

MiniDrill GFF

The **MiniDrill GFF** is a dedicated machining solution specifically developed for **FinFan air coolers**, enabling fast and precise repair of plug threads and sealing surfaces directly on-site.

Engineered for **FinFan maintenance**, the system supports drilling, re-machining, and seat restoration operations with a single machine, changing only the tool, eliminating the need for disassembly. Its rigid, torque-reactive design and dual clamping arms ensure stable mounting on adjacent tube holes, allowing accurate alignment across typical FinFan tube layouts.

With an **80 mm stroke**, controlled speed, and high torque output, the MiniDrill GFF delivers reliable performance even in demanding field conditions. The result is repeatable machining accuracy, reduced downtime, and restored sealing integrity of critical FinFan connections.

A compact, robust, and purpose-built tool for efficient FinFan thread repair and maintenance operations.



TAILOR MADE ONLY!

WORKING RANGE	LOCKING RANGE	WORKING STROKE	FREE SPEED	POWER	TORQUE		
12,5– 51,0 mm	According to the drawing	80 mm	100 Rpm	1,3 Hp	140 Nm		
0,492 – 2,000"		3,150"			105 Ft.Lbs		
AIR USE		BODY WIDTH		BODY HEIGHT		BODY WEIGHT	
55 cfm	1,3 m3/min	2,32"	59 mm	13,1"	335 mm	17,5 Lbs	8 kg



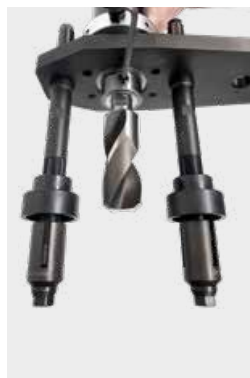
RIGID LOCKING

On standard FinFan gas coolers machine locks onto two shafts on the adjacent holes. The locking plate is manufactured according to the tube hole pitch to ensure precise tool alignment.



UNIVERSAL REACTION PLATE

MiniDrill FinFan is delivered with locking plate and 2 reaction shafts. Construction of the plate allows for locking machine with both shafts on one side to allow to machine the last holes in the row. Plate can be etc.



FINFAN THREAD REPAIR PROCESS

PROPER MACHINE LOCKING FOR ALL STEPS

Choose the correct locking jaws to suit the existing plug holes



PLUG SIZE			JAW SET (2 REQUIRED)	
1-1/8"	28,58 mm	12 TPI	701MM	#36-1-1/8-GFF
1-1/4"	31,75 mm	12 TPI	703MM	#36-1-1/4-GFF
1-3/8"	34,93 mm	12 TPI	705MM	#36-1-3/8-GFF
1-1/2"	38,10 mm	12 TPI	707MM	#36-1-1/2-GFF
1-5/8"	41,28 mm	12 TPI	709MM	#36-1-5/8-GFF
1-3/4"	44,45 mm	12 TPI	711MM	#36-1-3/4-GFF
1-7/8"	47,63 mm	12 TPI	713MM	#36-1-7/8-GFF

STEP 1 // Heads for weld removal over the welded plugs (in case are welded)



PLUGS SIZE			HEAD	INSERT	SCREW
1-1/8"	28,58 mm	12 TPI	TFWR-GFF-350	CS-5D	MHS-4
1-1/4"	31,75 mm	12 TPI	TFWR-GFF-380	CS-5D	MHS-4
1-3/8"	34,93 mm	12 TPI	TFWR-GFF-410	CS-5D	MHS-4
1-1/2"	38,10 mm	12 TPI	TFWR-GFF-440	CS-5D	MHS-4
1-5/8"	41,28 mm	12 TPI	TFWR-GFF-470	CS-5D	MHS-4
1-3/4"	44,45 mm	12 TPI	TFWR-GFF-500	CS-5D	MHS-4
1-7/8"	47,63 mm	12 TPI	TFWR-GFF-540	CS-5D	MHS-4

STEP 2 // Select the appropriate size drill head to match the desired new thread size



DRILL HEAD SIZE		DRILL HEAD		INSERT	SCREW
1-1/8 to 1-1/4"	28,58 to 31,75 mm	MD-29,6-	DRILL-L-130	CS-0.4	MHS-4
1-1/4 to 1-3/8"	31,74 to 34,93 mm	MD-32,9-	DRILL-L-130	CS-0.4	MHS-4
1-3/8 to 1-1/2"	34,93 to 38,10 mm	MD-36,1-	DRILL-L-130	CS-0.4	MHS-4
1-1/2 to 1-5/8"	38,10 to 41,28 mm	MD-39,3-	DRILL-L-130	CS-0.4	MHS-4
1-5/8 to 1-3/4"	41,28 to 44,45 mm	MD-42,5-	DRILL-L-130	CS-0.4	MHS-4
1-3/4 to 1-7/8"	44,45 to 47,63 mm	MD-45,5-	DRILL-L-130	CS-0.4	MHS-4

STEP 3 // Select the chamfering head to chamfer the hole before tapping (heads need a Weldon flange: MD-FLANGE-STWRMH)



RANGE		HEAD	INSERT	SCREW
0,787 to 1,653"	20,00 to 42,00 mm	STWRMH-317	WRI	MHS-4
1,417 to 2,244"	36,00 to 57,00 mm	STWRMH-444	CDI	MHS-4

STEP 4 // Select tapping head to suit the required thread size



PLUGS THREAD SIZE			TAP HEAD	RATCHED FEED ARM
1-1/8"	28,58 mm	12 TPI	MDFFPT-1-1/8_12	MD-RS-H28
1-1/4"	31,75 mm	12 TPI	MDFFPT-1-1/4_12	MD-RS-H28
1-3/8"	34,93 mm	12 TPI	MDFFPT-1-3/8_12	MD-RS-H28
1-1/2"	38,10 mm	12 TPI	MDFFPT-1-1/2_12	MD-RS-H28
1-5/8"	41,28 mm	12 TPI	MDFFPT-1-5/8_12	MD-RS-H28
1-3/4"	44,45 mm	12 TPI	MDFFPT-1-3/4_12	MD-RS-H28
1-7/8"	47,63 mm	12 TPI	MDFFPT-1-7/8_12	MD-RS-H28

STEP 5

Produce new gasket seat using MiniMill-300GFF. Choose heads and jaws on next page.

