



Technotorc

Power in Hand

www.technotorc.com

TUBE INSTALLATION TOOLS





Serrating / Grooving Tool

Technotorc
Power in Hand
www.technotorc.com

For Grooving In Tube Sheets



1/8"x3/8"x1/8"

TOOL BITS



1/8"x1/4"x1/8"

Features :

- High production tool.
- Ideal for use where 1 tool is needed per bore.
- One piece cryogenically treated tool bit ensures maximum life.
- Tool is ideally suited for CNC applications on account of 1 piece mandrel construction and short design.

SPECIFICATIONS

Tube O.D.		Tool Model No.	Spare Tool Bits		
mm	inc		1/8" x 3/8" x 1/8" Spacing	1/8" x 1/4" x 1/8" Spacing	Special Spacing
9.53	3/8	ST-375-970	ST-3703	ST-3703-S	ST-3703-SP
12.70	1/2	ST-500-1270	ST-5003	ST-5003-S	ST-5003-SP
15.87	5/8	ST-625-1588	ST-6203	ST-6203-S	ST-6203-SP
19.05	3/4	ST-750-1900	ST-7503	ST-7503-S	ST-7503-SP
22.22	7/8	ST-875-2220	ST-7503	ST-7503-S	ST-7503-SP
25.40	1	ST-1000-2540	ST-7503	ST-7503-S	ST-7503-SP
31.75	1.1/4	ST-1250-3175	ST-7503	ST-7503-S	ST-7503-SP
34.92	1.3/8	ST-1375-3493	ST-7503	ST-7503-S	ST-7503-SP
38.10	1.1/2	ST-1500-3810	ST-7503	ST-7503-S	ST-7503-SP
41.27	1.5/8	ST-1625-4128	ST-7503	ST-7503-S	ST-7503-SP
44.45	1.3/4	ST-1750-4445	ST-7503	ST-7503-S	ST-7503-SP
47.62	1.7/8	ST-1875-4763	ST-7503	ST-7503-S	ST-7503-SP
50.80	2	ST-2000-5080	ST-7503	ST-7503-S	ST-7503-SP
57.15	2.1/4	ST-2250-5715	ST-7503	ST-7503-S	ST-7503-SP
63.50	2.1/2	ST-2500-6350	ST-7503	ST-7503-S	ST-7503-SP

Note : Serrating Tools are available for MM bore sizes also. Please enquire.

Serrating / Grooving Tool



Technotorc
Power in Hand
www.technotorc.com



Features :

- Changing of pilot nose and cutter allows one tool to cover a range of hole diameters.
- Simple to change cutter for different groove shapes.
- Location and depth of cut easy to adjust.
- Only light pressure required to cut precision grooves.
- Ready to fit CNC drill machines, lathes and boring machines.
- The life of the cutter extendable by re-sharpening.

CIRCULAR FORM CUTTER



TOOL BIT



TOOL BIT WITH HOLDER



■ SPECIFICATIONS

Bore Range		Tool Model No.	Pilot Nose Model No.	Circular Form Cutter Model No.	Tool Bit Holder Model No.	Spare Tool Bit Model No.
mm	inch					
9 - 32	3/8 - 1.1/4	1 NW - 2 MT	1 NW - PN	1 NW - CF	1 NW - TBH	1 NW - TB
16 - 45	5/8 - 1.3/4	3 NW - 3 MT	3 NW - PN	3 NW - CF	3 NW - TBH	3 NW - TB
19 - 48	3/4 - 1.7/8	4 NW - 4 MT	4 NW - PN	4 NW - CF	4 NW - TBH	4 NW - TB
38 - 102	1.1/2 - 4	6 NW - 5 MT	6 NW - PN	6 NW - CF	6 NW - TBH	6 NW - TB

Note : Specify whether you need Circular Form Cutter (one piece HSS construction) or Tool Bit Holder with Tool Bit, when ordering.

Serrating /Grooving Tool



Technotorc
Power in Hand
www.technotorc.com



TOOL BIT

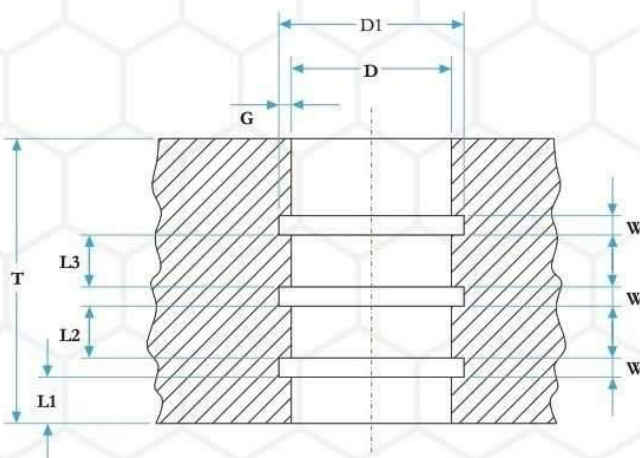
Features :

- Only light pressure required to cut precision grooves inside holes or cylinders.
- Location and depth of groove easy to adjust.
- Simple to change cutter for different groove shapes.
- Changing of bushing and cutter allows one tool to cover a range of hole diameters.
- The life of the cutter extendable by re-sharpening.

■ SPECIFICATIONS

Bore Range		Tool Model No.	Pilot Nose / Bushing Model No.	Tool Bits Model No.
mm	inch			
10 - 13	0.40 - 0.51	SGT-102	SGT-102-PN	SGT-102-TB
12.7 - 16	0.50 - 0.63	SGT-122	SGT-122-PN	SGT-122-TB
16 - 20	0.63 - 0.79	SGT-162	SGT-162-PN	SGT-162-TB
19- 20	0.75 - 1.26	SGT-193	SGT-193-PN	SGT-193-TB
30 - 52	1.18 - 2.05	SGT-303	SGT-303-PN	SGT-303-TB
50 - 78	1.97 - 3.07	SGT-504	SGT-504-PN	SGT-504-TB

PLEASE SUPPLY FOLLOWING INFORMATION WHEN ORDERING GROOVING TOOLS OR SPARE CUTTERS.

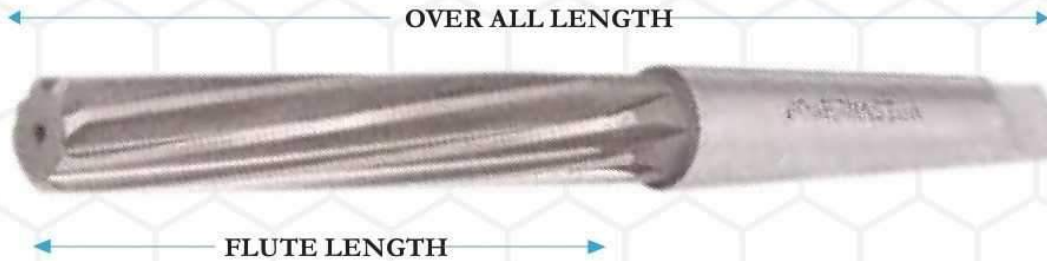


A) Bore Dia after reaming with Tolerances	D
B) Tube Plate Thickness	T
C) Distance of First Groove	L1
D) Total Number of Groove	N
E) Spacing of Grooves	L2, L3
F) Groove Width	W
G) Diameter of Grooves	D1
H) Groove undercut Depth	G

Tube Sheet Hole Reamer



Technotorc
Power in Hand
www.technotorc.com



Features :

- High speed steel, cryogenically treated & coated with Titanium Nitride for long life.
- Ideal for heat exchanger and condenser tube sheet reaming.
- Reamers available in MM sizes also.
- For larger diameters, please enquire.

SPECIFICATIONS

Tube O.D.		Reamer Size to "TEMA" Specification		Model No.	Flute Length		OAL		Shank Morse Taper #
mm	inch	mm	inch		mm	inch			
9.53	3/8	9.65	.380	RM-095/66	66	2.60	146	5.70	1
				RM-095/101	101	3.97	181	7.12	
				RM-095/152	152	5.98	232	9.13	
12.70	1/2	12.83	.505	RM-127/76	76	2.99	156	6.14	1
				RM-127/101	101	3.97	181	7.12	
				RM-127/152	152	5.98	232	9.13	
15.87	5/8	16.03	.631	RM-158/87	87	3.42	187	7.36	2
				RM-158/152	152	5.98	252	9.92	
				RM-158/203	203	7.99	303	11.93	
16.00	-	16.16	.636	RM-160/87	87	3.42	187	7.36	2
				RM-160/152	152	5.98	252	9.92	
				RM-160/203	203	7.99	303	11.93	
19.05	3/4	19.25	.758	RM-190/100	100	3.90	200	7.87	2
				RM-190/152	152	5.98	252	9.92	
				RM-190/203	203	7.99	303	11.93	
20.00	-	20.20	.795	RM-200/100	100	3.90	200	7.87	2
				RM-200/152	152	5.98	252	9.92	
				RM-200/203	203	7.99	303	11.93	
22.00	-	22.22	.875	RM-220/107	107	4.21	207	8.15	2
				RM-220/152	152	5.98	252	9.92	
				RM-220/203	203	7.99	303	11.93	
22.22	7/8	22.42	.883	RM-222/107	107	4.21	207	8.15	2
				RM-222/152	152	5.98	252	9.92	
				RM-222/203	203	7.99	303	11.93	
25.00	-	25.25	.994	RM-250/115	115	4.53	242	9.53	3
				RM-250/203	203	7.99	330	12.99	
				RM-250/254	254	10.00	381	15.00	
25.40	1	25.65	1.010	RM-254/115	115	4.53	242	9.53	3
				RM-254/203	203	7.99	330	12.99	
				RM-254/254	254	10.00	381	15.00	
28.57	1.1/8	28.86	1.136	RM-285/124	124	4.88	251	9.88	3
				RM-285/203	203	7.99	330	12.99	
				RM-285/254	254	10.00	381	15.00	
31.75	1.1/4	32.07	1.262	RM-317/133	133	5.23	293	11.53	4
				RM-317/203	203	7.99	363	14.29	
				RM-317/254	254	10.00	414	16.30	



Technotorc

Power in Hand
www.technotorc.com

Tube End Facer



TOOL BIT



NON-FERROUS
& CARBON STEEL

TOOL BIT



STAINLESS STEEL

Features :

- Ideal for quick facing of projecting tube ends in heat exchangers, condensers and boilers.
- One size of tool is suitable for use on multiple tube thicknesses by interchanging pilot. (TEF-375 is the exception with the tool suitable for one tube ID only).
- Each tool is supplied with a set of multiple pilots to cover all tube thicknesses.
- Tube end facers for MM sizes of tubes also available. Please enquire.

■ SPECIFICATIONS

Tube O.D.		Tube Thk. bwg	Model No.	Spare Tool Bits	
mm	inch			Non-Ferrous or Carbon Steel Tubes Model No.	Stainless Steel Tubes Model No.
9.53	3/8	16-22	TEF-375	TEF-376	TEF-376 SS
12.70	1/2	15-20	TEF-500	TEF-506	TEF-506 SS
					SS
19.05	3/4	10-18	TEF-750	TEF-756	TEF-756 SS
22.22	7/8	13-18	TEF-875	TEF-876	TEF-876 SS
25.40	1	11-18	TEF-1000	TEF-1006	TEF-1006 SS
28.57	1.1/8	11-18	TEF-1125	TEF-1126	TEF-1126 SS
31.75	1.1/4	11-18	TEF-1250	TEF-1256	TEF-1256 SS
34.92	1.3/8	11-18	TEF-1375	TEF-1376	TEF-1376 SS
38.10	1.1/2	11-18	TEF-1500	TEF-1506	TEF-1506 SS
41.27	1.5/8	11-18	TEF-1625	TEF-1626	TEF-1626 SS
44.45	1.3/4	11-18	TEF-1750	TEF-1756	TEF-1756 SS
47.62	1.7/8	11-18	TEF-1875	TEF-1876	TEF-1876 SS
50.80	2	11-18	TEF-2000	TEF-2006	TEF-2006 SS
57.15	2.1/4	11-18	TEF-2250	TEF-2256	TEF-2256 SS
63.50	2.1/2	11-18	TEF-2500	TEF-2506	TEF-2506 SS



Technotorc

Power in Hand
www.technotorc.com

Weld Removal Tool



Features :

- Tool uses 3 cutting blades which can be configured for tube end facing or weld removal as a step in the removal of welded tubes from the tube sheet.
- Tool fitted with MT shank for use with standard air or electric drills.
- Cutting blades are Titanium Nitride coated to give 3 times the life of conventional cutting blades.
- Tools available for MM sizes of tubes also. Please enquire.
- Ideally suited for work on larger diameter boiler tubes.

■ SPECIFICATIONS

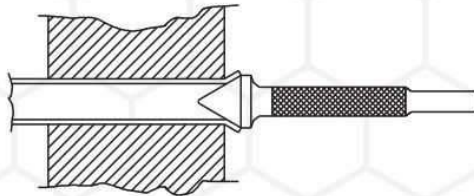
Tube O.D.		Facer Fitted With 3 Tool Bits Model No.	Spare Tool Bits Model No.
mm	inch		
38.10	1.1/2	FC-1500	FC-1500-TB
41.27	1.5/8	FC-1625	FC-1625-TB
44.45	1.3/4	FC-1750	FC-1750-TB
47.62	1.7/8	FC-1875	FC-1875-TB
50.80	2	FC-2000	FC-2000-TB
57.15	2.1/4	FC-2250	FC-2250-TB
63.50	2.1/2	FC-2500	FC-2500-TB
69.85	2.3/4	FC-2750	FC-2750-TB
76.20	3	FC-3000	FC-3000-TB
82.55	3.1/4	FC-3250	FC-3250-TB
88.90	3.1/2	FC-3500	FC-3500-TB
95.25	3.3/4	FC-3750	FC-3750-TB
101.6	4	FC-4000	FC-4000-TB



Technotorc

Power in Hand
www.technotorc.com

Flaring Tool



Features :

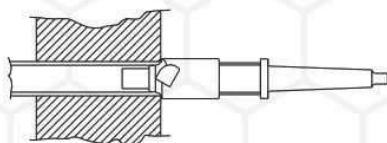
- High speed steel tool used in preparing tube sheets to suit the flaring or beading of tube ends outside of or flush with the tube sheet.
- MM sizes and cutters with other radii are also available. Please enquire.

Note : Fitted with Type 1 round shank for use with standard pneumatic chipping hammer.
Other shanks on request.

■ SPECIFICATIONS

Tube O.D.		Tube Thk. bwg.	Model No.
mm	inch		
12.70	1/2	16-22	FT-1
		14-15	FT-2
15.87	5/8	16-22	FT-3
		14-15	FT-4
19.05	3/4	16-22	FT-5
		14-15	FT-6
22.22	7/8	16-22	FT-7
		14-15	FT-8
25.40	1	16-22	FT-9
		14-15	FT-10
28.57	1.1/8	16-22	FT-11
		14-15	FT-12
31.75	1.1/4	15-22	FT-13
		8-14	FT-14
34.92	1.3/8	15-22	FT-15
		8-14	FT-16
38.10	1.1/2	15-22	FT-17
		8-14	

Tube Sheet Hole Radius Cutter



■ SPECIFICATIONS

Tube O.D.		Model No.	Tool Radius		Morse Taper
mm	inch		mm	inch	
12.70	1/2	20338	3.2	1/8	2
15.87	5/8	20224	4.0	5/32	2
19.05	3/4	20225	4.8	3/16	2
22.22	7/8	20226	4.8	3/16	2
25.40	1	20227	4.8	3/16	2
28.57	1.1/8	40512	6.4	1/4	2
31.75	1.1/4	21395	6.4	1/4	2



Technotorc

Power in Hand
www.technotorc.com

Tube Sheet Hole Brush



Features :

- To clean tube sheet bores, prior to tube installation.
- Can be used with any standard pneumatic or electric drill.

Note : Available in your choice of carbon steel, stainless steel or brass.
For other / larger sizes, please enquire.

■ SPECIFICATIONS

Tube O.D.		Model No.
mm	inch	
12.70	1/2	TSHB-1/2
15.87	5/8	TSHB-5/8
19.05	3/4	TSHB-3/4
22.22	7/8	TSHB-7/8
25.40	1	TSHB-1
31.75	1.1/4	TSHB-1.1/4
38.10	1.1/2	TSHB-1.1/2
44.45	1.3/4	TSHB-1.3/4
50.80	2	TSHB-2
57.15	2.1/4	TSHB-2.1/4
63.50	2.1/2	TSHB-2.1/2
69.85	2.3/4	TSHB-2.3/4
76.20	3	TSHB-3

Tube Guide



- To 'pilot' the tubes through the tube sheets and baffle plates during tube insertion.

■ SPECIFICATIONS

Tube O.D.		Tube Thk. bwg.	Model No.	Tube O.D.		Tube Thk. bwg.	Model No.
mm	inch			mm	inch		
12.70	1/2	16-18	TG-1	31.75	1.1/4	10-13	TG-15
		19-20	TG-2			14-20	TG-16
		21-23	TG-2.5			8-9	TG-17
15.87	5/8	12-13	TG-3	34.92	1.3/8	10-13	TG-18
		14-16	TG-4			14-20	TG-19
		17-20	TG-5			8-9	TG-20
		22-24	TG-5.5			10-13	TG-21
19.05	3/4	10-12	TG-6	38.10	1.1/2	14-20	TG-22
		13-16	TG-7			8-10	TG-23
		17-20	TG-8			11-13	TG-24
		22-24	TG-8.5			14-18	TG-25
22.22	7/8	10-12	TG-9	63.50	2.1/2	10-13	TG-26
		13-16	TG-10			14-18	TG-27
		17-20	TG-11				
		21-22	TG-11.5				
25.40	1	8-9	TG-12.5				
		10-12	TG-12				
		13-16	TG-13				
		17-20	TG-14				
		21-23	TG-14.5				
31.75	1.1/4	10-13	TG-15				
		14-20	TG-16				

Note : For other / larger sizes, please enquire.

Tube Leak Detector Test Kit



Technotorc

Power in Hand
www.technotorc.com



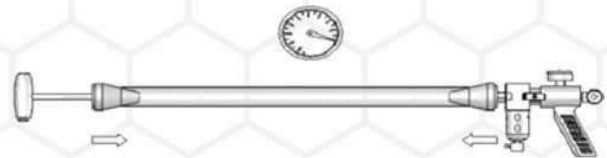
The vacuum leak tester PVLD-3000 is a very quick, easy & precise method of testing damage or leaky tubes of boilers, condensers & heat exchangers. Also it is very economical & fast method compare to hydro test for locating

- Tube Capacity : 1/4" (6.3mm) To 3" (76.2mm)
- Air Pressure required : 90 psi (6.0 Bar)
- Max Vacuum : 80%
- Temperature range : 20 to 80 C
- Weight : 0.800 gms
- Dimensions : 230 x 120 x 170 (MM)

Tube Seal Available

Model (Seals)	Tube Size
P-750	1/4" (6.3mm) - 3/4" (19.05mm)
P-1250	5/8" (15.9mm) - 1.1/4" (31.7mm)
P-2000	1.1/8" (28.6mm) - 2" (50.8mm)
P-3000	1.7/8" (47.6mm) - 3" (76.2mm)

Operational Instruction



Connect air supply to the gun Plug both ends of the tube to be tested with Plugging 'T' handle at one end and vacuum gun at other end.



Operate slide valve and allow creation of a vacuum in the tube.



Shut off the slide valve when vacuum gauge reaches to the desire pressure. Hold for a few seconds. If gauge shows steady pressure there is no leak.



If there is a pressure drop, it indicates a tube with a leak.

Bore Gauge



FEATURES

- Supplied with set of interchangeable carbide tipped anvils.
- The Dial Indicator is fully protected by a rugged cover.
- Packed as a set with all necessary accessories to measure the complete range.
- Unique self-entering device.
- Special type extra long bore gauge is also available kindly enquire.
- **Special model with lifelong ceramic points also available.**

Product Code TMBGC

■ SPECIFICATIONS

METRIC

Model (Seals)	Range	Resolution
TMBG 10	6.10mm	0.01mm
TMBG 18	10.18.5mm	0.01mm
TMBG 35	18.35mm	0.01mm
TMBG 60	35.60mm	0.01mm
TMBG 160	50.160mm	0.01mm
TMBG 250	160.250mm	0.01mm
TMBG 450	250.450mm	0.01mm
TMBG 600	400.600mm	0.01mm
TMBG 800	600.800mm	0.01mm

