

MiniMill-301-WTRT

TUBE WALL REDUCING TOOL

Precise reduction of tube stub wall for easy removal

The MiniMill-301-WTRT is designed to simplify one of the most critical and time-consuming stages of heat exchanger retubing — the removal of heavy-wall tube stubs from the tube sheet. Instead of forcing out strongly bonded stubs, the tool reduces the remaining wall thickness in a controlled manner. This significantly lowers the expansion grip, allowing the stub to be removed cleanly and predictably using standard tube drifts.

KEY APPLICATION

- ▶ Heat exchanger retubing
- ▶ Removal of expanded or seized tube stubs
- ▶ Situations with: corrosion bonding, over-expanded joints, serrated tube ends.

OPERATIONAL BENEFITS

- ▶ Lower extraction force required
- ▶ Reduced vibration during operation
- ▶ Minimal risk of chip packing and tool stalling
- ▶ Improved process stability and repeatability
- ▶ Faster and more predictable workflow



WORKING RANGE		FEED STROKE		POWER	FREE SPEED	TORQUE	
APPLICATION RANGE	LOCKING RANGE						
19,05 and 24,4 mm	16,90 – 23,0 mm	25 mm	0,787»	1,3 HP	300 RPM	43 Nm	32 ft.lbs
3/4" and 1"	0,488 – 0,945"						
AIR USE		BODY WIDTH		BODY HEIGHT		BODY WEIGHT	
55 cfm	1.3 m³/min	2.32"	59 mm	13.1"	335 mm	15.4 Lbs	7 kg

TOOLING CHART FOR 3/4" TUBE

TUBE OD		TOOL NUMBER	TOOL DIAMETER		DRILLING LENGTH*	
[INCH]	[MM]		[INCH]	[MM]	[INCH]	[MM]
3/4"	19,05	MDWTRT-180	0,709	18,0	2,5"	63,5 mm

* maximum depth is achieved in three passes

TOOLING CHART FOR 1" TUBE

TUBE OD		TOOL NUMBER	TOOL DIAMETER		DRILLING LENGTH*	
[INCH]	[MM]		[INCH]	[MM]	[INCH]	[MM]
1"	25,40	MDWTRT-245	0,965	24,3	2,5"	63,5 mm

* maximum depth is achieved in three passes

LOCKING JAWS FOR 3/4" TUBE

JAWS	RANGE [MM]		RANGE [INCH]		SPRING
	MIN	MAX	MIN	MAX	
309MM#36	13,00	14,00	0,512	0,551	DW-10
311MM#36	14,00	15,00	0,551	0,591	O-9
313MM#36	15,00	16,00	0,591	0,630	O-9
317MM#36	16,00	17,00	0,630	0,669	O-10

LOCKING JAWS FOR 1" TUBE

JAWS	RANGE [MM]		RANGE [INCH]		SPRING
	MIN	MAX	MIN	MAX	
207 MM#36	16,90	19,00	0,665	0,748	DW-15,5
209 MM#36	18,90	21,00	0,744	0,827	DW-15,5
211 MM#36	19,90	22,00	0,783	0,866	DW-15,5
213 MM#36	20,90	23,00	0,823	0,906	DW-15,5
214 MM#36	21,90	24,00	0,862	0,944	DW-15,5



POSITION IN WORKFLOW

Designed for heavy-wall tubing: when corrosion or seizing leaves no grip for extraction, the tool bores out the tube wall to loosen the joint and provide a better purchase for removal.