


$\frac{3}{8}$ " -  $\frac{1}{2}$ "  
O.D.

## SERRATING / GROOVING TOOL - 'ST' SERIES


**FOR GROOVING IN TUBE SHEETS**



**TOOL BITS**



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



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

**Features :**

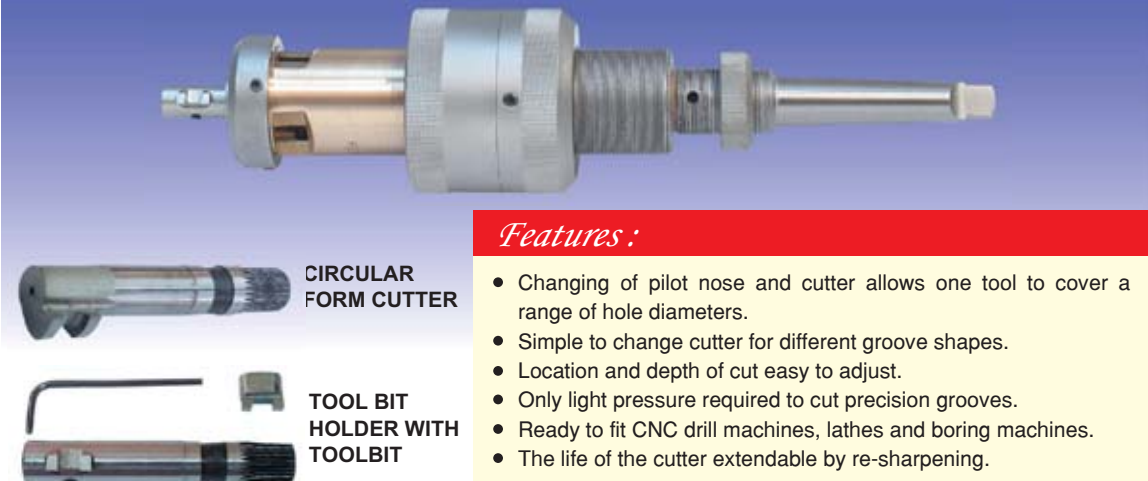
- High production tool.
- Ideal for use where 1 tool is needed per bore.
- One piece cryogenically treated tool bit ensures maximum life.
- Tool is ideally suited for CNC applications on account of 1 piece mandrel construction and short design.


| Tube O.D. |       | Tool Model No. | Spare Tool Bits            |                            |                 |
|-----------|-------|----------------|----------------------------|----------------------------|-----------------|
|           |       |                | 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-SPEC    |
| 12.70     | 1/2   | ST-500-1270    | ST-5003                    | ST-5003-S                  | ST-5003-SPEC    |
| 15.87     | 5/8   | ST-625-1588    | ST-6203                    | ST-6203-S                  | ST-6203-SPEC    |
| 19.05     | 3/4   | ST-750-1900    | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 22.22     | 7/8   | ST-875-2220    | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 25.40     | 1     | ST-1000-2540   | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 31.75     | 1.1/4 | ST-1250-3175   | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 38.10     | 1.1/2 | ST-1500-3810   | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 50.80     | 2     | ST-2000-5080   | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |
| 63.50     | 2.1/2 | ST-2500-6350   | ST-7503                    | ST-7503-S                  | ST-7503-SPEC    |

**Note :** Serrating Tools are available for MM bore sizes also. Please enquire.  
Refer to operation manual for spare parts list and detailed features.


$\frac{3}{8}$ " - 4"  
O.D.

## SERRATING / GROOVING TOOL - 'NW' SERIES





**CIRCULAR FORM CUTTER**



**TOOL BIT HOLDER WITH TOOLBIT**

**Features :**

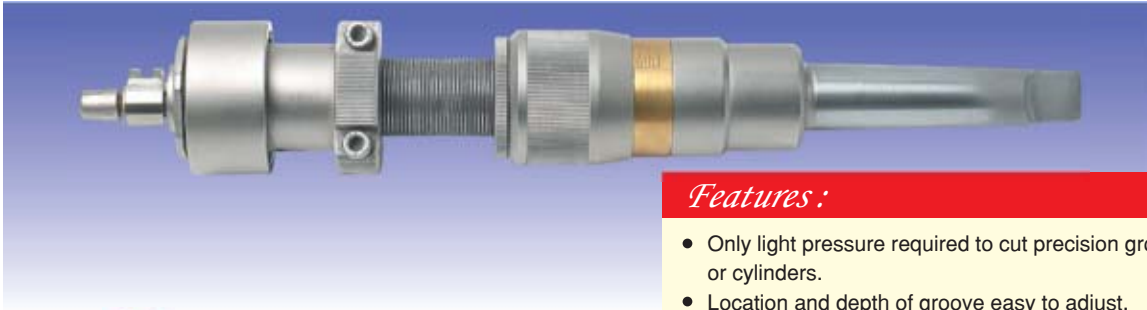
- Changing of pilot nose and cutter allows one tool to cover a range of hole diameters.
- Simple to change cutter for different groove shapes.
- Location and depth of cut easy to adjust.
- Only light pressure required to cut precision grooves.
- Ready to fit CNC drill machines, lathes and boring machines.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

| 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 | 2 NW - 3 MT    | 2 NW - PN            | 2 NW - CF                      | 2 NW - TBH                | 2 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.  
Refer to operation manual for detailed spare parts list.  
Ask for leaflet number 038 for detailed features.

# SERRATING / GROOVING TOOL - 'SGT' SERIES

3/8" - 3"  
O.D.



TOOL BIT

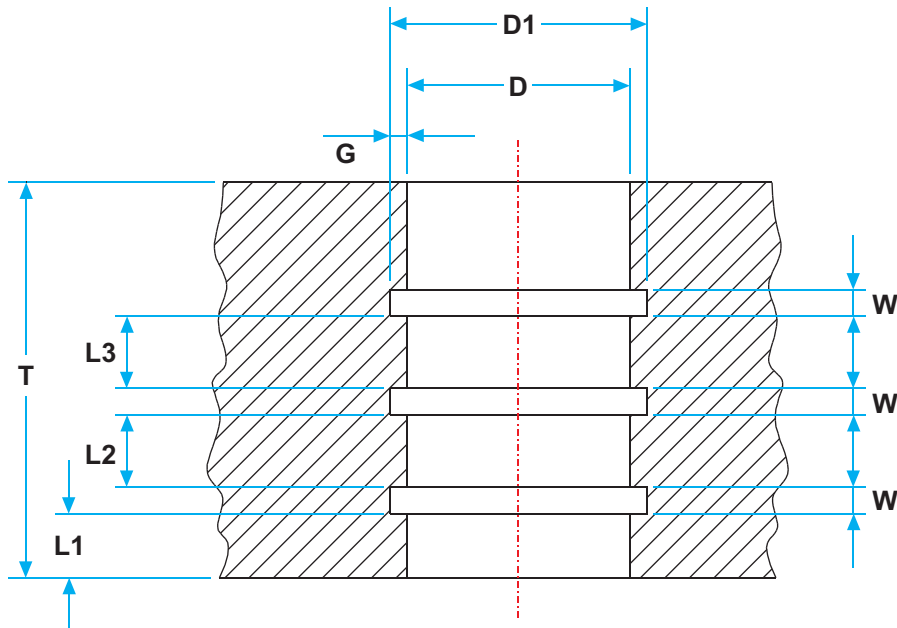
## Features :

- 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.

| 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 - 32    | 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          |

**Note :** Ask for catalog number CTG-100 for spare parts list, operating instructions and detailed features.

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

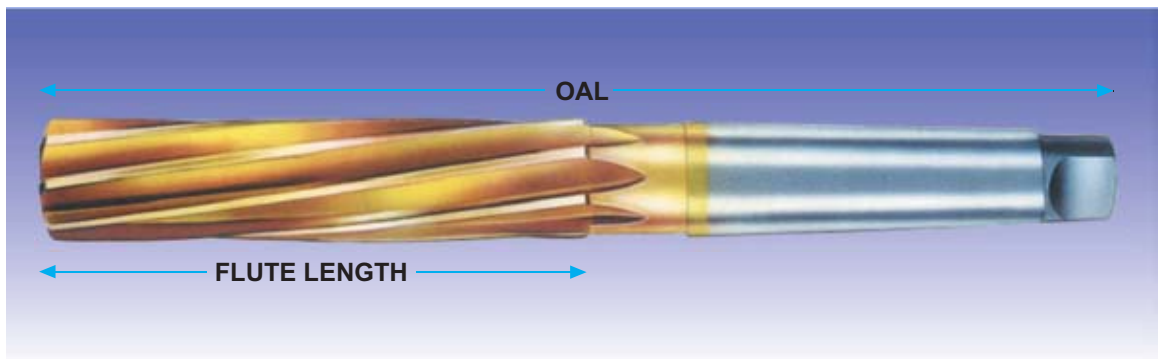


|    |  |        |
|----|--|--------|
| A) | Bore Dia after reaming with Tolerances | D      |
| B) | Tube Plate Thickness                   | T      |
| C) | Distance of First Groove               | L1     |
| D) | Total Number of Grooves                | N      |
| E) | Spacing of Grooves         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





## TUBE SHEET HOLE REAMER

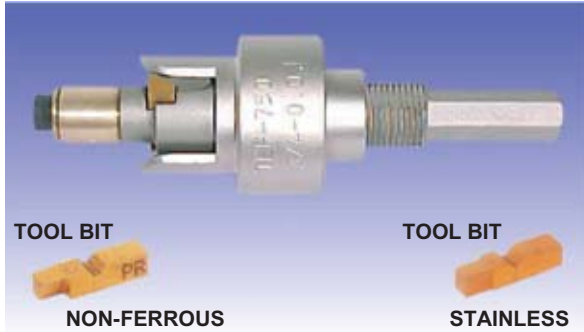


- Features :**
- High speed steel, cryogenically treated & coated with Titanium Nitride for long life.
  - Ideal for heat exchanger and condenser tube sheet reaming.
  - Reamers available in MM sizes also.
  - For larger diameters, please enquire.

| Tube O.D. |       | Reamer Size to "TEMA" Specification |       | Model No.  | Flute Length |       | OAL |       | Shank: Morse Taper # |
|-----------|-------|-------------------------------------|-------|------------|--------------|-------|-----|-------|----------------------|
| mm        | inch  | 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 |                      |

# TUBE END FACER - 'TEF' SERIES

3/8"-2 1/2"  
O.D.



## Features :

- Tool bits coated with Titanium Nitride to give 3 times the life of conventional tool bits.
- 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.

| 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                      |
| 12.07     | 1/2   | 15-20         | TEF-500   | TEF-506                                     | TEF-506 SS                      |
| 15.87     | 5/8   | 14-18         | TEF-625   | TEF-626                                     | TEF-626 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                     |

# TUBE END FACER - 'FB' SERIES



## Features :

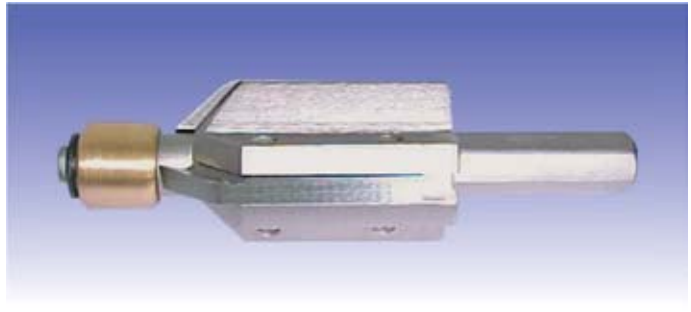
- High speed production tool.
- Titanium Nitride coated tool bit can be reversed and used. Doubles tool bit life.

| 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         | FB-375    | FB-376                                      | FB-376 SS                       |
| 12.07     | 1/2   | 15-20         | FB-500    | FB-506                                      | FB-506 SS                       |
| 15.87     | 5/8   | 14-18         | FB-625    | FB-626                                      | FB-626 SS                       |
| 19.05     | 3/4   | 10-18         | FB-750    | FB-756                                      | FB-756 SS                       |
| 22.22     | 7/8   | 13-18         | FB-875    | FB-876                                      | FB-876 SS                       |
| 25.40     | 1     | 11-18         | FB-1000   | FB-1006                                     | FB-1006 SS                      |
| 28.57     | 1.1/8 | 11-18         | FB-1125   | FB-1126                                     | FB-1126 SS                      |
| 31.75     | 1.1/4 | 11-18         | FB-1250   | FB-1256                                     | FB-1256 SS                      |
| 34.92     | 1.3/8 | 11-18         | FB-1375   | FB-1376                                     | FB-1376 SS                      |
| 38.10     | 1.1/2 | 11-18         | FB-1500   | FB-1506                                     | FB-1506 SS                      |
| 41.27     | 1.5/8 | 11-18         | FB-1625   | FB-1626                                     | FB-1626 SS                      |
| 44.45     | 1.3/4 | 11-18         | FB-1750   | FB-1756                                     | FB-1756 SS                      |
| 47.62     | 1.7/8 | 11-18         | FB-1875   | FB-1876                                     | FB-1876 SS                      |
| 50.80     | 2     | 11-18         | FB-2000   | FB-2006                                     | FB-2006 SS                      |
| 57.15     | 2.1/4 | 11-18         | FB-2250   | FB-2256                                     | FB-2256 SS                      |
| 63.50     | 2.1/2 | 11-18         | FB-2500   | FB-2506                                     | FB-2506 SS                      |



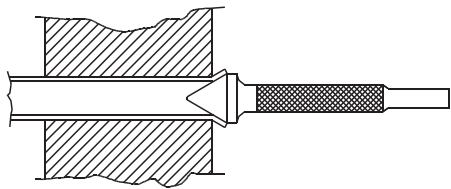
# TUBE END FACER - 'FC' SERIES / WELD REMOVAL TOOL

| 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                |

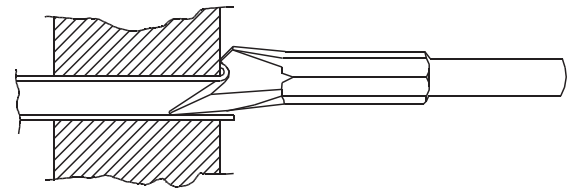


- Features :**
- Tool uses 3 cutting blades which can be configured for tube end facing or weld removal as a step in the removal of welded tubes from the tube sheet.
  - Tool fitted with MT shank for use with standard air or electric drills.
  - Cutting blades are Titanium Nitride coated to give 3 times 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.

## FLARING TOOL



## BEADING TOOL



| 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      |
|           |       | 12-15          | FT-8      |
| 25.40     | 1     | 16-22          | FT-9      |
|           |       | 12-15          | FT-10     |
| 28.57     | 1.1/8 | 16-22          | FT-11     |
|           |       | 8-14           | 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     |

| Tube O.D. |      | Tube Thk. bwg. | Model No. |
|-----------|------|----------------|-----------|
| mm        | inch |                |           |
| 12.70     | 1/2  | 16-17          | BDT-1     |
|           |      | 18-19          | BDT-2     |
|           |      | 20-22          | BDT-3     |
| 15.87     | 5/8  | 16-17          | BDT-4     |
|           |      | 18-19          | BDT-5     |
|           |      | 20-22          | BDT-6     |
| 19.05     | 3/4  | 16-17          | BDT-7     |
|           |      | 18-19          | BDT-8     |
|           |      | 20-22          | BDT-9     |
| 22.22     | 7/8  | 16-17          | BDT-10    |
|           |      | 18-19          | BDT-11    |
|           |      | 20-22          | BDT-12    |
| 25.40     | 1    | 16-17          | BDT-13    |
|           |      | 18-19          | BDT-14    |
|           |      | 20-22          | BDT-15    |

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

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



## BELLING TOOL

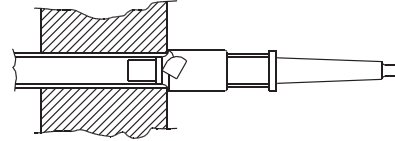


In many condensers the inlet end of tubes are required to be seated into the sheet (not projecting). The contour is a "Bell End" or "Trumpet Mouth" of special shape.

## TUBE SHEET HOLE RADIUS CUTTER



- 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.



| 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           |

## TUBE SHEET HOLE BRUSH

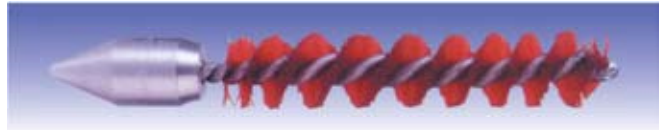
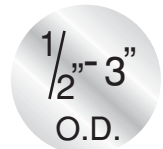


- To clean tube sheet bores, prior to tube installation.
- Can be used with any standard pneumatic or electric drill.

| 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     |

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

## TUBE GUIDE



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

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

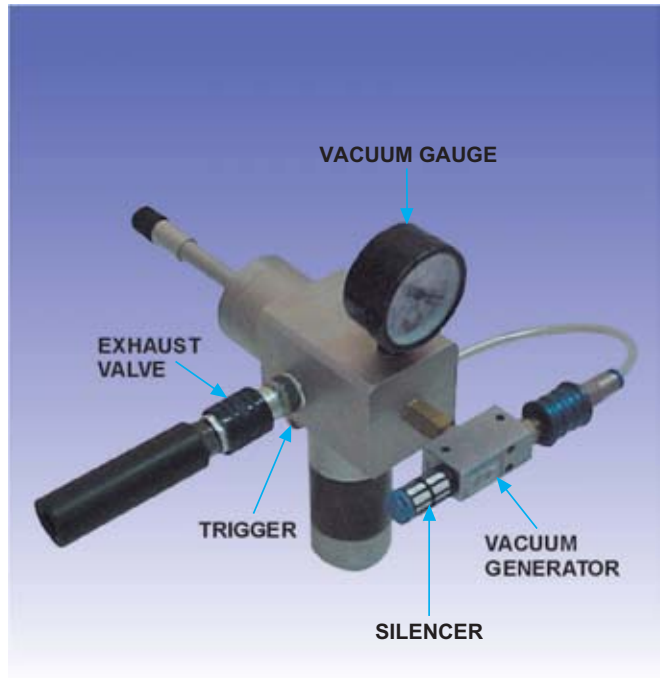
**Note :** For other / larger sizes, please enquire.



**TUBE LEAK DETECTOR KIT**



**TUBE JOINT TESTING KIT**



*Features :*

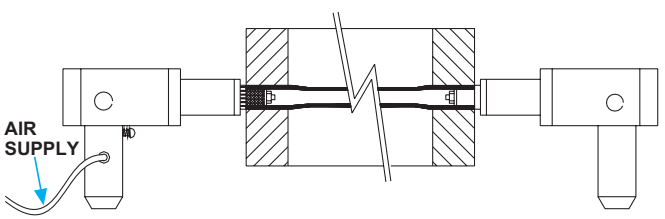
- Simple, Quick and Reliable tube and joint testing. Test 7 to 8 tubes or 10 tube joints per minute.
- Interchangeable seal sets : Allows testing of tubes from 7.75 mm to 30.63 mm ID with easy to replace accessories.
- Each Tube Testing Gun weighs less than 1.3 kg and Joint Testing Gun weighs less than 1.5 kg.
- Air supply : Uses standard plant air supplies from 70 psi to 100 psi (4.7 to 6.8 bar).
- Silent during use . Ergonomic design makes testing effortless.
- Each Kit packed in easy to carry case.

**OPERATION**

Tube Leak Detector detects tube leakage merely by pressing a button. The Pressurizing gun and Plugging Gun are inserted into opposite ends. Pressurizing Gun lets in air to pressurize the tube to 100 psi with compressed air. The gauge will show and hold the pressure if there are no leaks. Conversely, a pressure drop is indicated on gauge incase of tube leak. A quick slide of exhaust valve silently lets out the air in tube and releases the guns for next tube test.

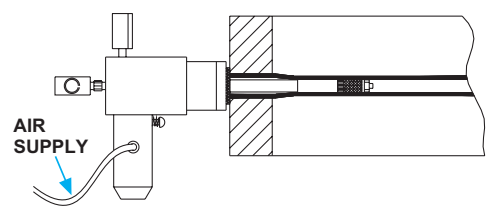
**OPERATION**

Tube Joint Tester is designed to test both rolled and welded tube-to-tubesheet joints. Joint Tester is inserted in tube, a trigger expands tube seal inside the tube and beyond the length of expansion. Actuating a slide valve generates vacuum between the tube seal and face seal over the joint seam. Vacuum level is indicated on gauge. Should the amount of vacuum shown on gauge start dropping, a leak is detected.

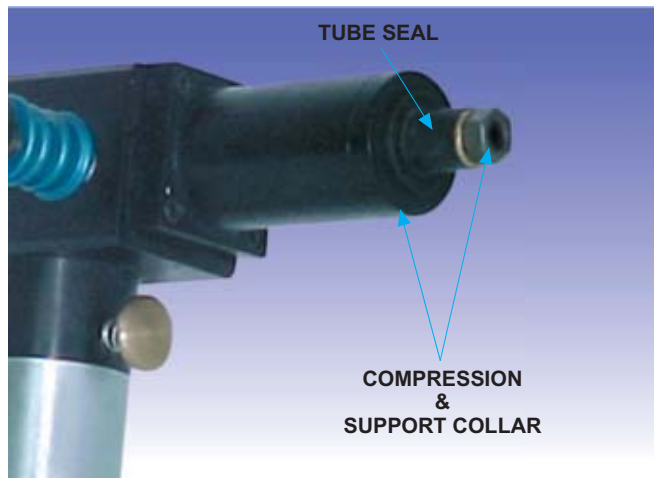


**PRESSURE GUN**

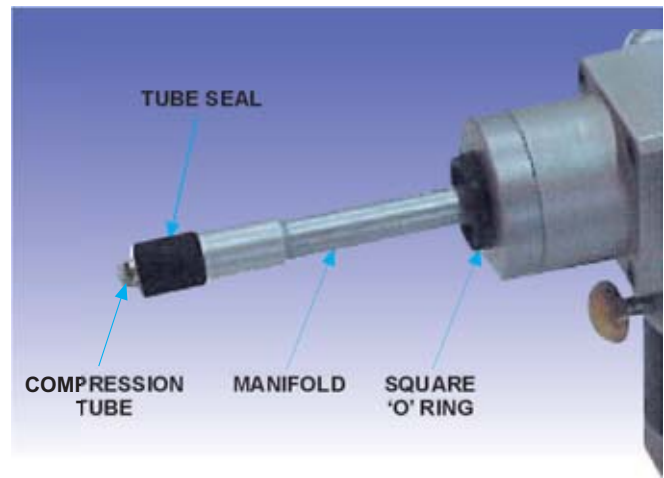
**PLUGGING GUN**



# TUBE LEAK DETECTOR KIT



# TUBE JOINT TESTING KIT



| TUBE SIZE |            | TLD-6525 Tube Tester Assembly | TLD-6525 Tube Tester Replacement Parts |                              | JTK-6500 Joint Tester Assembly | JTK-6500 Joint Tester Replacement Parts |                             |               |
|-----------|------------|-------------------------------|--|------------------------------|--------------------------------|---|-----------------------------|---------------|
| O.D.      | BWG        | Assembly Number               | Tube Seals                             | Compression & Support Collar | Assembly Number                | Tube Seals                              | Manifold with Square O-ring | Square O-ring |
| 5/8"      | 8-9        | TLD-6500 5/8SP                | TLD-300 N                              | TLD-15-125                   | JTK-6500 5/8SP                 | JTK-300 N                               | JTM-6500 5/8SP              | JTK-16 5/8    |
|           | 10-11      |                               | TLD-350 N                              |                              |                                | JTK-350 N                               |                             |               |
|           | 12-13      |                               | TLD-370 N                              |                              |                                | JTK-370 N                               |                             |               |
|           | 14-15      |                               | TLD-450 N                              |                              |                                | JTK-450 N                               |                             |               |
|           | 16-17      |                               | TLD-470 N                              |                              |                                | JTK-470 N                               |                             |               |
|           | 18-19      | TLD-490 N                     | JTK-490 N                              |                              |                                |   |                             |               |
| 20-24     | TLD-530 N  | TLD-15-312                    | JTK-6500 5/8                           | JTK-530 N                    | JTM-6500 5/8                   |   |                             |               |
| 3/4"      | 8-9        | TLD-6500 3/4SP                | TLD-430 N                              | TLD-15-312                   | JTK-6500 3/4SP                 | JTK-430 N                               | JTM-6500 3/4SP              | JTK-16 3/4    |
|           | 10-11      |                               | TLD-450 N                              |                              |                                | JTK-450 N                               |                             |               |
|           | 12-13      | TLD-6500 3/4                  | TLD-490 N                              | TLD-15-312                   | JTK-6500 3/4                   | JTK-490 N                               | JTM-6500 3/4                |               |
|           | 14-15      |                               | TLD-530 N                              |                              |                                | JTK-530 N                               |                             |               |
|           | 16-17      |                               | TLD-570 N                              |                              |                                | JTK-570 N                               |                             |               |
|           | 18-19      |                               | TLD-610 N                              |                              |                                | JTK-610 N                               |                             |               |
| 20-24     | TLD-650 N  | JTK-650 N                     |  |                              |                                |   |                             |               |
| 7/8"      | 8-9        | TLD-6500 7/8                  | TLD-530 N                              | TLD-15-312                   | JTK-6500 7/8                   | JTK-530 N                               | JTM-6500 7/8                | JTK-16 7/8    |
|           | 10-11      |                               | TLD-570 N                              |                              |                                | JTK-570 N                               |                             |               |
|           | 12-13      |                               | TLD-610 N                              |                              |                                | JTK-610 N                               |                             |               |
|           | 14-15      |                               | TLD-690 N                              |                              |                                | JTK-690 N                               |                             |               |
|           | 16-17      |                               | TLD-730 N                              |                              |                                | JTK-730 N                               |                             |               |
|           | 18-19      |                               | TLD-740 N                              |                              |                                | JTK-740 N                               |                             |               |
| 20-24     | TLD-790 N  | JTK-790 N                     |  |                              |                                |   |                             |               |
| 1"        | 8-9        | TLD-6500 1                    | TLD-650 N                              | TLD-15-405                   | JTK-6500 1                     | JTK-650 N                               | JTM-6500 1                  | JTK-16 1      |
|           | 10-11      |                               | TLD-690 N                              |                              |                                | JTK-690 N                               |                             |               |
|           | 12-13      |                               | TLD-740 N                              |                              |                                | JTK-740 N                               |                             |               |
|           | 14-15      |                               | TLD-790 N                              |                              |                                | JTK-790 N                               |                             |               |
|           | 16-17      |                               | TLD-840 N                              |                              |                                | JTK-840 N                               |                             |               |
|           | 18-19      |                               | TLD-870 N                              |                              |                                | JTK-870 N                               |                             |               |
| 20-24     | TLD-890 N  | JTK-890 N                     |  |                              |                                |   |                             |               |
| 1.1/8"    | 8-9        | TLD-6500 1.1/8                | TLD-790 N 405                          | TLD-15-312                   | JTK-6500 1.1/8                 | JTK-790 N 405                           | JTM-6500 1.1/8              | JTK-16 1.1/8  |
|           | 10-11      |                               | TLD-840 N                              |                              |                                | JTK-840 N                               |                             |               |
|           | 12-13      |                               | TLD-870 N                              |                              |                                | JTK-870 N                               |                             |               |
|           | 14-15      |                               | TLD-940 N                              |                              |                                | JTK-940 N                               |                             |               |
|           | 16-17      |                               | TLD-980 N                              |                              |                                | JTK-980 N                               |                             |               |
|           | 18-19      |                               | TLD-990 N                              |                              |                                | JTK-990 N                               |                             |               |
| 20-24     | TLD-1040 N | JTK-1040 N                    |  |                              |                                |   |                             |               |
| 1.1/4"    | 8-9        | TLD-6500 1.1/4                | TLD-890 N                              | TLD-15-405                   | JTK-6500 1.1/4                 | JTK-890 N                               | JTM-6500 1.1/4              | JTK-16 1.1/4  |
|           | 10-11      |                               | TLD-940 N                              |                              |                                | JTK-940 N                               |                             |               |
|           | 12-13      |                               | TLD-990 N                              |                              |                                | JTK-940 N                               |                             |               |
|           | 14-15      |                               | TLD-1080 N                             |                              |                                | JTK-1080 N                              |                             |               |
|           | 16-17      |                               | TLD-1090 N                             |                              |                                | JTK-1090 N                              |                             |               |
|           | 18-19      |                               | TLD-1100 N                             |                              |                                | JTK-1100 N                              |                             |               |
| 20-24     | TLD-1140 N | JTK-1140 N                    |  |                              |                                |   |                             |               |



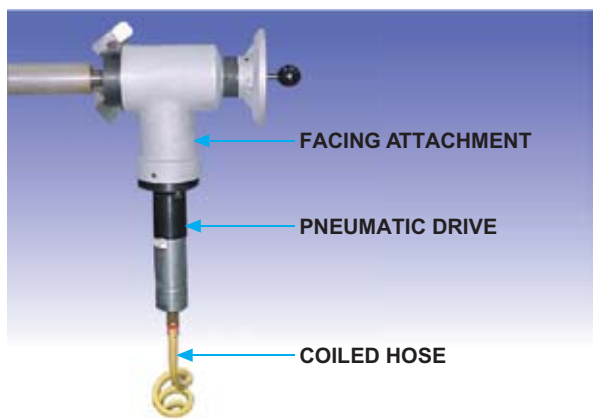


# TUBE END FACING MACHINE

The POWERMASTER Facing Machine is a powerful yet portable fixture designed to self-align and mount on tubes for fast tube end facing and chamfering in constrained spaces.

## Features :

- Power and range combined in light and portable design.
- Drive : Electric, Hydraulic or Pneumatic
- Range of Tube end facing, external or internal beveling and weld seam machining tool bits.
- Quick interchangeability of Pilot to suit range of inside diameters.
- Modular and Ergonomic design.

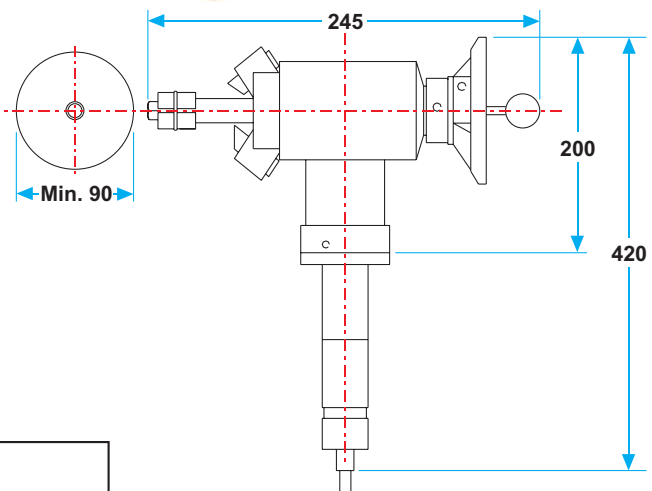


### FACING ATTACHMENT

|                              |         |
|------------------------------|---------|
| Locking Tube Range I.D. (mm) | 28-82   |
| Weight (kg)                  | 6.8     |
| Model                        | FM-3500 |

### DRIVE

| Motor       | Pneumatic     | Electric | Hydraulic |
|-------------|---------------|----------|-----------|
| Torque (Nm) | 84            | 138      | 140       |
| Speed (rpm) | 135 @ 500 lpm | 70       | 480       |
| Weight (kg) | 1.8           | 2.8      | 5.6       |
| Model       | MD-P          | FMD-E    | FMD-H     |



Note : All Dimension in MM

### CUTTING BITS

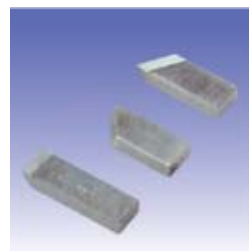
**EXTERNAL BEVELLING**

**INSIDE BEVELLING**

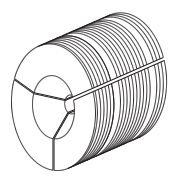
**STRAIGHT BEVELLING**

**WELDED SEAM MACHINING**

### CUTTING BITS



### PILOT JAWS



PILOT JAWS ARE AS PER TUBE INNER DIAMETER.

### OPTIONAL ELECTRIC OR HYDRAULIC DRIVE

