/2", 5/8", 3/4", 7/8" OR 1"
- ✓ STANDARD SAWS AND CUTTERS WITH THICKNESS UPTO 3/16" AND DIAMETER UPTO 4" CAN BE HELD SECURELY
- ✓ SUPPLIED COMPLETE WITH ALLEN KEY



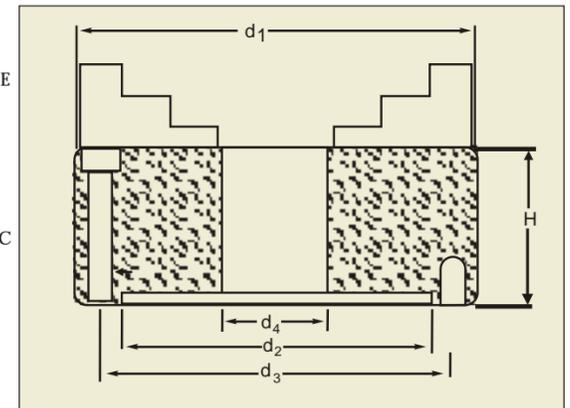
CAT. NO.	SHANK SIZE		OVERALL LENGTH	
	INCHES	mm	INCHES	mm
SSH - 60	1/2	12.7	2 1/8	28

UNIT OF PACK : ONE

42 SELF CENTRING (TRUE) CHUCKS 3 JAWS

- ✓ SCROLL OPERATED CHUCK WITH TWO SETS OF JAWS (REVERSE & FORWARD)
- ✓ BODY : HIGH STRENGTH CAST IRON ALLOYED WITH MAGNESE & CHROME HAVING GROUND FINISH ALL OVER
- ✓ SCROLL : FORGED HIGH STRENGTH WEAR RESISTANT ALLOY STEEL HARDNESS 40/45 HRC
- ✓ JAWS : CASE HARDENED STEEL WITH TOUGH CORE 56/60HRC
- ✓ PINION : CASE HARDENED & GROUND BEARING AREAS
- ✓ STD. ACCURACY : WITHIN 0.015mm

ALSO AVAILABLE IN 4 JAWS & 6 JAWS CONFIGURATION



CAT. NO.	NOMINAL SIZE	d ₁	d ₂	P. C. D	d ₄	H	APROX WEIGHT (Kgs.)
	mm	mm	mm	TOL. ON d ₃	mm	mm	
SCC - 5	125	95	108	± 0.3	28.5	63.5	5.5
SCC - 6	165	125	140	± 0.3	41	73.5	10.5
SCC - 8 GD	200	160	176	± 0.3	55	78	15
SCC - 10 GD	250	200	224	± 0.4	76	85	26
SCC - 12	315	267	292	± 0.5	95	90	38
SCC - 16	400	318	356	± 0.5	114	108	90

UNIT OF PACK : ONE

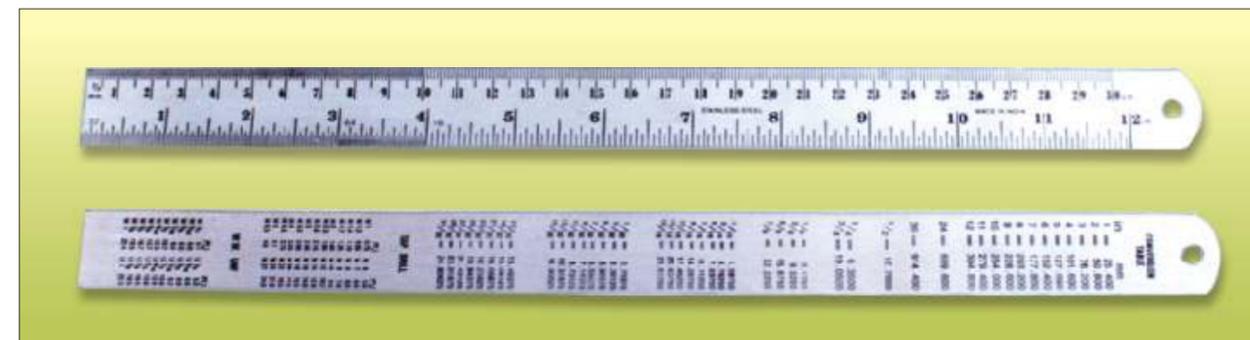


1 STEEL SQUARES

- SPRING STEEL BLADES ARE HARDENED & POLISHED
- ACCURATELY GROUND STOCKS FOR STRAIGHTNESS
- TRUE RIGHT ANGLES INSIDE & OUTSIDE
- ACCURACY IS SET TO WORKSHOP GRADE PER BSS- 939- GRADE B

CAT. NO.	NOMINAL BLADE LENGTH (FROM INNER EDGE)		NOMINAL STOCK SIZE (LENGTH X THICKNESS)	
	INCHES	mm	INCHES	mm
SES-101A	2	50	1 7/8 x 5/16	48 x 8
SES-101B	3	75	2 3/8 x 5/16	60 x 8
SES-101C	4	100	3 x 7/16	75 x 11
SES-101D	6	150	4 x 9/16	100 x 14
SES-101E	8	200	5 x 5/8	125 x 16
SES-101F	9	225	5 1/2 x 5/8	140 x 16
SES-101G	10	250	6 x 3/4	150 x 19
SES-101H	12	300	7 x 3/4	175 x 19
SES-101I	18	450	10 x 7/8	255 x 22
SES-101J	24	600	13 x 1 1/8	330 x 28

UNIT OF PACK : ONE



11 STEEL RULES

- MADE OF STAINLESS STEEL, POLISHED WITH MATT FINISH
- SHARP ETCHED GRADUATIONS IN METRIC AND IMPERIAL
- GRADUATED IN MILLIMETERS AND HALF MILLIMETERS & IN INCHES - 1/16th, 1/32nd & 1/64th
- REVERSE SIDE HAS CONVERSION TABLE FROM INCHES TO MILLIMETERS

CAT. NO.	LENGTH		WIDTH mm	THICKNESS mm
	INCHES	mm		
SR - 6	6	150	16.5	0.5
SR - 12	12	300	25	0.8
SR - 18	18	450	25.5	0.9
SR - 24	24	600	25.5	1.0
SR - 36	36	1000	30	1.2

UNIT OF PACK : TEN



12 BRASS CALIPERS

- CALIPERS MADE FROM BRASS & POLISHED
- INSIDE & OUTSIDE READINGS IN METRIC & INCHES

CAT. NO.	SIZE	
	INCHES	mm
BRC-4	4	100

UNIT OF PACK : TEN



2 DEGREE PROTRACTORS

- MADE OF STAINLESS STEEL
- PERMANENTLY ETCHED GRADUATIONS FROM 0 TO 180° IN OPPOSITE DIRECTIONS
- ADJUSTABLE ARM LOCKS INTO DESIRED DEGREE WITH BRASS LOCKNUT
- PACKED IN A PLASTIC POUCH

CAT. NO.	SIZE		UNIT OF PACK (PIECES)
	INCHES	mm	
DP-44 GD	6	150	10

9 RADIUS GAUGES (CONCAVE & CONVEX FORM)

- ✓ ACCURATELY FORMED BLADES FOR CHECKING INTERNAL AND EXTERNAL RADII
- ✓ BLADES OF GAUGES ENCLOSED IN A PROTECTIVE STEEL CASE
- ✓ PROVIDED WITH STEEL LOCKING SCREWS
- ✓ SIZES MARKED ON EACH BLADE OF THE GAUGE

CAT. NO.	MEASURING RANGE	NO. OF BLADES
RG-C7M GD	1mm TO 7mm BY STEP OF 0.25 FROM 1mm TO 3mm BY STEP OF 0.5 FROM 3.5mm TO 7mm	17 CONCAVE & 17 CONVEX
RG-C15M GD	7.5mm TO 15mm (BY STEP OF 0.5mm)	16 CONCAVE & 16 CONVEX
RG-C25M GD	15.5mm TO 25mm BY STEP OF 0.5mm FROM 15.5mm TO 20mm BY STEP OF 1mm FROM 21mm TO 25mm	15 CONCAVE & 15 CONVEX
RG-C14N	1/32" TO 1/4" (BY STEP OF 1/64")	15 CONCAVE & 15 CONVEX
RG-C12N	17/64" TO 1/2" (BY STEP OF 1/64")	16 CONCAVE & 16 CONVEX

UNIT OF PACK : FIVE



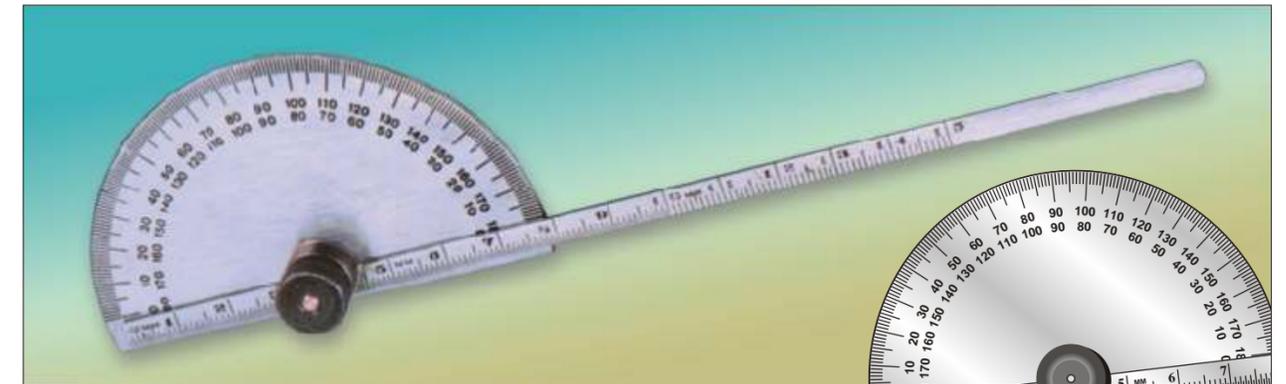
10 FEELER (THICKNESS) GAUGES

- ✓ THE GAUGE BLADES ARE MADE FROM HIGH GRADE TOOL STEEL
- ✓ HARDENED, TEMPERED AND POLISHED TO PRECISION ACCURACY
- ✓ TAPERED BLADES MARKED WITH THEIR THICKNESS SIZES
- ✓ BLADES OF GAUGES ENCLOSED IN A PROTECTIVE STAINLESS STEEL CASE
- ✓ AVAILABLE IN METRIC AND INCH SIZES

METRIC	CAT. NO.	LENGTH mm	NO. OF BLADES	RANGE mm	BLADE THICKNESS 1/100mm
	FG-9M	100	9	0.05 - 0.6	5, 10, 15, 20, 25, 30, 40, 50, & 60
FG-13M	100	13	0.05 - 1.0	5, 10, 15, 20, 25, 30, 40, 50, 60, 70, 80, 90 & 100	
FG-20M	100	20	0.05 - 1.0	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95 & 100	
FG-26M	100	26	0.03 - 1.0	3, 4, 5, 6, 7, 8, 9, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95 & 100	

INCHES	CAT. NO.	LENGTH INCHES	NO. OF BLADES	RANGE INCHES	BLADE THICKNESS 1/1000"
	FG-9N	3 1/2	9	0.0015 - 0.015	1.5, 2, 3, 4, 6, 8, 10, 12 & 15
FG-15N	3 1/2	15	0.002 - 0.025	2, 3, 4, 5, 6, 8, 10, 12, 13, 15, 18, 19, 20, 22 & 25	
FG-26N	3 1/2	26	0.0015 - 0.025	1.5, 2, 2.5, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, & 25	

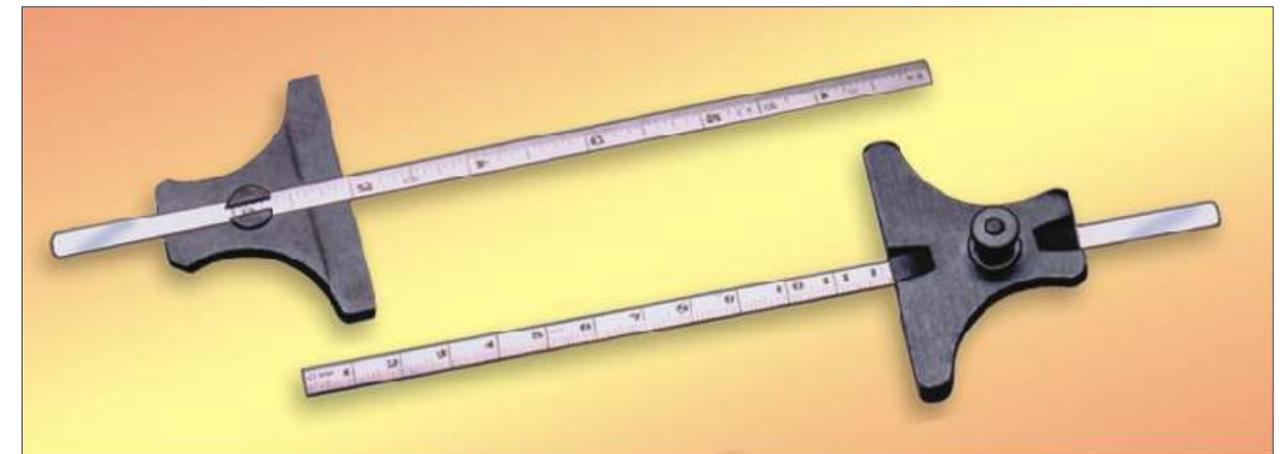
UNIT OF PACK : FIVE



3 PROTRACTOR-CUM-DEPTH GAUGES

- ✓ GRADUATED FROM 0 TO 180° IN OPPOSITE DIRECTIONS
- ✓ RULE WITH PERMANENTLY ETCHED GRADUATIONS ON BOTH SIDES IN METRIC AND IMPERIAL
- ✓ THE RULE IS ADJUSTABLE THROUGHOUT ITS LENGTH
- ✓ SPRING TENSION NUT LOCKS THE RULE FOR ACCURATE DEPTH & ANGLE MEASUREMENTS

CAT. NO.	LENGTH OF RULE		UNIT OF PACK (PIECES)
	INCHES	mm	
DP-45	6	150	10



4 DEPTH GAUGES

- ✓ STEEL BODY WITH TOP & BOTTOM WORKING FACES ACCURATELY GROUND
- ✓ STEEL RULE IS GRADUATED ON BOTH SIDES, ONE SIDE IN INCHES AND OTHER IN METRIC
- ✓ SPRING TENSION LOCKNUT FOR EASY DEPTH MEASUREMENTS

CAT. NO.	LENGTH OF RULE		WIDTH OF RULE		UNIT OF PACK (PIECES)
	INCHES	mm	INCHES	mm	
SDG-104A	6	150	1/4	6.3	5
SDG-104B	12	300	1/4	6.3	5



5 LONG HANDLED TAP WRENCHES

- ✓ SELF CENTRING HARDENED TOOL STEEL JAWS
- ✓ DESIGNED WITH ITS LONG REACH TO SIMPLIFY TAPPING OR REAMING IN DEPTHS
- ✓ ATTRACTIVELY FINISHED IN BLACK & WHITE WITH KNURLED CHUCK SIEVE
- ✓ SLIDING HANDLE CAN BE SET TO ANY DESIRED POSITION

CAT. NO.	TAP CAPACITY		OVERALL NOMINAL LENGTH	
	INCHES	mm	INCHES	mm
SLW - 56A	5/32 - 1/4	4 - 6	13	330
SLW - 56B	1/4 - 1/2	6 - 12	13	330

UNIT OF PACK : ONE

6 RATCHET TAP WRENCHES

- ✓ RATCHET CAN BE SET FOR RIGHT OR LEFT HAND OPERATIONS OR LOCKED FOR NON RATCHET USE
- ✓ SELF CENTRING HARDENED TOOL STEEL JAWS FOR POSITIVE GRIP ON TAPS AND REAMERS
- ✓ FULLY CHROME PLATED



CAT. NO.	TAP CAPACITY	
	INCHES	mm
SRW - 55A	5/32 TO 1/4	4 TO 6
SRW - 55B SB	1/4 TO 1/2	6 TO 12

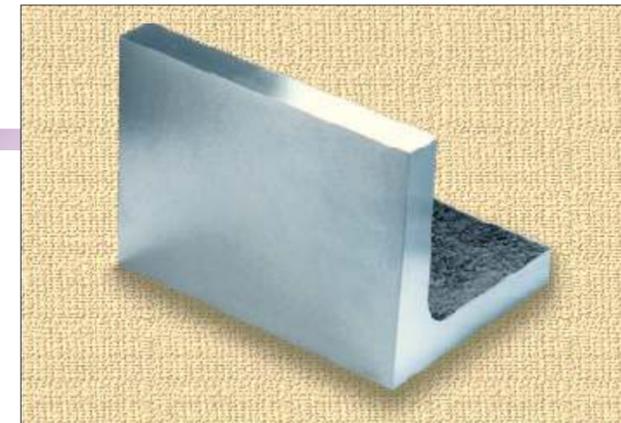
UNIT OF PACK : ONE

7 TAP AND REAMER ALIGNERS

- ✓ HOLD TAPS OR REAMERS IN PERFECT ALIGNMENT WITH THE HELP OF TAP GUIDE
- ✓ TAP BREAKAGE CHANCES ALMOST ELIMINATED
- ✓ CONSISTING ONE EACH OF TAP GUIDE, TAP WRENCH & TWO SPRING HELD HARDENED JAWS

CAT. NO.	TAP CAPACITY	
	INCHES	mm
STA - 09	1/8" - 1/4"	3 - 6

UNIT OF PACK : ONE



19 ANGLE PLATES - CAST IRON (PLAIN)

- ✓ MANUFACTURED FROM HIGH QUALITY CLOSE GRAIN CASTINGS
- ✓ OUTSIDE WORKING FACES ARE MACHINED AND PRECISION GROUND WITH TRUE 90° - RIGHT ANGLE
- ✓ FLAT AND SQUARE ACCURACY WITHIN 0.025mm PER 150mm
- ✓ IDEAL FOR LAYOUT AND INSPECTION

CAT. NO.	DIMENSIONS		WALL THICKNESS	
	LENGTH x WIDTH x HEIGHT		INCHES	mm
	INCHES	mm		
31	4 x 4 x 4	100 x 100 x 100	3/4	20
32	5 x 4 x 4	125 x 100 x 100	7/8	22
33	5 x 5 x 5	125 x 125 x 125	1	25
34	6 x 5 x 5	150 x 125 x 125	1	25
35	6 x 6 x 6	150 x 150 x 150	1 1/8	28
36	8 x 6 x 6	200 x 150 x 150	1 1/8	28
37	8 x 8 x 8	200 x 200 x 200	1 3/16	30
38	10 x 8 x 8	250 x 200 x 200	1 1/4	32
39	10 x 10 x 10	250 x 250 x 250	1 1/4	32
40	12 x 10 x 10	300 x 250 x 250	1 3/8	35
41	12 x 12 x 12	300 x 300 x 300	1 3/8	35

UNIT OF PACK : ONE

20 ANGLE PLATES - CAST IRON (SLOTTED)

- ✓ MANUFACTURED FROM HIGH QUALITY CLOSE GRAIN CASTINGS
- ✓ ACCURATELY MACHINED AND GROUND SQUARE & PARALLEL TO ALL OUTSIDE FACES
- ✓ FLAT AND SQUARE ACCURACY WITHIN 0.025mm PER 150mm
- ✓ IDEAL FOR MACHINING, LAYOUT AND INSPECTION
- ✓ MACHINED SLOTS FOR CONVENIENT CLAMPING & MOUNTING
- ✓ AVAILABLE IN WEBBED END AND OPEN END



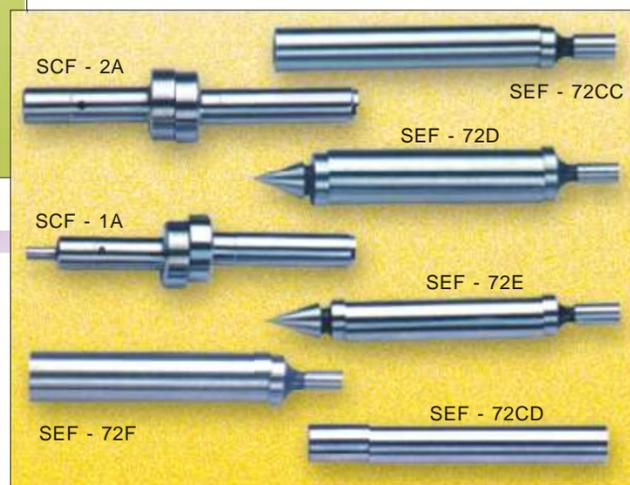
CAT. NO.	DIMENSIONS		
	LENGTH x WIDTH x HEIGHT		
	INCHES	mm	
OPEN END	WEBBED END		
299	199	3 x 2 1/2 x 2	75 x 63 x 50
300	200	3 1/2 x 3 x 2 1/2	88 x 75 x 63
301	201	4 7/16 x 3 1/2 x 3	112 x 88 x 75
302	202	6 x 5 x 4 7/16	150 x 125 x 112
303	203	7 x 5 1/2 x 4 7/16	175 x 138 x 112
304	204	8 x 6 x 5	200 x 150 x 125
305	205	9 x 7 x 6	225 x 175 x 150
306	206	10 x 8 x 6	250 x 200 x 150
307	207	12 x 9 x 8	300 x 225 x 200

UNIT OF PACK : ONE



24 MICROMETER STANDS CAT. NO. MS - 2

- ✓ MADE OF GRADED CAST IRON WITH EPOXY PAINTED BODY
- ✓ PROVIDES DESIRABLE MEASURING POSITION AND ANGLE FOR INSIDE & OUTSIDE MICROMETER
- ✓ AN INDISPENSABLE CIAMPING DEVICE FOR PRECISE AND STABLE MEASUREMENTS



25 EDGE & CENTRE FINDERS

- ✓ MANUFACTURED FROM TOOL STEEL AND HARDENED THROUGHOUT
- ✓ CENTRELESS GROUND TO PRECISION TOIERANCE
- ✓ USED FOR QUICKLY LOCATING WORK EDGES, GROOVES, SHOULDERS & CENTRE POINT
- ✓ VERY USEFUL TIME SAVING TOOL FOR JIG BORING, MILLING AND DRILLING OPERATIONS

CAT. NO.	TIP DIAMETER		SHANK DIAMETER		TYPE
	INCHES	mm	INCHES	mm	
SEF - 72C GD	0.2	5	3/8	9.5	EDGE FINDER - SINGLE END
SEF - 72F	0.2	5	1/2	12.7	EDGE FINDER - SINGLE END
SEF - 72E	0.2	5	3/8	9.5	EDGE & CENTRE FINDER - DOUBLE END
SEF - 72D	0.2	5	1/2	12.7	EDGE & CENTRE FINDER - DOUBLE END
SEF - 72CC	—	6	—	10	EDGE FINDER - METRIC - SINGLE END
SEF - 72CD	—	10	—	10	EDGE FINDER - METRIC - SINGLE END
SCF - 1A	—	4	—	10	EDGE FINDER (Z TYPE) - METRIC
SCF - 2A	—	10	—	10	EDGE FINDER (Z TYPE) - METRIC

UNIT OF PACK : FIVE

26 WIGGLER OR CENTRE FINDERS

CAT. NO. SWF - 73

- ✓ FOUR POINT SETS - FOR ACCURATELY LOCATING WORKING POINTS ON DRILL PRESSES, MILLINGS AND OTHER MACHINES
- ✓ SET CONSISTING OF SNAP IN HOLDER, NEEDLE POINT, DISC POINT, BALL SHAFT AND INDICATOR SHAFT
- ✓ CHUCK DESIGNED TO HOLD ANY OF THE FOUR INTER-CHANGEABLE ATTACHMENTS





- 21** **HOLLOW PUNCHES**
(LEATHER PUNCHES)
- ✓ MADE FROM CARBON STEEL HARDENED & TEMPERED
 - ✓ PRECISELY GROUND EDGES TO PUNCH CLEAN HOLES IN SOFT MATERIALS SUCH AS RUBBER, LEATHER OR PLASTIC etc
 - ✓ KNURLED BODY FOR COMFORTABLE GRIPPING

CAT. NO.	HOLE DIAMETER		UNIT OF PACK
	INCHES	mm	
HP - 3	1/8	3	25
HP - 4	5/32	4	25
HP - 5	3/16	5	25
HP - 6	1/4	6	25
HP - 8	5/16	8	10
HP - 10	3/8	10	10
HP - 12	1/2	12	10
HP - 14	9/16	14	10
HP - 16	5/8	16	10
HP - 19	3/4	19	5
HP - 22	7/8	22	5
HP - 25	1	25	5



- 8** **ROUND DIE STOCK HANDLES**
- ✓ FORGED STEEL IN SINGLE PIECE CONSTRUCTION
 - ✓ THREE ADJUSTING SCREWS FOR HOLDING ROUND SPIIT DIES

CAT. NO.	CAPACITY O/D THREADING DIES		OVERALL NOMINAL LENGTH		UNIT OF PACK
	INCHES	mm	INCHES	mm	
SDH - 57A	5/8	15	5 1/2	140	10
SDH - 57B	13/16	20	6 3/4	170	10
SDH - 57C SB	1	25	8 3/4	222	10
SDH - 57CC	1 5/16	33	10	254	10
SDH - 57D SB	1 1/2	38	12 1/2	317	10
SDH - 57E	2	50	15 9/16	395	10
SDH - 57EE	2 1/4	57	16 1/2	420	1
SDH - 57F	2 1/2	63	19	480	1
SDH - 57G	3	75	22 1/2	572	1
SDH - 57H	4	100	35	890	1

- 22** **COLD CHISELS**
(FLAT)
- ✓ UNIFORMLY FORGED OF CHROME ALLOY STEEL
 - ✓ PROPERLY HARDENED & TEMPERED FOR HIGH STRENGTH & COLD CUTTING OF METALS
 - ✓ OCTAGONAL SHANK WITH ACCURATELY ANGLED CUTTING EDGE
 - ✓ BLUE EPOXY COATED FINISH WITH POLISHED TIP

CAT. NO.	TIP WIDTH		LENGTH		UNIT OF PACK
	INCHES	mm	INCHES	mm	
CH - 9A	3/8	9	5	125	10
CH - 9B	3/8	9	6	150	10
CH - 13A	1/2	13	6	150	5
CH - 13B	1/2	13	8	200	5
CH - 16A	5/8	16	6	150	5
CH - 16B	5/8	16	8	200	5
CH - 19A	3/4	19	7	175	5
CH - 19B	3/4	19	8	200	5
CH - 22B	7/8	22	8	200	5
CH - 22C	7/8	22	10	250	5
CH - 22D	7/8	22	12	300	5
CH - 25B	1	25	8	200	5
CH - 25C	1	25	10	250	5
CH - 25D	1	25	12	300	5



- 9** **FLOATING DIE HOLDERS**
- ✓ SOLID ONE PIECE BODY
 - ✓ FOR USE ON LATHES, MILLING MACHINES & TAPPING TOOLS etc
 - ✓ IDEAL FOR SHORT OR MEDIUM THREADING OF SHAFTS



CAT. NO.	CAPACITY O/D THREADING DIES		BODY DIA. x LENGTH		SHANK DIA. x LENGTH	
	INCHES	INCHES	INCHES	INCHES	INCHES	INCHES
SFD - 58A	13/16		1 1/2	x 1	1/2	x 2
SFD - 58B	1		1 1/2	x 1	1/2	x 2
SFD - 58C	1 1/2		2	x 1	3/4	x 2

UNIT OF PACK : ONE

ADJUSTABLE HAND REAMERS

10

- ✓ PRECISION MADE EXPANDING REAMERS
- ✓ SIX HIGH SPEED STEEL BLADES ENSURE EASY REAMING BY HAND
- ✓ BLADES FULLY HARDENED - S8/62 HRC



CAT. NO.	SIZE - RANGE				OVERALL NOMINAL LENGTH	
	INCHES		mm		INCHES	mm
SR - H1	3/8	To 13/32	9.5	To 10.3	4 3/4	120
SR - H2	13/32	To 7/16	10.3	To 11.1	5	125
SR - H3 GD SB	7/16	To 15/32	11.1	To 11.9	5 1/4	133
SR - H4 SB	15/32	To 17/32	11.9	To 13.5	5 1/2	140
SR - H5 GD SB	17/32	To 19/32	13.5	To 15	5 3/4	146
SR - H6	19/32	To 21/32	15	To 16.6	6 1/2	165
SR - H7 SB	21/32	To 23/32	16.6	To 18.2	6 3/4	172
SR - H8	23/32	To 25/32	18.2	To 19.8	7	178
SR - H9	25/32	To 27/32	19.8	To 21.4	7 3/8	187
SR - H10 GD SB	27/32	To 15/16	21.4	To 23.8	8	203
SR - H11 GD SB	15/16	To 11/16	23.8	To 26.9	9	228
SR - H12 GD	1 1/16	To 1 3/16	26.9	To 30.1	10	254
SR - H13	1 3/16	To 1 11/32	30.1	To 34.1	11	280
SR - H14 GD SB	1 11/32	To 1 1/2	34.1	To 38.1	12	305
SR - H15 SB	1 1/2	To 1 13/16	38.1	To 46	14	355
SR - H16	1 13/16	To 2 7/32	46	To 56.3	16	406

UNIT OF PACK : ONE

DRIVE PIN PUNCHES - OCTAGONAL

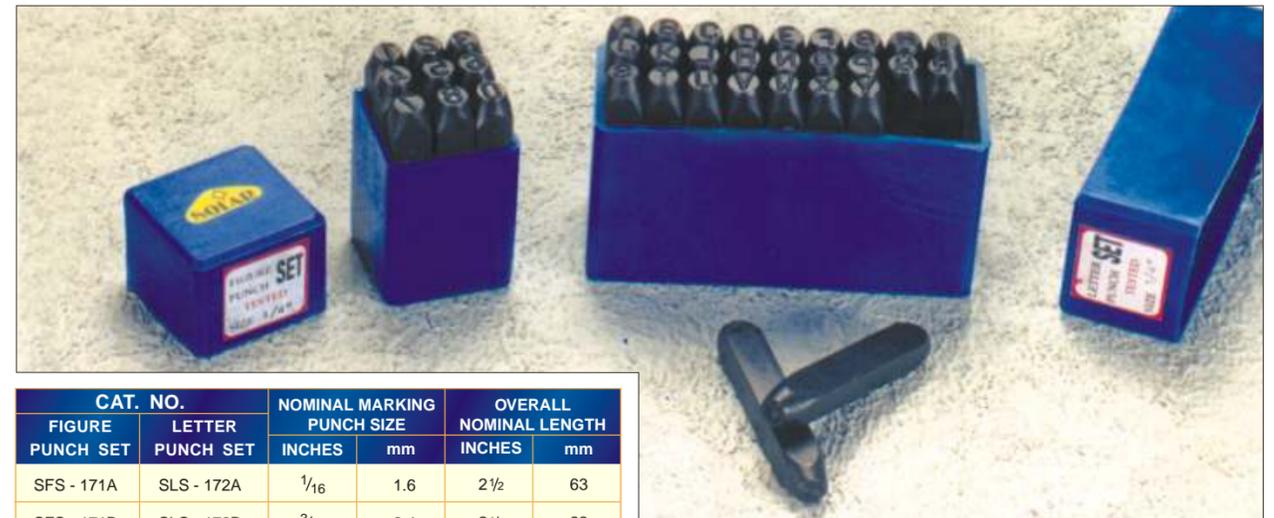
19

- ✓ MADE OF CHROME-MOLYBDENUM STEEL IN OCTAGONAL SECTION
- ✓ FULLY HARDENED & TEMPERED WITH NON-SPREAD HEADS
- ✓ PUNCH DIAMETERS ARE UNDERSIZE APPX. 0.005" - 0.12mm



CAT. NO.	PUNCH SIZE	SECTION	OVERALL NOMINAL LENGTH
	mm	mm	mm
PEX - 70	2.5	9.5	125
PEX - 71	3	9.5	125
PEX - 72	4	9.5	150
PEX - 73	5	9.5	150
PEX - 74	5.5	9.5	150
PEX - 75	6.5	9.5	150
PEX - 76	8	12.7	150
PEX - 77	10	12.7	150
PEX - 78	SET OF ABOVE EIGHT PIECES IN A PLASTIC POUCH		

UNIT OF PACK : FIVE



CAT. NO.		NOMINAL MARKING PUNCH SIZE		OVERALL NOMINAL LENGTH	
FIGURE PUNCH SET	LETTER PUNCH SET	INCHES	mm	INCHES	mm
SFS - 171A	SLS - 172A	1/16	1.6	2 1/2	63
SFS - 171B	SLS - 172B	3/32	2.4	2 1/2	63
SFS - 171C	SLS - 172C	1/8	3.2	2 5/8	67
SFS - 171C GD	SLS - 172C GD	5/32	4	2 5/8	67
SFS - 171D	SLS - 172D	3/16	4.8	2 3/4	70
SFS - 171E GD	SLS - 172E	1/4	6.3	2 3/4	70
SFS - 171EE	SLS - 172EE	5/16	8	2 3/4	70
SFS - 171F GD	SLS - 172F	3/8	9.5	3 3/8	85
SFS - 171G	SLS - 172G	1/2	12.7	3 3/8	85

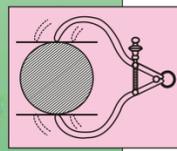
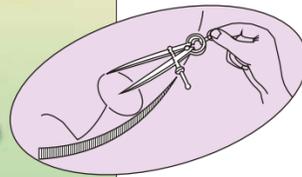
UNIT OF PACK : FIVE & TEN

LETTER & FIGURE PUNCHES SETS

20

- ✓ MANUFACTURED FROM HIGH QUALITY CARBON STEEL
- ✓ FULLY HARDENED TO PROVIDE OUTSTANDING TOUGHNESS FOR STABLE PUNCH LIFE
- ✓ FIGURE PUNCHES SET CONSIST OF 9 STICKS - 0 TO 8, NO. 6 IS INVERTED TO MARK NO. 9
- ✓ LETTER PUNCHES SET CONSIST OF 27 STICKS - A TO Z WITH &

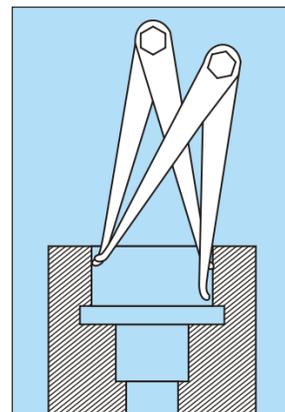
24 SPRING CALIPERS & DIVIDERS



- ✓ **REGULAR GRADE** : MADE FROM MID STEEL WITH HARDENED SPRING FOR UNIFORM TENSION
- ✓ **GRADE "A"** : MADE FROM CARBON STEEL WITH UNIFORMLY HARDENED SPRING AND WORKING EDGES WITH FINELY POLISHED FIAT LEGS
- ✓ AVAILABLE FOR INSIDE & OUTSIDE MEASUREMENT AND DIVIDER FOR SCRIBING RADIUS
- ✓ THE NOMINAL SIZE OF THESE CALIPERS & DIVIDERS IS THE DISTANCE BETWEEN THE CENTRE OF ROLLER AND THE WORKING END OF THE LEGS

CAT. NO.		SIZE		UNIT OF PACK (PIECES)
REG. GRADE	GRADE "A"	INCHES	mm	
SSC - 106B	SSC - 107B	4	100	5
SSC - 106C	SSC - 107C	6	150	5
SSC - 106D GD	SSC - 107D	8	200	5
SSC - 106DD	SSC - 107DD	10	250	5
SSC - 106E SB	SSC - 107E	12	300	5
SSC - 106F SB	SSC - 107F	18	450	5
SSC - 106G GD	SSC - 107G	24	600	3

* PLEASE SPECIFY I/S FOR INSIDE, O/S FOR OUTSIDE & D FOR DIVIDER ALONG WITH CAT. NO., WHILE ORDERING

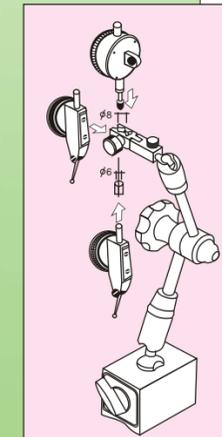


25 FIRM JOINT CALIPERS

- ✓ MADE FROM SHEET STEEL WITH LEGS HINGED WITH HEX NUT
- ✓ ANY DESIRED TENSION CAN BE ADJUSTED WITH FIRM JOINT
- ✓ LEGS ARE POLISHED WITH HARDENED POINTS
- ✓ NOMINAL SIZE IS THE DISTANCE BETWEEN THE CENTRE OF THE NUT TO THE POINT OF THE LEG
- ✓ AVAILABLE FOR INSIDE & OUTSIDE MEASUREMENT AND DIVIDER FOR SCRIBING RADIUS

CAT. NO.	SIZE		UNIT OF PACK (PIECES)
	INCHES	mm	
SFC - 105A	3	75	5
SFC - 105B	4	100	5
SFC - 105C	6	150	5
SFC - 105D	8	200	5
SFC - 105E	10	250	5
SFC - 105F	12	300	5
SFC - 105G	18	450	5
SFC - 105H	24	600	5
SFC - 105I	30	750	3
SFC - 105J	36	900	3
SFC - 105K	48	1200	2

* PLEASE SPECIFY I/S FOR INSIDE, O/S FOR OUTSIDE & D FOR DIVIDER ALONG WITH CAT. NO., WHILE ORDERING



3 MAGNETIC BASES - UNIVERSAL

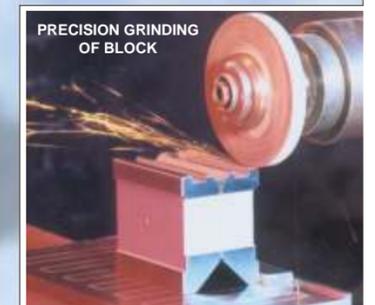
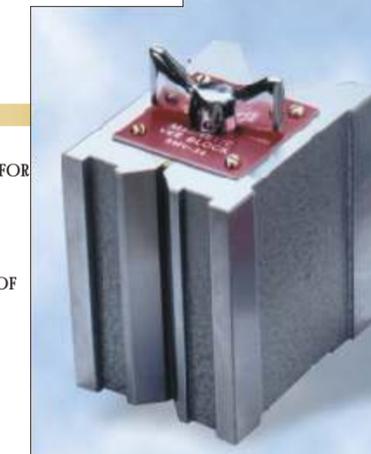
(CAT. NO. SMB-701U)

- ✓ HIGH POWERED MAGNETIC STANDS WITH MAGNETIC PULL OF 60 Kgs.
- ✓ EASY "ON/OFF" ROTATING SWITCH
- ✓ MULTI NIMBLE JOINT FOR INSTANT FIXATION IN ANY POSITION BY TIGHTENING JUST ONE KNOB
- ✓ LARGE REACH - 10.1/2"
- ✓ SUITABLE FOR ALL TYPE OF DIAL GAUGES WITH STEM, BACK IUG OR DOVETAIL
- ✓ SUPPLIED WITHOUT DIAL GAUGE



4 MAGNETIC VEE BLOCKS

- ✓ PRECISION GROUND 90° V-WAY ON TOP AND BOTTOM FOR HOLDING ROUND OR IRREGULAR SHAPES FOR SCRIBING, GRINDING, MEASURING OR MACHINING
- ✓ POWERFUL MAGNETIC FORCE WITH CLAMPING POWER OF ABOVE 75 Kgs.
- ✓ EASY "ON/OFF" SWITCH
- ✓ AVAILABLE IN SINGLE (S) OR MATCHED PAIR (MP)



CAT. NO.	SIZE OF BLOCK			HOLDING CAPACITY	
	L	W	H	TOP VEE	BOTTOM VEE
	mm			mm	mm
SMV - 33 - S	80	60	65	45	15
SMV - 33 - MP	80	60	65	45	15
SMV - 34 - S	100	75	95	60	20
SMV - 34 - MP	100	75	95	60	20
SMV - 36 - S	150	75	95	65	20
SMV - 36 - MP	150	75	95	65	20

UNIT OF PACK : ONE



1 MAGNETIC BASES - ECONOMY

- PRIMARILY USED FOR HOLDING DIAL GAUGE INDICATORS
- SUITABLE FOR STEM AND BACK LUG TYPE DIAL GAUGES
- EASY PUSH BUTTON "ON/OFF" CONTROL
- UNIVERSAL ADJUSTMENT IN HORIZONTAL AND VERTICAL SURFACES
- MAGNETIC PULL OF 25 Kgs.

CAT. NO.	BASE DIMENSIONS		STEM DIA.		HEIGHT	
	INCHES	mm	INCHES	mm	INCHES	mm
SMB - 41	2 x 1 7/8 x 1 3/4	50 x 48 x 45	3/8	9.5	9 1/4	235

UNIT OF PACK : ONE

2 MAGNETIC BASES - HIGH POWER

- HIGH POWERED MAGNETIC STANDS WITH MAGNETIC PULL OF 60 Kgs.
- EASY "ON/OFF" ROTATING SWITCH
- CAN BE HEID ON VERTICAL FACES, UPSIDE -DOWN OR BY ROUND BAR
- SUPPLIED WITHOUT DIAL GAUGE

FEATURES

SMB-701	STANDARD MODEL SUITABLE FOR HOLDING STEM OR BACK LUG TYPE DIAL GAUGES
SMB-701F	FINE ADJUSTMENT MODEL SUITABLE FOR HOLDING STEM OR BACK LUG TYPE DIAL GAUGES

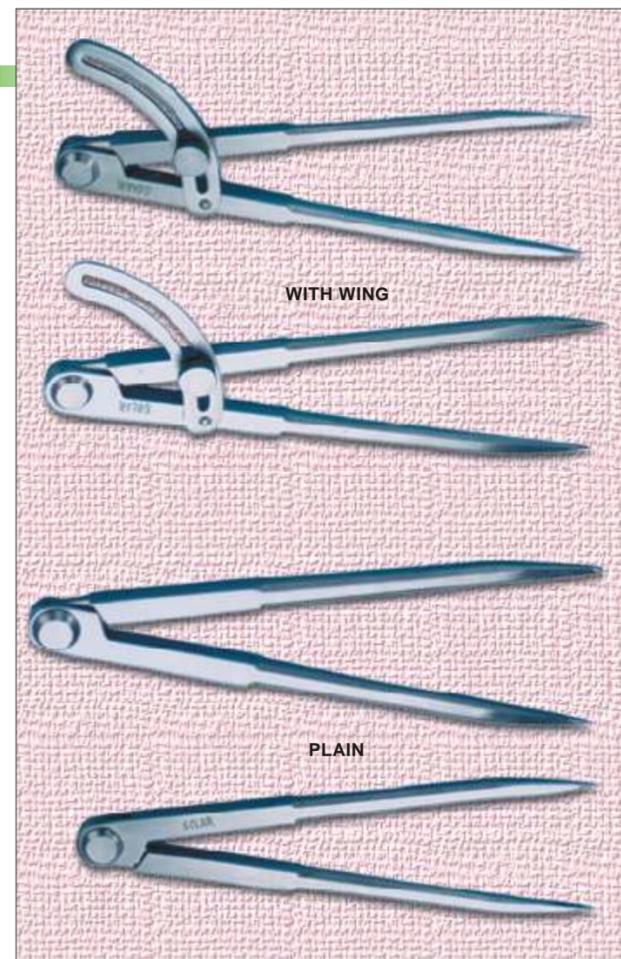
CAT. NO.	BASE DIMENSIONS		HEIGHT	
	L x W x H		INCHES	mm
	INCHES	mm	INCHES	mm
SMB - 701	2 1/2 x 2 x 2 1/4	65 x 50 x 55	9 1/4	235
SMB - 701F	2 1/2 x 2 x 2 1/4	65 x 50 x 55	9 1/4	235

UNIT OF PACK : ONE



SMB-701

SMB-701F



26 WING COMPASSES

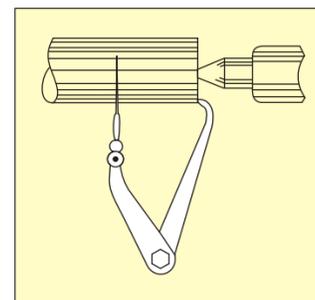
(WITH WING OR PLAIN)

- AVAILABLE WITH WING OR WITHOUT WING (PLAIN)
- MILLED AND RIVETED LEGS FOR UNIFORM TENSION
- FINELY POLISHED WITH HARDENED POINTS

CAT. NO.	WITH WING	PLAIN	SIZE		UNIT OF PACK (PIECES)
			INCHES	mm	
206B	GD	207B	6	150	5
206C	GD	207C	8	200	5
206D		207D	10	250	5
206E	GD	207E	12	300	5
206X		207X	14	350	4
206Y		207Y	16	400	4
206Z		207Z	18	450	3
206G	GD	207G	24	600	2

27 JENNY CALIPERS - FIRM JOINT

- WITH ADJUSTABLE HARDENED POINT
- ALSO KNOWN AS HERMAPHRODITE OR ODD LEG CALIPERS



PLAIN LEG

WITH LOCATING SPUR

CAT. NO.	SIZE		DESCRIPTION
	INCHES	mm	
SJC - 107B	4	100	PLAIN LEG
SJC - 107C	6	150	PLAIN LEG
SJC - 107B - LS	4	100	WITH LOCATING SPUR
SJC - 107C - LS	6	150	WITH LOCATING SPUR

UNIT OF PACK : FIVE

WOODWORKING VICES - PROFESSIONAL

- 8** ✓ PERMANENT BENCH FIXING VICE
- ✓ CLOSE GRAIN CAST IRON BODY WITH SOLID STEEL GUIDE RODS AND SCREW
- ✓ HANDLE, GUIDE RODS & MAIN SCREW CHROME PLATED

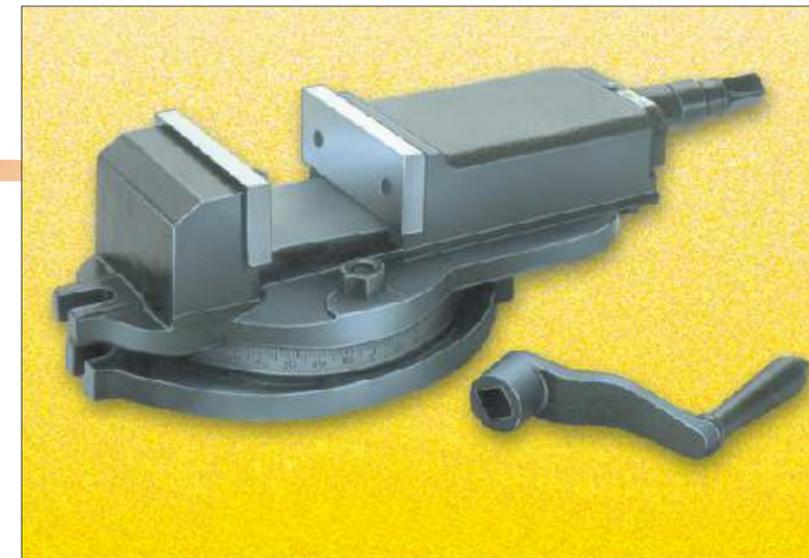
CAT. NO.	JAW WIDTH		JAW OPENING	
	INCHES	mm	INCHES	mm
WVP - 6	6	150	6	150
WVP - 7	7	175	8	200
WVP - 9	9	225	13	330

UNIT OF PACK : ONE



MILLING MACHINE VICES (STANDARD)

- 1** ✓ MADE OF GRADED CAST IRON FOR ACCURACY & RESISTANCE TO WEAR
- ✓ STEEL JAWS ARE HARDENED & GROUND
- ✓ FULLY COVERED STEEL SCREW OPERATING ON A GUN METAL NUT
- ✓ ACCURATELY INDEXED 360° SWIVEL BASE
- ✓ COMPLETE WITH CRANK HANDLE



CAT. NO.	NOMINAL SIZE		JAW WIDTH		JAW DEPTH		MAX. OPENING	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
231 - S4	4	100	4	102	1 ³ / ₁₆	45	4	102
231 - S5	5	125	5	127	2 ¹ / ₈	54	5	127
231 - S6 GD	6	150	6	152	2 ³ / ₈	60	6 ¹ / ₈	155
231 - S8	8	200	8	205	2 ¹ / ₂	63	8	205

UNIT OF PACK : ONE

WOODWORKING VICES - PORTABLE

- 9** ✓ LIGHT WEIGHT CAST IRON BODY
- ✓ CAN BE CIAMPED OR FIXED ON ANY CONVENIENT SURFACE INDOORS OR OUTDOORS

CAT. NO.	JAW WIDTH		JAW OPENING	
	INCHES	mm	INCHES	mm
VP - 6	6	150	4 ¹ / ₂	114

UNIT OF PACK : ONE

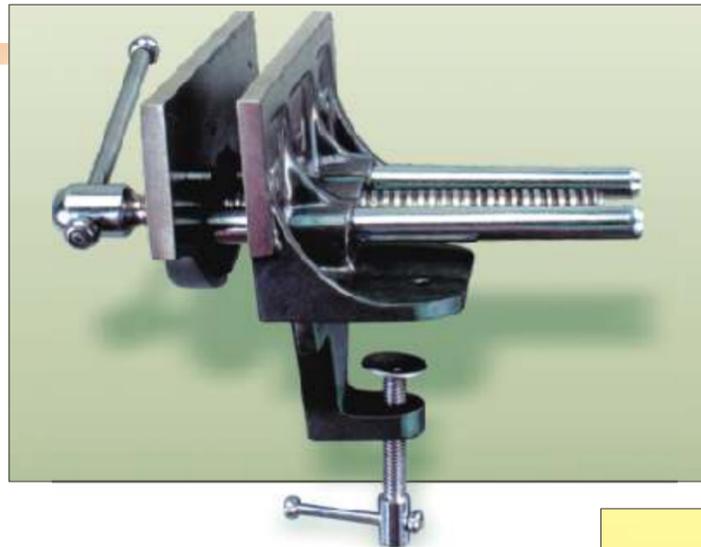


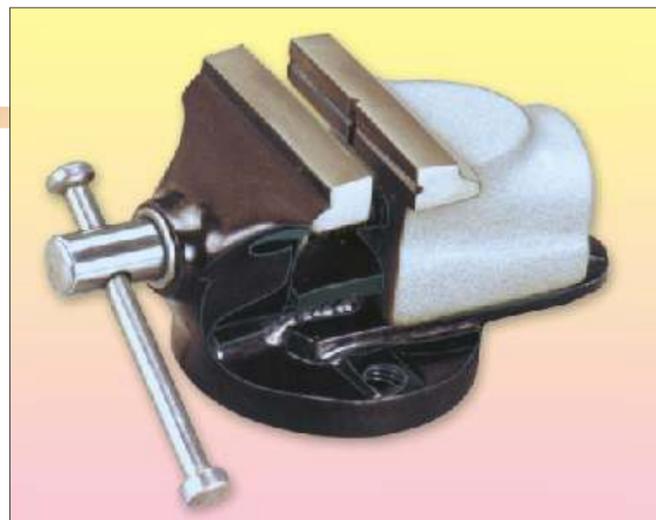
TABLE (MINI) VICES

(FIXED & SWIVEL BASE)

- 10** ✓ MADE FROM GRADED CAST IRON & ATTRACTIVELY PAINTED
- ✓ HAVING CHROME PLATED HANDLE & SPINDIE

CAT. NO.	JAW WIDTH		
	INCHES	mm	
MV - F1	MV - S1	1 ¹ / ₄	32
MV - F2	MV - S2	1 ⁵ / ₈	40
MV - F3	MV - S3	2	50
MV - F4	MV - S4	2 ³ / ₈	60
MV - F5	MV - S5	3	75

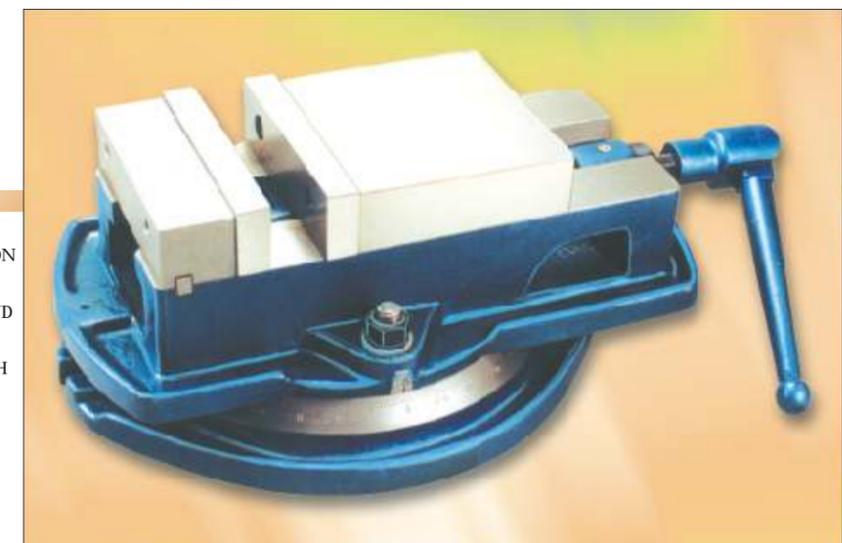
UNIT OF PACK : ONE



MILLING MACHINE VICES

(KURT TYPE)

- 2** ✓ MANUFACTURED FROM CLOSE GRAIN CAST IRON
- ✓ ALLOY STEEL JAWS ARE HARDENED AND GROUND
- ✓ JAW WAY IS PRECISION GROUND FOR SMOOTH MOVEMENT & GREATER GRIPPING POWER
- ✓ ACCURATELY GRADUATED SWIVEL BASE



CAT. NO.	NOMINAL SIZE		JAW WIDTH		MAX. OPENING	
	INCHES	mm	INCHES	mm	INCHES	mm
131 - S5	5	125	5	127	4 ¹ / ₄	108
131 - S6	6	150	6	152	5 ¹ / ₂	140

UNIT OF PACK : ONE



3 MILLING MACHINE VICES (ECONOMY)

- LIGHT WEIGHT DUCTILE STEEL BODY
- ALLOY STEEL JAWS ARE HARDENED & GROUND
- ALL WORKING SURFACES PRECISION GROUND WITH ACCURATELY GRADUATED SWIVEL BASE

CAT. NO.	NOMINAL SIZE		JAW WIDTH		JAW DEPTH		MAX. OPENING	
	mm	mm	mm	mm	mm	mm	mm	mm
31 - S4 GD	100		100		30		65	
31 - S6	150		150		40		114	
31 - S8	200		200		58		150	

UNIT OF PACK : ONE

4 ANGULAR MACHINE VICES

- MADE FROM CLOSE GRAIN CAST IRON
- ALLOY STEEL HARDENED JAW PLATES
- THE SWIVEL BASE IS GRADUATED IN 360° IN THE HORIZONTAL PLANE AND 90° IN THE VERTICAL PLANE ENABLING THE WORK TO BE HELD IN ANY COMPOUND ANGLE
- NO TILTING OF JAWS



CAT. NO.	NOMINAL SIZE		JAW WIDTH		JAW DEPTH		MAX. OPENING	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
301 - A4	4	100	4	102	1 3/4	45	4	102
301 - A6	6	150	6	152	2 1/4	56	6 1/8	155
301 - A8	8	200	8	205	2 1/2	63	7 7/8	200

UNIT OF PACK : ONE



5 METAL WORKING VICES (GENERAL PURPOSE)

- DESIGNED FOR ALL TYPE OF GENERAL USE IN THE MACHINE SHOPS
- STEEL JAWS ARE HARDENED WITH VERTICAL & HORIZONTAL "VEE" GROOVES
- NO TILTING OF THE SLIDING JAWS
- LARGE BASE AND RIGID MOUNTING MAKES THIS A USEFUL VICE

CAT. NO.	JAW WIDTH	JAW OPENING	DEPTH OF JAWS
	mm	mm	mm
GP - 3	75	80	50
GP - 4	105	110	65
GP - 6	155	160	70

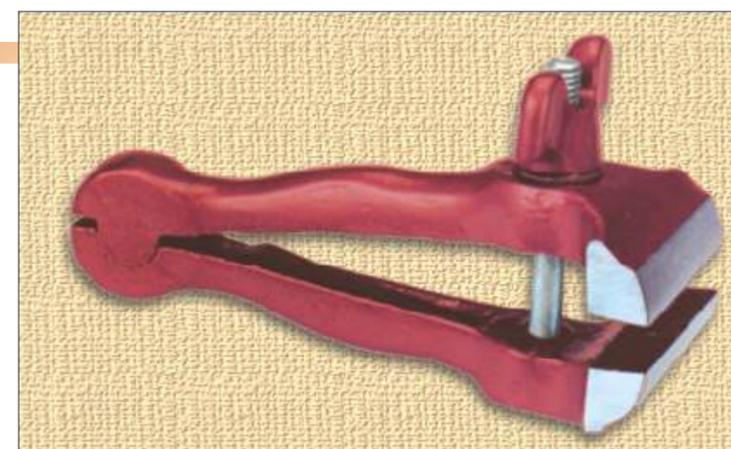
UNIT OF PACK : ONE

6 BENCH (TABLE) VICES (FIXED & SWIVEL BASE)

- MADE OF GRADED CAST IRON
- STEEL JAWS ARE HARDENED, GROUND AND SERRATED
- SWIVEL BASE CAN BE LOCKED BY TWO LOCKING SCREWS

CAT. NO.		JAW WIDTH		JAW OPENING	
FIXED	SWIVEL	INCHES	mm	INCHES	mm
BV - F3	BV - S3	3	75	3 3/8	85
BV - F4	BV - S4	4	100	4	102
BV - F5	BV - S5	5	125	5	127
BV - F6	BV - S6	6	150	6	155
BV - F8	BV - S8	8	200	8	205

UNIT OF PACK : ONE



7 HAND VICES

- MALLEABLE CAST IRON BODY
- STEEL SCREW CAN FIRMLY BE TIGHTENED BY WING NUT
- CONVENIENT VICE FOR HOLDING SMALL JOBS

CAT. NO.	OVERALL NOMINAL LENGTH	
	INCHES	mm
HV - 4	4	100
HV - 5	5	125

UNIT OF PACK : ONE