60 INSTALLATION TOOLS KRAIS TUBE & PIPE TOOLS

# **Basic installation tools**

### TEF – Tube End Facer



Typical application for TEF is the tube trimming of heat exchanger, condenser and chiller tubes to a uniform 1/8" (3 mm) tube projection after tube rolling. This will fit into all electric and pneumatic power tools equipped with a 1/2" Jacobs chuck. The tool is fitted with a three slot collar for precision adjustment and features a very simple mechanism for tool bit replacement. TEF is equipped with a hex shank as standard.

Work best with KDM - Krais Drilling Machine.



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TUBE OD				SPARE BITS	
[INCH]	[MM]	TOOL NO.	PILOT RANGE	NON FERROUS OR CARBON STEEL	STAINLESS
3/8"	9,50	TEF-375	16 – 20	TEF-376	TEF-376-SS
1/2"	12,7	TEF-500	16 – 20	TEF-506	TEF-506-SS
5/8"	15,8	TEF-625	14 – 18	TEF-626	TEF-626-SS
3/4"	19,0	TEF-750	10 – 18	TEF-756	TEF-756-SS
7/8"	22,2	TEF-875	14 – 18	TEF-876	TEF-876-SS
1"	25,4	TEF-1000	10 – 18	TEF-1006	TEF-1006-SS
1-1/4"	31,7	TEF-1250	10 – 18	TEF-1256	TEF-1256-SS
1-1/2"	38,1	TEF-1500	10 – 18	TEF-1506	TEF-1506-SS
2"	50,8	TEF-2000	10 – 18	TEF-2006	TEF-2006-SS
2-1/2"	63,5	TEF-2500	10 – 18	TEF-2506	TEF-2506-SS

## **Tool for Serrating Tube Sheet**



Portable, self-centering tool for grooving tube sheet. Unique single-piece mandrel with built-in rollers in the part that operates directly in the hole allows obtaining a perfect surface, free from burrs and flashes. The latter was formed with the previous designs during the friction of the mandrel against the walls of the hole - now, it is eliminated through the use of rollers - the mandrel rolls over the walls of the hole. Owing to the lack of friction the life of the tool has grown very significantly. As an option, the tool can be delivered with a special channel conducted inside the mandrel. Channel serving the purpose of feeding the cooling medium directly through the tool cutter, this having an enormous impact on the life of the cutter and helping in rinsing out chips during the work.

Grooving tools can be used both on portable and stationary multiradial drills. They also find their application on CNC machine tools. JGS grooving tools are manufactured within a broad range of sizing: from 3/8" (9.52 mm) up to 4" (101.6 mm), in both imperial and metric versions. As a standard, the tools have an adjustment system for channel cutting reach, 22.2 mm to 54.0 mm (as counted from the bottom face to the internal edge of the channel being cut).

Work best with KDM - Krais Drilling Machine.



#### **CUTTER BITS**



Example of cutter bits, available as optional.

#### NOTE!

For tube sheet holes bigger up to 0,25 mm than tube OD the tailor-made mandrel should be considered. Hole bigger more than 0,25 mm may create a damage of the tool mandrel or drilling machine!

#### IMPERIAL VERSION TOOLS

Tool No.	Tube OD	Tool Bits (spacing)		
1001 NO.	[inch]	1/8 x 1/4 x 1/8"	1/8 x 3/8 x 1/8"	1/8 x 1/8 x 1/8"
JGS-375	3/8"	ST-3703-S	ST-3703	ST-3703-SPEC
JGS-500	1/2"	ST-5003-S	ST-5003	ST-5003-SPEC
JGS-625	5/8"	ST-6203-S	ST-6203	ST-6203-SPEC
JGS-750	3/4"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-875	7/8"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-1000	1"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-1250	1-1/4"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-1500	1-1/2"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-2000	2"	ST-7503-S	ST-7503	ST-7503-SPEC
JGS-2500	2-1/2"	ST-7503-S	ST-7503	ST-7503-SPEC

#### **METRIC VERSION TOOLS**

Tool No.	Tube OD	Tool Bits (spacing)		
TOULINO.	[mm]	3 x 6 x 3 mm	3 x 9 x 2 mm	3 x 3 x 3 mm
JGS-375-10	10,00	GS-106	GS-109	GS-103
JGS-500-12	12,00	GS-206	GS-209	GS-203
JGS-625-16	16,00	GS-306	GS-309	GS-303
JGS-750-20	20,00	GS-406	GS-409	GS-403
JGS-875-22	22,00	GS-406	GS-409	GS-403
JGS-1000-25	25,00	GS-406	GS-409	GS-403
JGS-1250-32	32,00	GS-406	GS-409	GS-403
JGS-1500-38	38,00	GS-406	GS-409	GS-403
JGS-2000-51	51,00	GS-406	GS-409	GS-403

Other sizes and bits on request.

