

PanelMill

The PanelMill attaches to the tube outside diameter by means of custom or specific clamp type jaws that provide strong clamping action that minimizes chatter and vibration. This rugged construction allows the tool's cutting blade to end prep quickly. Several cutter heads are available for tubes with up to 2-1/2" O.D. Both the clamp and cutter heads are extremely durable and easy to change. It is designed for maximum comfort, efficiency, safety, and ease of use. The ratchet feed arm enables the operator to comfortably feed the tool during beveling or facing. The PanelMill is suitable for small bore heavy wall tubes with a high percentage of chrome, stainless steel, and other exotic alloys. Standard and custom made blades are offered in a wide variety of angles and sizes. All inserts are 6% cobalt HSS, and do not need any lubrication. Highly engineered, it incorporates state of the art materials and heat treated components.



	APPLICATION RANGE	FEED STROKE	FREE SPEED	TORQUE
PANELMILL 63	19 – 63 mm	25 mm	100 Rpm	140 Nm
	0,750 – 2,500"	1,0"	OPT. 35, 200, 300	105 Ft.Lbs

Air consumption:	55 CFM	1,3 m ³ /min	Body width:	1,96"	50,0 mm	Body height:	13,1"	300,0 mm	Total length:	14,56"	370,0 mm	Body weight:	22,04 Lbs	10,0 kg
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	APPLICATION RANGE	FEED STROKE	FREE SPEED	TORQUE
PANELMILL 100	50 – 102 mm	25 mm	100 Rpm	140 Nm (Opt. 420 Nm)
	2,0 – 4,0"	1,0"	OPT. 40	105 Ft.Lbs (Opt. 310 Nm)

Air consumption:	42,4 CFM	1,2 m ³ /min	Body width:	3,11"	79,0 mm	Body height:	13,77"	350,0 mm	Total length:	15,74"	400,0 mm	Body weight:	39,68 Lbs	18,0 kg
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MACHINING IN EVERY POSITION

PanelMill can be rotated through 180 degrees to work in every position. Machine can be used for standard beveling application and for opposite tubes.



CUTTER HEADS



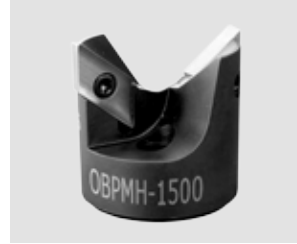
OBMH



Custom, precisely designed head. Dedicated for outside beveling of both tubes and pipes. Sized per tube or pipe diameter and angle of required weld bevel. The heads are precisely engineered so that the inserts cannot damage the shaft or locking jaws.

TABLE FOR OBMH, PAGE F-43

OBPMH



OBPMH beveling head for beveling tubes without membranes in a boiler waterwall.

TABLE FOR OBPMH, PAGE F-46

MRBMH

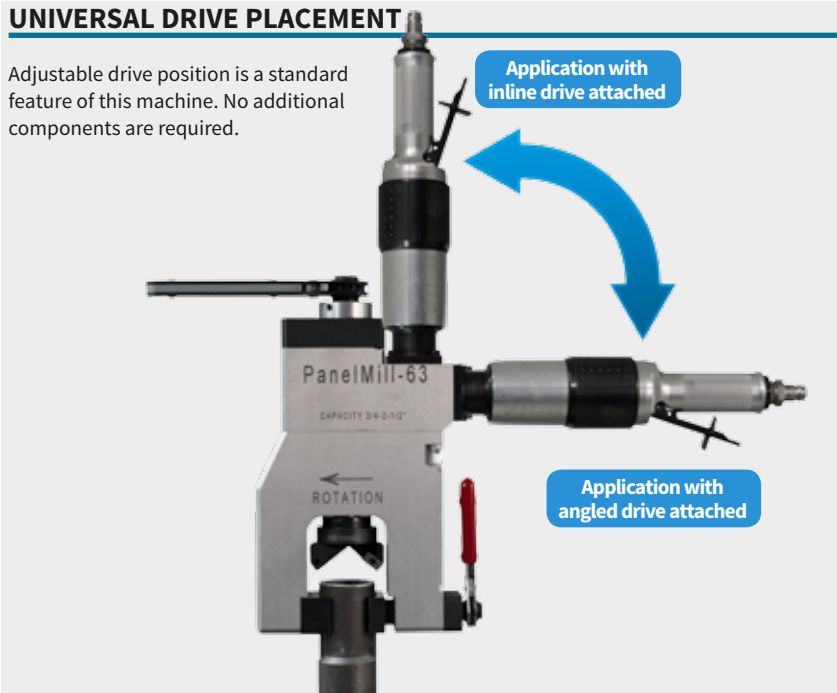


A seal weld removal head over tube circumference prior to re-welding the damaged joint without removing the tube.

TABLE FOR MMRBMH/PMRBH, PAGE F-45

UNIVERSAL DRIVE PLACEMENT

Adjustable drive position is a standard feature of this machine. No additional components are required.



JAWS FOR PANELMILL

JAWS NO.	TUBE OD	
	[MM]	[INCH]
300 PM#2	19,05	0,750
301 PM#2	20,00	0,787
304 PM#2	22,20	0,874
308 PM#2	25,40	1,000
309 PM#2	25,00	0,984
312 PM#2	28,80	1,134
313 PM#2	30,00	1,181
314 PM#2	31,70	1,248
318 PM#2	34,90	1,374
322 PM#2	38,10	1,500
326 PM#2	44,40	1,748
330 PM#2	50,80	2,000
331 PM#2	51,00	2,008
334 PM#2	57,10	2,248
338 PM#2	60,30	2,374
342 PM#2	63,50	2,500
346 PM#2	76,20	3,000

EXAMPLE TOOL APPLICATION



PanelMill E

The PanelMill-E electrically driven beveling machine attaches to the tube outside diameter by means of custom OD specific clamp type jaws that provide a strong clamping action that minimizes chatter and vibration. This rugged construction allows the tool's cutting blade to end prep quickly. Several cutter heads are available for tubes of up to 2-1/2" OD. Both the clamp and cutter heads are extremely durable and easy to change. Designed for maximum comfort, efficiency, safety, and ease of use. The ratchet feed arm enables the operator to comfortably feed the tool during beveling or facing. The PanelMill is suitable for small bore heavy wall tubes with a high percentage of chrome, stainless steel, and other exotic alloys. Standard and tailor made blades are offered in a wide variety of angles and sizes. All inserts are 6% cobalt HSS and do not need any lubrication. Highly engineered, it incorporates state of the art materials and heat treated components.



ELECTRIC DRIVEN

		APPLICATION RANGE		FEED STROKE		FREE SPEED		TORQUE	
PANELMILL 63E		19 – 63 mm		25 mm		100 Rpm OPT. 35, 200, 300		140 Nm	
		0,750 – 2,500"		1"				105 Ft.Lbs	

Power	230 V	Body width:	1,96"	50,0 mm	Body height:	13,1"	300,0 mm	Total length:	14,56"	370,0 mm	Body weight:	22,04 Lbs	10,0 kg
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		APPLICATION RANGE		FEED STROKE		FREE SPEED		TORQUE	
PANELMILL 100E		50 – 102 mm		25 mm		100 Rpm OPT. 40		140 Nm (Opt. 420 Nm)	
		2 – 4"		1"				105 Ft.Lbs (Opt. 310 Nm)	

Power	230 V	Body width:	3,11"	79,0 mm	Body height:	13,77"	350,0 mm	Total length:	15,74"	400,0 mm	Body weight:	39,68 Lbs	18,0 kg
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MACHINING IN EVERY POSITION

PanelMill can be rotated through 180 degrees to work in every position. Machine can be used for standard beveling application and for opposite tubes.



FlangeMill 100

Presenting our I.D. mount flange facing machines. It is a quick and easy way to remachine damaged flat and raised faced flanges on site. FlangeMill 100 is designed and built based on our MiniMill-100 that is converted to a dedicated flange facer. The machine comes factory configured.



STAINLESS STEEL HOUSING

	APPLICATION RANGE	SURFACE FINISH	TOOL FEED RATE	Max TOOL TRAVEL
FlangeMill 100	19,1 – 203,2 mm	63 to 250 RMS	0,15 mm per pin	40 mm
	0,750 – 8,000"		0,005" per pin	1,57"

Recommended for **Remachining flanges**

Air consumption:	55 CFM	1,3 m³/min	Body width:	2,32"	59 mm	Body height:	13,1"	335 mm	Body weight:	22 Lbs	10 kg
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MiniDrill 55



MiniDrill 55 is a unique machining platform designed to safely perform multiple machining operations on heat exchangers, boilers and similar thermal exchange equipment. Designed with operator safety in mind, this system can drill, ream, bore and even re-machine serrations in steam drums quickly and safely. With a 80 mm (3.150") travel, this tool is ideally suited for the majority of plant equipment. The system is fully torque reacted with 2 clamping arms that are independent of one another and can accommodate most pitch configurations. Once locked into the tubes, the MiniDrill is extremely stable.



⌘ Reducing tube wall on a 6" thick tube sheet prior to punching.



⌘ Boring head to machine heavy wall boiler tubes, safely and efficiently prior to collapsing through the drum.

WALL REDUCING

Tube wall reducing head with carbide inserts



DRILLING

Drill for machining holes in tube plugs before removing them with our special plug removal tool



REAMMING

Safely ream tube sheets



MFM Manual FlangeMill

Simple and cost-effective solution for I.D. mount flange facing. It is a quick and easy way to reface a damaged flat, grooves in pipe flanges on site. Manual FlangeMill size and body is designed and built to allow quick and convenient processing of small flanges in awkward or dangerous locations.



	CLAMPING RANGE	FACING RANGE	MAX TOOL TRAVEL	MIN SWING DIAMETER
Manual FlangeMill	25,4 – 254,0 mm	30 – 350 mm	V: 10,0 mm H: 55,0 mm	457,2 mm
	1" – 10"	1,25" - 14,00"	V: 0,395" H: 2,165"	18"

Recommended for **Remachining flanges**

Drive:	Manual	Body width:	6,5"	165 mm	Body height:	12,79"	325 mm	Body weight:	19,4 Lbs	8,8 kg
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MACHINING IN EVERY POSITION

Manual FlangeMill can be freely rotated to work in every position. Remachining damaged flat, grooves and raised faced flanges on site is possible in every position.



STABLE MOUNTING IN THE PIPE



☞ The tool depth can be adjusted (10 mm stroke) thru spindle to define cut depth and the correct finish.

EASE OF USE



☞ The tool arm is rotated by hand using a worm-gear mechanism to provide a perfect spiral finish.

SMOOTH OPERATION



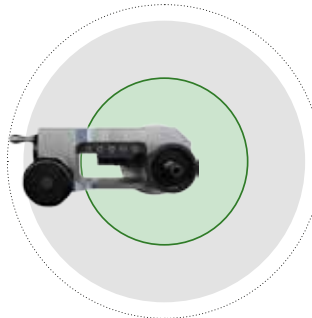
☞ Quick adjustment handle to move the cutter to groove position

MFM IN ACTION



☞ Refaced and re grooved flange with MFM

TOOL SWING DIAMETERS



FACING RANGE: 30,0 – 350,0 MM | 1,250" - 14"

BODY SWING DIAMETER: 460 mm | 18"

WHOLE TOOL SWING DIAMETER: 560 mm | 22"