

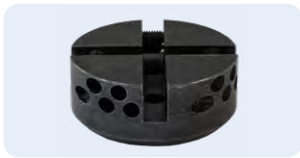
PanelMill PF

KRAIS PanelMill PF is the first machine where the bevelling cycle time is not dependent on an operator efficiency but on the machine mechanism. Both, the feed mechanism and the spindle rotation mechanism are driven from one source. A fixed rate of spindle advancement is achieved for each rotation of the spindle so every stroke cycle is predictable.

The standard machine has 35 mm feed stroke (longer ones are available as option).

PanelMill PF – positive feed bevelling machine, is highly recommended for tube end facing, bevelling, and membrane milling in water wall panels. As well as for the tube end preparation in the boiler and heat exchanger industry and FAB shops.

STANDARD SET UP



CUTTER HEAD 66 MM

Cutter head thanks to special way of fixing with spindle can cover full range from 0 to 76 mm



3" CLAMPS

Standard machine clamps allows for machining tubes up to 3" with 35 mm positive feed range.



35 MM SPINDLE

Heavy duty 35 mm (1-3/8") diameter spindle. The best stability and rigidity available on the market within this machine sizes!

The first one in the world! OD clamp pipe bevelling machine with Positive Feed.

| STANDARD WORKING RANGE | | | OPTIONAL WORKING RANGE | | |
|------------------------|-------------|---------------|------------------------|-------------|---------------|
| APPLICATION | FEED STROKE | FEED PER REV. | APPLICATION | FEED STROKE | FEED PER REV. |
| 19,05 - 76,20 mm | 35 mm | 0,1 mm | 51 - 114 mm | 35 mm | 0,1 mm |
| 0,75 - 3,00" | 1,377" | 0,003" | 2,00 - 4,50" | 1,377" | 0,003" |
| POWER | FREE SPEED | TORQUE | POWER | FREE SPEED | TORQUE |
| 2,2 hp | 125 Rpm | 300 Nm | 2,2 Hp | 100 Rpm | 360 Nm |

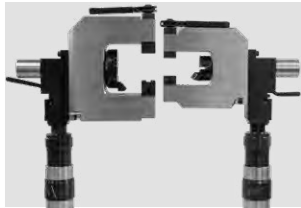
STANDARD JAWS

| JAWS NO. | TUBE OD | |
|----------|---------|--------|
| | [MM] | [INCH] |
| 308 PM#2 | 25,40 | 1,000 |
| 314 PM#2 | 31,70 | 1,248 |
| 322 PM#2 | 38,10 | 1,500 |
| 330 PM#2 | 50,80 | 2,000 |
| 342 PM#2 | 63,50 | 2,500 |
| 346 PM#2 | 76,20 | 3,000 |

OPTIONAL JAWS

| 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 |
| 309 PM#2 | 25,00 | 0,984 |
| 312 PM#2 | 28,80 | 1,134 |
| 313 PM#2 | 30,00 | 1,181 |
| 318 PM#2 | 34,90 | 1,374 |
| 326 PM#2 | 44,40 | 1,748 |
| 331 PM#2 | 51,00 | 2,008 |
| 334 PM#2 | 57,10 | 2,248 |
| 338 PM#2 | 60,30 | 2,374 |

OPTIONAL PARTS



4,5" CLAMP

The bigger 4,5" clamp to increase PanelMill PF capacity up to 114 mm (4,5"). With this clamp the machine covers tube range from 51 to 114 mm (2-4,5").



LONG FEED STROKE

Special version of clamps and sindle with longer feed stroke. Depending on the application, there is a possibility to build machine with stroke even up to 4". Please consult with factory if you have an application that needs even longer feed.



BENCH MOUNT PLATE (BMP)

Thanks to bench mount plate, it is possible to attach PanelMill to the table/worktop. A table base allows you to convert PanelMill-PF to a table machine for bevelling pipes, stubs or elbows. This is only available for 4,5" clamp only.

PANELMILL PF-E

PanelMill PF can be driven by electric motor. Thus equipped machine covers the same working range but gets much more mobility. We offer two drives with different free speed. Both of them are run by Makita motor and use planetary gear Box's made by KRAIS. It has variable speed control and produce enormous torque. Electric drives are interchangeable with pneumatic one and can be purchased separately at any time.

| PanelMill Size | 3" | 4,5" |
|----------------|---------|---------|
| Type: | ED600 | ED240 |
| Free speed: | 220 Rpm | 110 Rpm |
| Power: | 750W | 1500 W |
| Torque: | 360 Nm | 420 Nm |
| Gearbox: | 2-stage | 3-stage |



TWO VARIANTS



RIGHT-ANGLE AND IN-LINE

PanelMill-PF is available in two versions: right angle and in-line. You can choose the version, which suits better for your needs. Both models have exactly the same parameters.

OPTIONAL HEADS FOR PANELMILL PF

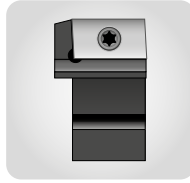
UNIVERSAL CUTTER HEADS



PMH-PF-66
66 MM (2,598")
Head supplied with PanelMill 3". Designed to fasten wide range of cutting inserts.

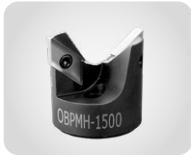


PMH-PF-99
99 MM (3,897")
Head supplied with PanelMill 4,5". Designed to fasten wide range of cutting inserts.



BIT & HOLDERS
Universal cutter heads can hold a wide range of holders, with a bunch types of bits.

OUTSIDE BEVELLING HEAD



Angle: 37,5°; for tubes without membranes, with HSS 6% cobalt bits.

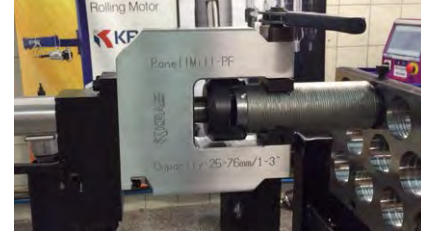


| HEAD NR | TUBE CAPACITY | | | RANGE [INCH] | | RANGE [MM] | | INSERT | NO. OF INS. |
|--------------|---------------|-------|-------|--------------|-------|------------|-------|--------|-------------|
| | [INCH] | [MM] | BWG | MIN | MAX | MIN | MAX | | |
| OBPMH-PF-285 | 1,125 | 28,58 | 11-23 | 0,890 | 1,240 | 22,60 | 31,50 | WRIL | 2 |
| OBPMH-PF-317 | 1,250 | 31,75 | 8-23 | 0,917 | 1,732 | 23,30 | 44,00 | WRIL | 2 |
| OBPMH-PF-381 | 1,500 | 38,10 | 6-23 | 0,984 | 1,850 | 25,00 | 47,00 | WRIL | 2 |
| OBPMH-PF-444 | 1,750 | 44,45 | 6-23 | 1,024 | 1,890 | 26,00 | 48,00 | WRIL | 2 |
| OBPMH-PF-508 | 2,000 | 50,80 | 6-23 | 1,181 | 2,047 | 30,00 | 52,00 | WRIL | 2 |
| OBPMH-PF-571 | 2,250 | 57,15 | 6-23 | 1,417 | 2,283 | 36,00 | 58,00 | WRIL | 2 |
| OBPMH-PF-603 | 2,375 | 60,33 | 6-23 | 1,535 | 2,402 | 39,00 | 61,00 | WRIL | 2 |
| OBPMH-PF-635 | 2,500 | 63,50 | 6-23 | 1,654 | 2,559 | 42,00 | 65,00 | WRIL | 2 |
| OBPMH-PF-889 | 3,500 | 88,90 | 6-23 | 2,677 | 3,543 | 68,00 | 90,00 | WRIL | 2 |

CLADDING REMOVAL HEAD



Head with carbide bits.



| HEAD NR | TUBE CAPACITY | | INSERT | NO. OF INSERTS |
|------------|---------------|-------|--------|----------------|
| | [INCH] | [MM] | | |
| CRH-PF-508 | 2,000 | 50,80 | CI 9x9 | 3 |
| CRH-PF-571 | 2,250 | 57,15 | CI 9x9 | 3 |
| CRH-PF-603 | 2,375 | 60,33 | CI 9x9 | 3 |
| CRH-PF-635 | 2,500 | 63,50 | CI 9x9 | 3 |
| CRH-PF-762 | 3,000 | 76,20 | CI 9x9 | 3 |

MEMBRANE REMOVAL AND OVERLAY HEAD



Head with carbide bits.



| HEAD NR | TUBE CAPACITY | | INSERT | NO. OF INSERTS |
|---------------|---------------|-------|--------|----------------|
| | [INCH] | [MM] | | |
| PRRBMH-PF-508 | 2,000 | 50,80 | PO8 | 7 |
| PRRBMH-PF-571 | 2,250 | 57,15 | PO8 | 7 |
| PRRBMH-PF-603 | 2,375 | 60,33 | PO8 | 7 |
| PRRBMH-PF-635 | 2,500 | 63,50 | PO8 | 7 |
| PRRBMH-PF-762 | 3,000 | 76,20 | PO8 | 9 |