### CHAPTER TWO

# **Hypermill Series**



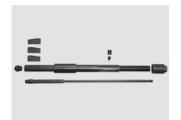


**KRAIS** Tube Expander HyperMill Series

## **HyperMill 100**

The HyperMill series pneumatic tube facing, bevelling and weld removal machine. The HyperMill is a rugged, fast, portable weld end preparation lathe for various tubes including stainless steel and other high chromium alloys. A standard machine is equipped to cover 35 to 111 mm ID (1.378" to 4,370"), with a 114 mm cutter.

#### **SHAFT HM20**



A special shaft for HyperMill. Clamping range 20 to 44 mm inside diameter (0.787" to 1.732") JAWS FOR SHAFT HM20, PAGE 56

#### **SHAFT HM35**



A special shaft for HyperMill. Clamping range 35 to 111 mm inside diameter (1.378" to 4.409") JAWS FOR SHAFT HM35, PAGE 56



	STANDARD HEAD	APPLICATION RANGE	STD. LOCKING RANGE	FREE SPEED	TORQUE	FEED STROKE
HyperMill 100	114,0 mm	20 – 111 mm	35 – 111 mm	100 Rpm	144 Nm	40 mm
	4,488"	0,787 – 4,370"	1,378 – 4,37"	100 Kpiii	106,2 Ft.Lbs	1,6"

### Recommended for Tube facing • Tube bevelling



55 cfm

1.3 m<sup>3</sup>/min

width:

3.22"

82 mm

height:

15"

385 mm

weight:

19 Lbs

9 kg

#### **CUTTER HEADS**



#### **RATCHED FEED RM**



A practical and easy to use lever feed. Ideal for limited access applications within boilers or channel heads of heat exchangers.

#### **SPEED REDUCER**



An optional speed reducer can be used for seal and strength weld removal applications including duplex, super duplex and other hard to machine alloys.

SPEED REDUCER, PAGE 4

#### **MRBMH**



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

TABLE FOR MMRBMH/PMRBMH, PAGE 53



HyperMill Series

**KRAIS** Tube Expander

### **HyperMill 55**

The HyperMill series pneumatic tube facing, bevelling and weld removal machines. The HyperMill is a rugged, fast, portable weld end preparation lathe for various tubes and pipes, including stainless steel and other high chromium materials. A standard machine is equipped with a locking system to cover sizes of 35 to 128 mm ID (1.378" to 5.039") with a 135 mm cutter head.

#### **SHAFT HM20**



A special shaft for HyperMill. Clamping range 20 to 44 mm inside diameter (0.787" to 1.732") JAWS FOR SHAFT HM20, PAGE 56

#### **SHAFT HM35**



Special shaft for HyperMill. Clamping range 35 to 128 mm inside diameter (1.378" to 5.039") JAWS FOR SHAFT HM35, PAGE 56



	STANDARD HEAD	APPLICATION RANGE	STD. LOCKING RANGE	FREE SPEED	TORQUE	FEED STROKE
HyperMill 55	135,0 mm	20 – 128 mm	35 – 128 mm	EE Dom	280 Nm	40 mm
	5,3"	0,866 – 5,039"	1,378 – 5,039"	55 Rpm 210 Ft.Lk		1,6"

### Recommended for Tube facing • Tube bevelling



55 cfm 1,3 m<sup>3</sup>/min

Body width:

3,22" 82 mm height:

15"

385 mm

weight:

19 Lbs

9 kg

#### **CUTTER HEADS**



OPTIONAL 114 mm | 4,6"



**STANDARD** 135 mm | 5,3"



OPTIONAL 175 mm | 6,9"

#### **RATCHED FEED RM**



A practical and easy to use lever feed. Ideal for limited access applications within boilers or channel heads of heat exchangers.



#### **SPEED REDUCER**



SPEED REDUCER, PAGE 4



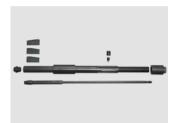
Series

**KRAIS** Tube Expander

### **HyperMill 55E**

HyperMill-E series, electrically driven tube facing, bevelling and weld removal machines. The HyperMill-E is a rugged, fast, portable weld end preparation lathe for various tubes and pipes, including stainless steel and other high chromium materials. A standard machine is equipped with a locking system to cover sizes of 35 to 128 mm ID (1.378" to 5.039"), with a 135 mm cutter head.

#### **SHAFT HM20**



A special shaft for HyperMill. Clamping range 20 to 44 mm inside diameter (0.787" to 1.732") JAWS FOR SHAFT HM20, PAGE 56

#### **SHAFT HM35**



Special shaft for HyperMill. Clamping range 35 to 128 mm inside diameter (1.378" to 5.039") JAWS FOR SHAFT HM35, PAGE 56



	STANDARD HEAD	APPLICATION RANGE	STD. LOCKING RANGE	FREE SPEED	TORQUE	FEED STROKE
HyperMill 55E	135,0 mm	20 – 128 mm	35 – 128 mm	55 Rpm	280 Nm	40 mm
	5,3"	0,787 – 5,039"	1,378 – 5,039"	JJ KPIII	210 Ft.Lbs	1,6"

Recommended for Tube facing • Tube bevelling

Power:

230V

width:

3.22"

82 mm

height:

15" 385 mm weight:

19 Lbs

9 kg

#### **CUTTER HEADS**



#### **RATCHED FEED RM**



A practical and easy to use lever feed. Ideal for limited access applications within boilers or channel heads of heat exchangers.



HyperMill Series

# **HyperMill 75**

HyperMill-75 is a pneumatic powered tube facing, bevelling and weld removal machine. It is a rugged, fast, portable weld end preparation lathe for various pipes including stainless steel and other exotic alloys. A standard machine is equipped with a locking system to cover sizes of 35 to 142 mm ID (1.378" - 5.591") with a 175 mm cutting head.





	STANDARD HEAD	APPLICATION RANGE	STD. LOCKING RANGE	FREE SPEED	TORQUE	FEED STROKE
HyperMill 75	175,0 mm	35 – 162,0 mm	35 – 142,0 mm	47 Rpm	720 Nm	40 mm
	6,9"	1,378 – 6,378"	1,378 – 5,591"	47 Kpili	540 Ft.Lbs	1,6"

Recommended for Tube facing Tube bevelling

Air consumption: 70 cfm 2,2 m³/min	Body width: 3,22"	82 mm	Body height: 19"	485 mm	Body weight: 23 Lbs	10,5 kg
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#### **CUTTER HEADS**



#### **RATCHED FEED RM**



A practical and easy to use lever feed. Ideal for limited access applications within boilers or channel heads of heat exchangers.

#### **SHAFT HM35**

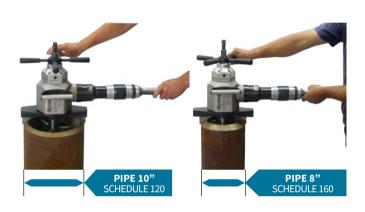


Special shaft for HyperMill. Clamping range 35 to 142 mm inside diameter (1.378" to 5.669") JAWS FOR SHAFT HM35, PAGE 56

KRAIS Tube Expander

# **PipeMill**

PipeMill is a pneumatic powered tube facing, bevelling and weld removal machine. The PipeMill is a rugged, fast and powerful weld end preparation lathe for various pipes including stainless steel and other exotic alloys. A standard machine is equipped with a locking system to cover sizes of 50,8 to 172 mm ID (2.000" to 6.800") with a 250 mm cutting head.





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	CAPACITY	APPLICATION RANGE	LOCKING RANGE	TORQUE	FEED STROKE
PipeMill	254,0 mm	50,8 – 268 mm	50,8 – 172 mm	*	50 mm
	10"	2,000 – 10,551 "	2,00 – 6,80''		2"

Recommended for Tube facing • Tube beveling • Seal weld removal

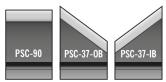
Air consumption: 70 cfm 2,2 m³/min Body width: 5,7" 145 mm Body height: 21,5" 550 mm Body weight: Lbs 24 kg

#### **CUTTER HEADS**



#### STANDARD CUTTERS

FOR USE WITHOUT HOLDERS BIT: **HSS and HSS Cobalt** 



#### **TORQUE**

DEPENDS ON THE GEAR BOX CONFIGURATION:

15 rpm	2544 Nm	1908 Ft.lbs
20 rpm	1883 Nm	1415 Ft.lbs
28 rpm	1290 Nm	969 Ft.lbs
37 rpm	971 Nm	730 Ft.lbs



HyperMill Series KRAIS Tube Expander

	LOCKING R	ANGE [MM]	LOCKING RANGE [INCH]		
JAW SET	MIN	MAX	MIN	MAX	
501 PM#36	50,00	60,50	1,969	2,382	
503 PM#36	60,00	70,50	2,362	2,776	
505 PM#36	70,00	80,50	2,756	3,169	
507 PM#36	80,00	90,50	3,150	3,563	
509 PM#36	90,00	100,50	3,543	3,957	
511 PM#36	100,00	110,50	3,937	4,350	
513 PM#36	110,00	120,50	4,331	4,744	
515 PM#36	120,00	130,50	4,724	5,138	
517 PM#36	130,00	140,50	5,118	5,531	
519 PM#36	140,00	150,50	5,512	5,925	
521 PM#36	150,00	160,50	5,906	6,319	
523 PM#36	160,00	170,50	6,299	6,713	
525 PM#36	170,00	180,50	6,693	7,106	
527 PM#36	180,00	190,50	7,087	7,500	
529 PM#36	190,00	200,50	7,480	7,894	
531 PM#36	200,00	210,50	7,874	8,287	
533 PM#36	210,00	220,50	8,268	8,681	
535 PM#36	220,00	230,50	8,661	9,075	
537 PM#36	230,00	240,50	9,055	9,469	
539 PM#36	240,00	250,50	9,449	9,862	
541 PM#36	250,00	260,50	9,843	10,256	
543 PM#36	260,00	270,50	10,236	10,650	



### HOLDERS FOR PIPEMILL







OB-45-37

IB-45-37

F-45-90