

## PanelDrill

The KRAIS PanelDrill is a modular machine for the boiler waterwalls manufactures.

This is the first outside mounting tool with unique up to 80 mm feed stroke and 50 mm thick drive spindle.

Thanks to long feed stroke, rigid construction, powerful drives options and strong clamping PanelDrill is much more comfortable than other solutions. Minimized chatter and vibration results in smooth machining and operator convenience. The PanelDrill is suitable for small bore, heavy wall tubes with a high percentage of chrome, stainless steel and other exotic alloys.

The machine is offered with a choice of one from 3 available clamping jaws: 2,5", 3" or 4" OD, other sizes are just on request.



The crank arm enables the operator to smooth and fast feeding the tool during beveling or facing.

### AVAILABLE CLAMPS



#### 2,5" CLAMPS

Basic clamps allows for machining tubes with MiniDrill up to 2,5" with 2" feed range.



#### 3" CLAMP

The mid 3" clamps increases MiniDrill capacity up to 76 mm (3") with 2" feed range.



#### 4" CLAMP

The biggest, 4" clamps increases MiniDrill capacity up to 101 mm (4") with 2" feed range.

CLAMPS	WORKING RANGE	CLEARANCE	CLADDING REMOVAL	MEMBRANE UP TO	FEED STROKE	FREE SPEED	TORQUE
2,5"	19 - 63,5 mm	70 mm	44,4 mm	51,0 mm	50 mm	100 Rpm (Opt. 35, 200, 300)	140 Nm
	0,75 - 2,50"	2,75"	1,75"	2,0"	2,0"		105 Ft.Lbs
AIR USE		BODY WIDTH		BODY HEIGHT		WEIGHT	
55 cfm		1,3 m <sup>3</sup> /min		1,96"		50 mm	
				13,1"		300 mm	
						22 Lbs	
						10 kg	

CLAMPS	WORKING RANGE	CLEARANCE	CLADDING REMOVAL	MEMBRANE UP TO	FEED STROKE	FREE SPEED	TORQUE
3"	19 - 76 mm	84 mm	63,5	63,5 mm	50 mm	100 Rpm (Opt. 35, 200, 300)	140 Nm
	0,75 - 3,00"	3,3"	2,5"	2,5"	2,0"		105 Ft.Lbs
AIR USE		BODY WIDTH		BODY HEIGHT		WEIGHT	
55 cfm		1,3 m <sup>3</sup> /min		1,96"		50 mm	
				12,60"		320 mm	
						24 Lbs	
						11 kg	

CLAMPS	WORKING RANGE	CLEARANCE	CLADDING REMOVAL	MEMBRANE UP TO	FEED STROKE	FREE SPEED	TORQUE
4"	50 - 101 mm	122 mm	88,9 mm	122 mm	50 mm	100 Rpm (Optional 35 Rpm with Speed Reducer)	140 Nm
	2 - 4"	4,8	3,5"	4,8"	2,0"		105 Ft.Lbs
AIR USE		BODY WIDTH		BODY HEIGHT		WEIGHT	
55 cfm		1,3 m <sup>3</sup> /min		1,96"		50 mm	
				13,77"		350 mm	
						40 Lbs	
						18 kg	

**UNIVERSAL CUTTER HEADS AND HOLDERS**



**50 MM**  
Standard cutter head, delivered with 2,5" clamps, covers full range from 19 to 63,5 mm tubes.

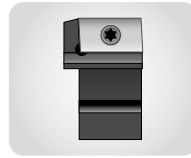


**63 MM (2,48")**  
Head supplied with 3" clamps. Designed to fasten wide range of cutting inserts.



**101 MM (3,97")**  
Head supplied with biggest 4" clamps. Designed to fasten wide range of cutting inserts.

All cutter heads are based on Weldon type gripper.



**BIT & HOLDERS**  
Wide range of holders, with a standard and custom made blades are offered in a wide variety of angles and sizes.

→ TABLE PAGE 44

**OPTIONAL LONG FEED SYSTEM**



Special version of clamps and spindle with longer feed stroke. Depending on the application, there is a possibility to build machine with stroke even up to 80 mm. Please consult with factory if you have an application that needs even longer feed.

**OTHER OPTIONAL**



**SPEED REDUCER**  
Easy to use gearbox for 3x speed reduction. Increases the torque, enabling the machine to generate a thick chip whilst reducing the cutting time.

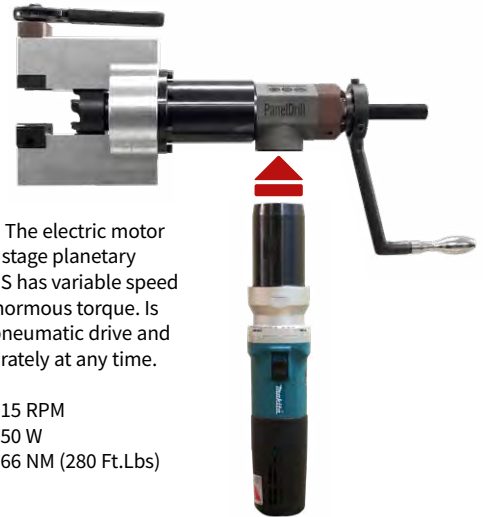
**PANELDRILL PERFORMANCE**



PanelDrill during 2" carbon steel membrane removal.

**PANELDRILL-E**

PanelDrill E is electric version of PanelDrill. A standard machine cover the same pipe sizes and comes with the same cutting head. The electric motor made by Makita with 3 stage planetary gear box made by KRAIS has variable speed control and produce enormous torque. Is interchangeable with pneumatic drive and can be purchased separately at any time.



Free Speed .....115 RPM  
Power .....750 W  
Torque .....366 NM (280 Ft.Lbs)

**CLAMPING JAWS FOR PANELDRILL**

JAWS	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
350 PM#2	88,90	3,500
400 PM#2	101,60	4,000