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# POWERMASTER

# TUBE AND PIPE BEVELLING MACHINES

Tools for every conceivable need.....

www.powermaster.in

# **Product Profile** TUBE AND PIPE BEVELLING MACHINE

The improved and newly launched range of electric, pneumatic and hydraulic Internal clamping bevelling machines and by **POWERMASTER** have found worldwide acceptance due to their rugged design, broad range and superior performance.

**POWERMASTER** bevelling machines are manufactured on the latest state of the art machining centers that ensure high accuracy and zero defects. They are fast, accurate and easy to set up and use. Available for tubes and pipes from 1/2" ID to 24" ID (12.7mm to 609.6mm). The machines can be used for facing, bevelling and counter boring of tubes and pipes for all types of materials including stainless steel, inconel, duplex and other materials. Internal clamping bevelling machines use high torque motors and a self aligning internal clamping mechanism that allows a single operator to effortlessly make end preps safely and quickly. Powermaster machines are an excellent alternate to the slow, unsafe and cumbersome grinding operation.

The improved and newly launched range of electric, pneumatic and hydraulic external clamping bevelling machines and by **POWERMASTER** have found worldwide acceptance due to their rugged design, broad range and superior performance.

Externally mounted is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 2" ID to 60" ID (50.8mm to 1524mm) in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.

Motors manufactured by the leading German manufacturers of motors, bearings from the world's largest manufacturer and gearing that is precision manufactured and hardened using the automated heat treatment plants makes the Powermaster range of bevelling machines the worlds preferred choice !

# Distribution available in over 110 countries worldwide.

#### **Corporate Headquarters**

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<b>30</b> FF-4000 - Locking Range (1" - 4")	58 DRIVE UNITS
32 CUTTING BITS	<b>59</b> CLAMSHELLS BITS AND HOLDERS

# **EVELLING MACHINE** OF TOOLS ATURES nge (2" - 6") Range (6" - 12") Range (12" - 18") Range (18" - 24") Range (24" - 32") Range (28" - 36") Range (34" - 42") Range (40" - 48") Range (48" - 54") Range (54" - 60")



6

An Internal clamping pipe beveller solves several problems of finishing and irregularity produced by the pipe cutting techniques. It generally utilizes a expandable mandrel which slides into the open end and is expanded by tightening of a draw nut. The tool has a predetermined angle ground into it which when fed into the material produces a bevel of same angle. Different bevelling tools for different bevelling angle can be made available and even the bits can be custom made for any form tooling operation.

# **Complete set of tools** TUBE AND PIPE BEVELLING MACHINE

#### **GENERAL INFORMATION**

The all new range of POWERMASTER bevelling machines delivers maximum power and performance for fast, accurate weld preps on pipes and tubes ranging from 1/2" ID. up 24" OD. (12.7mm - 609.6mm) depending on all model and configuration. Facing, bevelling and counter boring preparations are possible on all machinable alloys including stainless steel, duplex, super duplex, inconel and other alloys. Seal and strength weld removal applications for heat exchangers and boilers are the primary focus of our machining technology. The rugged design features a self accepting torque system with self centering inner clamping which allows one skilled operator to make end preps quickly and safely, avoiding the slow hazardous process of grinding.

The in-house manufactured pneumatic drives are resilient and powerful. The carefully selected quality bearings ensure great support to the drive shafts, right angle gear assembly and cutter head. This provides rigidity and unparalleled stability.



# Whole range of applications

#### **TUBE AND PIPE BEVELLING MACHINE**

#### INDEX



**TUBE SHEET SEAL WELD REMOVAL** 







Light Weight Tube/Pipe Bevelling Machine Locking Range 20mm ID to 42mm ID (3/4" - 1.5/8")

The FM-1625 is a light weight and compact machine for facing, bevelling and weld preparation on materials including stainless steel, duplex, inconel and others. One operator performs weld preparations safely, accurately and quickly vs. the slow and cumbersome grinding operation. Easy to handle and quick to setup. Used in shutdown environments on condensers and heat exchangers.



#### **Technical Specification**

Drive		Pneumatic	Electric
Locking Range	mm	20 - 42	20 - 42
	(inch)	(3/4" - 1.5/8")	(3/4" - 1.5/8")
Idle Speed	rpm	235	250
Torque	Nm (lbf.ft)	29 (21.38)	45 (33.19)
Feeding Stroke	mm (inch)	23 (7/8″)	23 (7/8″)
Pneumatic Power	HP	0.583	-
Air Consumption	cfm	15 - 18	-
Air Pressure	bar (psi)	6 (90)	-
Electric Power	Watts	-	850
Voltage	V	-	110 / 220
Net Weight	kg (lb)	4.8 (10.58)	5.5 (12.12)

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	Pneumatic (mm)	Electric (mm)
Α	400	440
В	300	300
С	67	67

- LIGHT WEIGHT BODY High pressure cast aluminum body allows continuous operation under the harshest conditions.
- ROBUST TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- HIGH STRENGTH FEED SHAFT Precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- TOOL STEEL JAW Wedge style hardened tool steel jaws for maximum life and secure positioning. Available within the locking range of 20mm to 42mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
- GEAR BOX Highly accurately machined for positive power transmission with less noise and no wear and tear.
- BROACHED BUSH Through hardened broached bush restricts the angular movement of the machine.
- **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.



#### **Optional Reduced Shafts**

The FM-1625 is also available with reduced diameter central shafts allowing its use on following smaller sized tubes:

Shaft	Locking Range		
Model	mm	inch	
12.4	12.5 - 15	1/2" - 9/16"	6
13.9	14 - 18	9/16" - 11/16"	
16.9	17 - 21	11/16" - 13/16"	
KIT	12.5 - 21	1/2" - 13/16"	



**Recommended for :** Tube Facing, Tube Bevelling, Weld Preparation **FM-1625** is used where access is limited.



# **1625** AUTO LOCK

#### **TUBE / PIPE BEVELLING MACHINE**

Fast Accurate Auto Lock Tube/Pipe Bevelling Machine Locking Range **20mm ID to 42mm ID (3/4" - 1.5/8")** 

The FM-1625 auto lock machine suitable for high volume repetitive works on heat exchangers and condensers etc. The automatic locking feature dramatically reduces production time. It produces fast accurate weld preps on any schedule and material of pipe effortlessly within its range.

#### **Cutter Heads**



# **3000** AUTO LOCK

#### **TUBE / PIPE BEVELLING MACHINE**

Fast Accurate Auto Lock Tube/Pipe Bevelling Machine Locking Range **28mm ID to 76mm ID (1.1/8" - 3")** 

The FM-3000 auto lock machine is a powerful, reliable and versatile bevelling machine. It's automatic locking feature allows it to perform repeatable high quality weld preparations on all types of materials. It produces fast accurate weld preps on any schedule and material of pipe effortlessly within its range.





	FM-1625 Pneumatic (mm)	FM-3000 Pneumatic (mm)
А	490	570
В	410	520
С	67	80

#### **Optional Heads**



Table for POB, PSTWR, PSWR Page 16, 17

#### **Features**



**AUTO LOCK** - Which reduces the production cycle time.

2

**FAST AND ACCURATE** - Fast and accurate weld preps.



# **1625** AUTO LOCK LEVER FEED

#### **TUBE / PIPE BEVELLING MACHINE**

#### Light Weight Auto Lock Lever Feed Tube/Pipe Bevelling Machine Locking Range **12.5mm ID to 42mm ID (1/2" - 1.5/8")**

The FMP-1625 auto lock lever feed is a light weight and compact machine for facing, bevelling and weld preparation on all materials including stainless steel, duplex, inconel and others. The auto locking feature dramatically reduces production time. It produces fast, accurate weld preps on any schedule and material of pipe effortlessly within its range. Easy to handle and quick to setup. Used in shutdown environments condensers and heat exchangers, boiler. The FMP-1625 auto lock lever feed comes in 3 different - speed versions (100, 200 and 300 RPM) The lower speed machines develop more torque and are used on larger, thicker and harder tubes.



	FM-1625 Pneumatic (mm)	FM-3000 Pneumatic (mm)
Α	490	570
В	410	520
С	67	80



#### **Technical Specification**

Drive	_	Pneumatic
Looking Dongo	mm	12.5 - 42
Locking Range	(inch)	(1/2" - 1.5/8")
Application Range	mm (inch)	12.5 - 42 (1/2" - 1.5/8")
Free Speed	rpm	120
Torque	Nm (lbf.ft)	38 (28)
Pneumatic Power	HP	0.83
Air Consumption	cfm	15 - 18
Air Pressure	bar (psi)	6 (90)
Body Size (W x H x L)	mm	50 x 400 x 300
Net Weight	kg (lb)	4.8 (10.6)

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- **TOOL HOLDER** Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- **FEED SHAFT** High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 12.5mm to 42mm.
- GEAR BOX Highly accurately machined for positive power transmission with less noise and no wear and tear.
- **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.

MODEL - FW-1825 RANGE(MW) - 20-42 1.D. WEIGHT(KG.) - 4.30 SR.NO. - 1857 21.02.18

#### **Pneumatic**

#### **Jaws Set**

#### FM-1625 Auto Lock Lever Feed (20-42 mm)



#### **Optional Reduced Shafts**

The FM-1625 auto lock lever feed is also available with reduced diameter central shafts allowing its use on following smaller sized tubes:

Shaft	Locking Range	
Model	mm	inch
12.4	12.5 - 15	1/2" - 9/16"
13.9	14 - 18	9/16" - 11/16"
16.9	17 - 21	11/16" - 13/16"
KIT	12.5 - 21	1/2" - 13/16"



**Recommended for :** Tube Facing, Tube Bevelling, Weld Preparation





FM-3000 TUBE / PIPE BEVELLING MACHINE

# Most Popular and Powerful Tube / Pipe Bevelling Machine Locking Range **28mm ID to 76mm ID (1.1/8" - 3")**

The FM-3000 is the most popular and powerful machine used on boiler tubes. Allows quick interchangeability of locking jaws to suit wide range of diameters. Modular and ergonomic design. Easy to handle and quick to setup.



#### **Technical Specification**

Drive		Pneumatic	Electric
Looking Dongo	mm	28 - 76	28 - 76
Locking Range	(inch)	(1.1/8" - 3")	(1.1/8" - 3")
Idle Speed	rpm	110	75
Torque	Nm (lbf.ft)	56 (41.30)	82 (60.48)
Feeding Stroke	mm (inch)	40 (1.9/16")	40 (1.9/16")
Pneumatic Power	HP	0.70	-
Air Consumption	cfm	34 - 36	-
Air Pressure	bar (psi)	6 (90)	-
Electric Power	Watts	-	1000
Voltage	V	-	110 / 220
Net Weight	kg (lb)	8.0 (17.63)	9.0 (19.84)

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	Pneumatic (mm)	Electric (mm)
Α	450	560
В	410	410
С	80	80

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 28mm to 76mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
- GEAR BOX Highly accurately machined for positive power transmission with less noise and no wear and tear.
- BROACHED BUSH Through hardened broached bush restricts the angular movement of the machine.
- **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.



#### **Optional Reduced Shafts**

The FM-3000 is also available with reduced diameter central shafts allowing its use on following smaller sized tubes:





**FM-3000** used during new boiler manufacturing and boiler maintenance.



# **Optional Specialized Cutter Heads**

#### **TUBE / PIPE BEVELLING MACHINE**

In order to increase the boiler and heat exchanger work efficiency, we have designed and manufactured milling heads for various purposes. Our offer includes heads for strength and seal weld removal, membrane removal, facing, bevelling, fin fan cooler facing or weld removal and many more, all of which can be found in this catalogue. In case you do not find the head for your application, let us know and we can design it for you.



#### **Outside Bevel Milling Head (POB)**

BIT : HSS 8% Cobalt DEGREE : 37,5



Custom, precisely designed head. Dedicated for the outside bevelling 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.

Head NR	-	Tube Capacit	у	Range	(inch)	Rang	e (mm)	Insert	No. of	Shaft
nead int	inch	mm	BWG	min	max	min	max	moore	Inserts	onart
POB-190	0,750	19,05	14-23	0,5826	0,866	14,80	22,00	CS	2	901 MM#151 12,4 mm
POB-222	0,875	22,23	12-23	0,654	1,004	16,60	25,50	CS	2	905 MM#151 13,9 mm
POB-254	1,000	25,40	11-23	0,764	1,122	19,40	28,50	CS	2	909 MM#151 16,9 mm
POB-285	1,125	28,58	11-23	0,890	1,240	22,60	31,50	CS	2	915 MM#151 20 mm
POB-317	1,250	31,75	8-23	0,917	1,732	23,30	44,00	CDI	2	STD shaft 20 mm or 22
POB-381	1,500	38,10	6-23	0,984	1,850	25,00	47,00	CDI	2	STD shaft 20 mm or 23
POB-444	1,750	44,45	6-23	1,024	1,890	26,00	48,00	CDI	2	STD shaft 20 mm or 24
POB-508	2,000	50,80	6-23	1,181	2,047	30,00	52,00	CDI	2	STD shaft 20 mm or 25
POB-571	2,250	57,15	6-23	1,417	2,283	36,00	58,00	CDI	2	STD shaft 20 mm or 26
POB-603	2,375	60,33	6-23	1,535	2,402	39,00	61,00	CDI	2	STD shaft 20 mm or 27
POB-635	2,500	63,50	6-23	1,654	2,559	42,00	65,00	CDI	2	STD shaft 20 mm or 28
POB-762	3,000	76,20	6-23	2,165	3,031	55,00	77,00	CDI	2	STD shaft 20 mm or 29
POB-889	3,500	88,90	6-23	2,677	3,543	68,00	90,00	CDI	2	STD shaft 20 mm or 30
POB-900	4,000	101,60	6-23	3,150	4,016	80,00	102,00	CDI	2	STD shaft 20 mm or 31

#### **Strength Weld Removal (PSTWR)**

BIT : HSS 8% Cobalt DEGREE : 37,5



Custom designed head dedicated for strength weld removal. The heads are sized per tube diameter and are precisely engineered so that the inserts cannot damage the shaft or locking jaws. Simple, trouble-free set up makes these heads very advantageous.

Head NR	1	ube Capacit	у	Range	(inch)	Rang	e (mm)	Insert	No. of	Shaft
neau niv	inch	mm	BWG	Min	Max	Min	Max	moent	Inserts	Shart
PSTWR-190	0,750	19,05	12-23	0,530	1,46	13,50	37,00	WRI	2	901 MM#151 12,4 mm
PSTWR-222	0,875	22,23	12-23	0,650	1,496	16,50	38,00	WRI	2	905 MM#151 13,9 mm
PSTWR-254	1,000	25,40	10-23	0,732	1,654	18,60	42,00	WRI	2	909 MM#151 16,9 mm
PSTWR-285	1,125	28,58	10-23	0,858	1,772	21,80	45,00	WRI	2	915 MM#151 20 mm
PSTWR-317	1,250	31,75	9-23	0,945	1,850	24,00	47,00	WRI	2	STD shaft 20 mm or 22
PSTWR-381	1,500	38,10	8-23	1,142	2,047	29,00	52,00	WRI	2	STD shaft 20 mm or 23
PSTWR-444	1,750	44,45	8-23	1,417	2,244	36,00	57,00	CDI	2	STD shaft 20 mm or 24
PSTWR-508	2,000	50,80	6-23	1,575	2,480	40,00	63,00	CDI	2	STD shaft 20 mm or 25
PSTWR-571	2,250	57,15	6-23	1,811	2,717	46,00	69,00	CDI	2	STD shaft 20 mm or 26
PSTWR-603	2,375	60,33	6-23	1,949	2,854	49,50	72,50	CDI	2	STD shaft 20 mm or 27
PSTWR-635	2,500	63,50	6-23	2,067	2,972	52,50	75,50	CDI	2	STD shaft 20 mm or 28
PSTWR-762	3,000	76,20	6-23	2,579	3,484	65,50	88,50	CDI	2	STD shaft 20 mm or 29
PSTWR-889	3,500	88,90	6-23	3,071	3,976	78,00	101,00	CDI	2	STD shaft 20 mm or 30
PSTWR-900	4,000	101,60	6-23	3,563	44,69	90,50	113,50	CDI	2	STD shaft 20 mm or 31

#### **Tube Facing Milling Head (PSWR)**

#### BIT : HSS 8% Cobalt



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

Head NR	Tube Ca	apacity		Cutter	Range		Insert	No. of	Shaft	
nouunit	inch	mm	Min (inch)	Max (inch)	Min (inch)	Max (inch)	moore	Inserts	onart	
PSWR-190	0,750	19,05	0,750	1,222	19,05	31,05	CSWR	2	901 MM#151 12,4 mm	
PSWR-222	0,875	22,23	0,874	1,346	22,20	34,20	CSWR	2	905 MM#151 13,9 mm	
PSWR-254	1,000	25,40	1,000	1,472	25,40	37,40	CSWR	2	909 MM#151 16,9 mm	
PSWR-285	1,125	28,58	1,124	1,596	28,55	40,55	CSWR	2	915 MM#151 20,0 mm	
PSWR-318	1,250	31,70	1,250	1,722	31,75	43,75	CSWR	2	915 MM#151 20,0 mm	
PSWR-381	1,500	38,10	1,500	1,969	38,10	50,01	CSWR	2	915 MM#151 20,0 mm	

FM-4000 TUBE / PIPE BEVELLING MACHINE

Portable and Powerful Tube / Pipe Bevelling Machine Locking Range **23mm ID to 104mm ID (1" - 4")** 

The FM-4000 is a portable and powerful machine used on boiler tubes. Light in weight and easy in handling make it very useful. Modular and ergonomic design with high torque makes it useful for heavy duty working conditions.



#### **Technical Specification**

Drive		Pneumatic	Electric
Looking Dongo	mm	23 - 104	23 - 104
Locking Range	(inch)	(1" - 4")	(1" - 4")
Idle Speed	rpm	70	70
Torque	Nm (lbf.ft)	140 (103.25)	143 (105.47)
Feeding Stroke	mm (inch)	40 (1.9/16")	40 (1.9/16")
Pneumatic Power	HP	1.33	-
Air Consumption	cfm	55 - 60	-
Air Pressure	bar (psi)	6 (90)	-
Electric Power	Watts	-	1000
Voltage	V	-	110 / 220
Net Weight	kg (lb)	9.0 (19.84)	10.0 (22.00)



	Pneumatic (mm)	Electric (mm)
Α	420	560
В	450	450
С	115	115

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 23mm to 104mm.
- CENTRAL MANDREL Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
- **GEAR BOX** Highly accurately machined for positive power transmission with less noise and no wear and tear.
- BROACHED BUSH Through hardened broached bush restricts the angular movement of the machine.
- **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.



#### **Optional Reduced Shafts**

The FM-4000 is also available with reduced diameter central shafts allowing its use on following smaller sized tubes:





**FM-4000** used in heavy duty working conditions.



#### **TUBE / PIPE BEVELLING MACHINE**

#### Heavy Duty Tube / Pipe Bevelling Machine Locking Range **39mm ID to 114mm ID (1.9/16" - 4.1/2")**

The FM-4500 is a heavy duty machine designed to bevel, face, and prepare weld edges. Modular and ergonomic design. It's suitable for tubes and pipe in the size range of 39mm - 114mm.



#### **Technical Specification**

Drive		Pneumatic	Electric	Electric-HD	
Locking Range	mm	39 - 114	39 - 114	39 - 114	-
	(inch)	(1.9/16" - 4.1/2")	(1.9/16" - 4.1/2")	(1.9/16" - 4.1/2")	
Idle Speed	rpm	70	70	115	
Torque	Nm (lbf.ft)	180 (132.76)	245 (180.70)	265 (195.45)	-
Feeding Stroke	mm (inch)	40.5 (1.9/16")	40.5 (1.9/16")	40 (1.9/16")	
Pneumatic Power	HP	1.33	-	-	
Air Consumption	cfm	50 - 60	-	-	
Air Pressure	bar (psi)	6 (90)	-	-	
Electric Power	Watts	-	1020	1800	
Voltage	V	-	110 / 220	110 / 220	
Net Weight	kg (lb)	17.0 (37.47)	18.0 (39.70)	27.0 (59.52)	

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	Pneumatic (mm)	Electric (mm)	Electric-HD (mm)
Α	630	525	670
В	450	450	450
С	126	126	126

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- 2 TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 39mm to 114mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
  - **GEAR BOX** Highly accurately machined for positive power transmission with less noise and no wear and tear.
  - **BROACHED BUSH** Through hardened broached bush restricts the angular movement of the machine.
  - **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.



## FM-8000 **TUBE / PIPE BEVELLING MACHINE**

#### Heavy Duty for Wide Range Tube / Pipe Bevelling Machine Locking Range 49mm ID to 203mm ID (2" - 8")

The FM-8000 is a modular and ergonomics designed machine that develops high torque to suit the toughest working conditions. Suitable for a wide range of tube and pipe internal diameters.



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The innovative, 6 points jaws,

effectively lock the machine within the pipe, allowing safe,

efficient and smooth processing

of the tube end.

50 mm (2") shaft, assures rigidity when machining heavy wall pipe.

#### **Technical Specification**

Drive		Pneumatic	Electric	Electric-HD	
Locking Dongo	mm	49 - 203	49 - 203	49 - 203	-
Locking Range	(inch)	(2" - 8")	(2" - 8")	(2" - 8")	
Idle Speed	rpm	52	34	40	
Torque	Nm (lbf.ft)	250 (184.40)	264 (194.70)	295 (217.60)	-
Feeding Stroke	mm (inch)	40.5 (1.9/16")	40.5 (1.9/16")	40 (1.9/16")	
Pneumatic Power	HP	1.80	-	-	
Air Consumption	cfm	60 - 65	-	-	
Air Pressure	bar (psi)	6 (90)	-		
Electric Power	Watts	-	1100	1800	- 8
Voltage	V	-	110 / 220	110 / 220	
Net Weight	kg (lb)	21 (46.30)	22 (48.50)	30 (66.10)	

B	C

	Pneumatic (mm)	Electric (mm)	Electric-HD (mm)
Α	660	700	670
В	530	530	530
С	220	220	220

- BODY Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 49mm to 203mm.
- 5 ) **CENTRAL MANDREL** - Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
  - GEAR BOX Highly accurately machined for positive power transmission with less noise and no wear and tear.
  - BROACHED BUSH Through hardened broached bush restricts the angular movement of the machine.
  - PNEUMATIC OR ELECTRIC DRIVE High quality pneumatic or electric drive for reliable service and long working life.



# FM-12000 TUBE / PIPE BEVELLING MACHINE

Combination of Power and Wide Range Tube / Pipe Bevelling Machine Locking Range **100mm ID to 306mm ID (4" - 12")** 

The FM-12000 is a combination of power and range in a light and portable design. Rugged and balanced machine suitable for tubes and pipes in the size range of 100mm to 306mm in internal diameter.

# <complex-block>



The innovative, 6 points jaws, effectively lock the machine within the pipe, allowing safe, efficient and smooth processing of the tube end.

#### **Technical Specification**

Drive		Pneumatic	Electric
Looking Pongo	mm	100 - 306	100 - 306
Locking Range	(inch)	(4" - 12")	(4" - 12")
Idle Speed	rpm	35	31
Torque	Nm (lbf.ft)	180 (132.76)	230 (169.63)
Feeding Stroke	mm (inch)	50 (1.15/16")	50 (1.15/16")
Pneumatic Power	HP	.88	-
Air Consumption	cfm	0	-
Air Pressure	bar (psi)	6 (90)	-
Electric Power	Watts	-	2000
Voltage	V	-	110 / 220
Net Weight	kg (lb)	43.0 (94.80)	44.0 (97.00)



	Pneumatic (mm)	Electric (mm)
Α	325	325
В	700	700
С	310	310

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 100mm to 306mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
- **GEAR BOX** Highly accurately machined for positive power transmission with less noise and no wear and tear.
- **BROACHED BUSH** Through hardened broached bush restricts the angular movement of the machine.
- PNEUMATIC OR ELECTRIC DRIVE High quality pneumatic or electric drive for reliable service and long working life.





**Electric** 

#### **Expandable Holders**

FM-12000 Cutter Head



Machine is equipped with 8" standard cutter head.

FM-12000 performs bevelling, facing and counter boring in 1 operation.



**Recommended for :** Tube Facing, Tube Bevelling, Weld Preparation edges

#### FM-18000 TUBE / PIPE BEVELLING MACHINE

#### Combination of Power and Wide Range Tube / Pipe Bevelling Machine Locking Range **102mm ID to 457mm ID (4" - 18")**

The FM-18000 is a combination of power and range in a light and portable design. Rugged and balanced machine suitable for tubes and pipes in the size range of 102mm to 457mm in internal diameter. It is new generation heavy duty facing and bevelling machine design for Piping industries.

#### **Unique Shaft Design**



102 mm (4") shaft, assures rigidity when machining heavy wall pipe.

#### 6 Points Locking Jaws FM-18000 102-457mm (4-18")



The innovative, 6 points jaws, effectively lock the machine within the pipe, allowing safe, efficient and smooth processing of the tube end.



	Pneumatic (mm)	Electric (mm)
Α	476	476
В	686	686
С	385	385
D	508	508

#### Features

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- **FEED SHAFT** High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 102mm to 457mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
  - **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.

#### **Cutters**



#### **Technical Specification**

Drive		Pneumatic	Electric
Looking Dongo	mm	102 - 457	102 - 457
Locking Range	(inch)	(4" - 18")	(4" - 18")
Idle Speed	rpm	13	15
Torque	Nm (lbf.ft)	1266 (933)	1182 (871)
Feeding Stroke	mm (inch)	60 (2.36")	60 (2.36")
Pneumatic Power	HP	2.6	-
Air Consumption	cfm	85	-
Air Pressure	bar (psi)	6.2 (90)	-
Electric Power	Watts	-	2000
Voltage	V	-	230
Net Weight	kg (lb)	90 (198)	90 (198)



**Pneumatic** 



**Electric** 

#### Jaws Set FM-18000 (102-457 mm)



Expandable Holders FM-18000 Cutter Head



Machine is equipped with 8" standard cutter head.

#### Heavy Duty Pendant



Machine is equipped with a heavy duty pendant.

**Recommended for :** Tube Facing, Tube Bevelling, Piping Industries



**FM-18000** is used for heavy duty applications.



## FM-24000 TUBE / PIPE BEVELLING MACHINE

Combination of Power and Wide Range Tube / Pipe Bevelling Machine Locking Range **180mm ID to 609mm ID (7" - 24")** 

The FM-24000 is a combination of power and range in a light and portable design. Rugged and balanced machine suitable for tubes and pipes in the size range of 180mm to 609mm in internal diameter.

# 

6 Poin	ts Loci	king J	aws
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180 mm (7") Shaft, assures rigidity when machine heavy wall pipe. The jaws are fully containing within the shaft with no need for retaining springs or O-rings that easily brake or get lost. Expandable Holders



Machine is equipped with 8" standard cutter head.



#### **Features**

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- JAW Wedge style hardened tool steel mounted jaws for maximum life and secure positioning. Available within the locking range of 180mm to 609mm.
- **CENTRAL MANDREL** Expanding mandrel allows fast, accurate and self-centering alignment with torque-free operation for operator safety.
- **PNEUMATIC OR ELECTRIC DRIVE** High quality pneumatic or electric drive for reliable service and long working life.

#### Holders



#### **Technical Specification**

Drive		Pneumatic	Electric
Looking Pongo	mm	180 - 609	180 - 609
Locking Range	(inch)	(7" - 24")	(7" - 24")
Idle Speed	rpm	10	13
Torque	Nm (lbf.ft)	3376 (2490)	1400 (1032)
Feeding Stroke	mm (inch)	60 (2.36")	60 (2.36")
Pneumatic Power	HP	3.5	-
Air Consumption	cfm	95	-
Air Pressure	bar (psi)	6.2 (90)	-
Electric Power	Watts	-	2600
Voltage	V	-	230
Net Weight	kg (lb)	250 (550)	250 (550)

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# FF-4000

#### FLANGE / PIPE FACING MACHINE FLANGE FACER

Quick and Simple Flange / Pipe Facing Machine Flange Facer

Locking Range 35mm ID to 104mm ID (1.38" - 4")

It is quick and simple to re-machine damaged flange faced and raised faced ID mount Flange facing machine. This design is based on our FM-4000 which is converted to Flange facer using special attachment.



#### **Technical Specification**

Drive	-	Pneumatic	Electric
Locking Range	mm	35 - 104	35 - 104
	(inch)	(1.3/8" - 4")	(1.3/8" - 4")
Application Range	mm (inch)	35 - 356 (1.38"- 14")	35 - 356 (1.38"- 14")
Idle Speed	rpm	70	75
Torque Speed Rate/Pin	mm (inch)	0.16 (0.0062)	0.16 (0.0062)
Feeding Stroke	mm (inch)	17 (0.67")	17 (0.67")
Pneumatic Power	HP	0.83	-
Air Consumption	cfm	55	-
Air Pressure	bar (psi)	6.2 (90)	-
Electric Power	Watts	-	1000
Voltage	V	-	110 / 220
Net Weight	kg (lb)	14.2 (31.3)	15.3 (33.7)



	Pneumatic (mm)	Electric (mm)
Α	470	610
В	450	450
С	160	160
D	470	470

#### **Features**

- **BODY** Light weight, high pressure cast aluminum body allows continuous operation under the harshest conditions.
- TOOL HOLDER Holds the cutting tool bits tightly at the desired position. Its robust construction and support to the cutting bits ensure vibration free performance.
- FEED SHAFT High strength, precise machined and hardened feed shaft provides a strong support to the assembly which slides over it.
- FEED SPROKET Quick and easy redial feed provide to the tool bit.
- CARRIER Light weight, high pressure cast aluminum body.
- PNEUMATIC OR ELECTRIC DRIVE High quality pneumatic or electric drive for reliable service and long working life.

#### **Accurate Locking System**



Internal locking system for safety and better accuracy.



FF-4000 can be rotated under any angle. Machine can be used for machining flanges in every position.

**Recommended for :** Tube Facing, Tube Bevelling, Piping Industries

# **Cutting Bits**









FT-5

**Internal Bevelling** 

FT-6



FT-7



Facing

**External Bevelling** 

FT-2





Thickness (T)
6
10

# EXTERNAL TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

Powermaster introduced the next major advance in pipe cutting and bevelling i.e. split frame machine tools. It is designed for cutting, bevelling, facing, counterboring for popular nominal pipe sizes ranging from 2" to 60" O.D.

It is highly portable, strong and powerful and lightweight. It is available in your choice of pneumatic, hydraulic or electric drive.

Split frames are easier to set up, easier to operate, and more powerful to handle. It has low clearance design that fits into tight spaces, its lightweight constructing and wide range of versatile accessories.

This portable machine tool is designed to eliminate safety risks associated with other cutting operations.

# **Complete set of tools** TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### **GENERAL INFORMATION**

POWERMASTER split frame machine perform precision pipe cutting, bevelling, facing and ID. boring operations over the range of 2" - 60" OD. pipes of all machinable alloys including stainless steel, duplex super duplex, inconel and other alloys. These portable split frame machines are capable of working on a wide range of wall thickness. Also the split frame design allows the machine to be split into two halves and then to be mounted on the pipe which is to be worked on. The construction comprising of a steel mobile ring gear resting on the solid bearing mounted on the light weight aluminum fixed ring, ensures extreme strength and durability.

The rugged construction of machine and powerful drives provides the necessary rigidity and stability.



# Whole range of applications

TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

INDEX

**TUBE AND PIPE BEVELLING** 

LOW **CLEARANCE** 

**COUNTER BORING** 

**PIPE ENDS CUT-OFF** 

**ELIMINATE** SAFETY



**TUBE OR TUBES FACING** 

**TUBE OR PIPE FLAT FACING** 





**COUNTER** BORING



**J-PREPS** 

# **Split Frame**

#### **TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE**

#### Super Heavy wall and Hard alloy Pipe Model Range **50.8mm OD to 1524mm OD (2" - 60")**

For super heavy applications with super heavy wall and/or hard alloy pipes, We manufacture the steel ring, which mounts on the rear of the aluminium ring. Also equipped with 4 steel location stabilizers to enhance the range and rigidity of the machine for those heavy duty applications. The dramatically increases the axial stability and rigidity when cutting and/or bevelling. This solution can help to save time and expense for clamshells completely made out of steel – ask your representative for more details.






Lever Type Tripper Module





**Counterbore Attachment** 



**Swivel Head** 





**Reaction Ring** 

**Tool Slides** 

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **50.8mm 0D to 152.4mm 0D (2" - 6")**

Externally mounted SF-26 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 50.8 mm to 152.4 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	304	304	304
В	178	178	178
С	64	64	64
D	78	78	78



# **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic
Looking Pongo	mm	50.8 - 152.4	50.8 - 152.4	
Locking Range	(inch)	(2" - 6")	(2" - 6")	
Idle Speed	rpm	34	37	
Pneumatic Power	HP	4	1.5	
Air Consumption	cfm	95	-	
Air Pressure	bar (psi)	6.2 (90)	-	
Electric Power	Watts	-	1100	
Voltage	V	-	230	
Machine Weight	kg (lb)	32 (70.5)	28 (62)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- TOOL SLIDE Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
- **PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE** - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **152.4mm 0D to 304.8mm 0D (6" - 12")**

Externally mounted SF-612 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 152.4 mm to 304.8 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	490	490	490
В	334	334	334
С	78	78	78
D	66	66	66



# **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic
Looking Pongo	mm	152.4 - 304.8	152.4 - 304.8	
Locking Range	(inch)	(6" - 12")	(6" - 12")	
Idle Speed	rpm	22	24	
Pneumatic Power	HP	4	1.5	
Air Consumption	cfm	95	-	
Air Pressure	bar (psi)	6.2 (90)	-	
Electric Power	Watts	-	1100	
Voltage	V	-	230	
Machine Weight	kg (lb)	54 (119)	50 (110)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
  - **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
  - TOOL SLIDE Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
- **PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE** - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



# TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **304.8mm 0D to 457.2mm 0D (12" - 18")**

Externally mounted SF-1218 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 304.8 mm to 457.2 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	632	632	632
В	470	470	470
С	82	82	82
D	77	77	77



# **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic
Locking Range	mm	304.8- 457.2	304.8- 457.2	
LOCKING Hange	(inch)	(12" - 18")	(12" - 18")	
Idle Speed	rpm	12	15	
Pneumatic Power	HP	4	-	
Air Consumption	cfm	95	-	
Air Pressure	bar (psi)	6.2 (90)	-	
Electric Power	Watts	-	2000	
Voltage	V	-	230	
Machine Weight	kg (lb)	79 (174.2)	76 (167.6)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- TOOL SLIDE Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed
  reduction with increasing torque.
- PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.





Hydraulic

**Recommended for :** Tube Bevelling, Cutting, Piping Industries



# TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **457.2mm 0D to 609.6mm 0D (18" - 24")**

Externally mounted SF-1824 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 457.2 mm to 609.6 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	750	750	750
В	623	623	623
С	63.5	63.5	63.5
D	76	76	76



# **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic
Looking Pongo	mm	457.2- 609.6	457.2- 609.6	
Locking Range	(inch)	(18" - 24")	(18" - 24")	
Idle Speed	rpm	12	15	
Pneumatic Power	HP	4	-	
Air Consumption	cfm	95	-	
Air Pressure	bar (psi)	6.2 (90)	-	
Electric Power	Watts	-	2600	
Voltage	V	-	230	
Machine Weight	kg (lb)	75 (165)	75 (165)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- TOOL SLIDE Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
- **PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE** - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



**Recommended for :** Tube Bevelling, Cutting, Piping Industries

# TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **609.6mm 0D to 812.8mm 0D (24" - 32")**

Externally mounted SF-2432 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 609.6 mm to 812.8 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	969	969	969
В	838	838	838
С	65	65	65
D	113	113	113



### **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic
Looking Pongo	mm	609.6 - 812.8	609.6 - 812.8	
Locking Range	(inch)	(24" - 32")	(24" - 32")	
Idle Speed	rpm	12	13	
Pneumatic Power	HP	4.2	-	
Air Consumption	cfm	95	-	
Air Pressure	bar (psi)	6.2 (90)	-	
Electric Power	Watts	-	2600	
Voltage	V	-	230	
Machine Weight	kg (lb)	105 (231)	105 (231)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- TOOL SLIDE Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed
  reduction with increasing torque.
- PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



# TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **711.2mm 0D to 914.4mm 0D (28" - 36")**

Externally mounted SF-2836 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 711.2 mm to 914.4 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	1070	1070	1070
В	940	940	940
С	131	131	131
D	108	108	108



### **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic	4
Locking Range	mm	711.2 - 914.4	711.2 - 914.4	711.2 - 914.4	
	(inch)	(28" - 36")	(28" - 36")	(28" - 36")	
Idle Speed	rpm	10	11	10	
Pneumatic Power	HP	4.2	-	-	
Air Consumption	cfm	95	-	-	
Air Pressure	bar (psi)	6.2 (90)	-	-	-5
Electric Power	Watts	-	2600	-	
Voltage	V	-	230	-	
Hydraulic Motor Power	HP	-	-	15	G
Working Power	HP	-	-	7.5	
Machine Weight	kg (lb)	156 (344)	156 (344)	156 (344)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
  - **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
  - **TOOL SLIDE** Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
  - PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
  - **PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE** - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



Tube Bevelling, Cutting, Piping Industries

# TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **863.6mm 0D to 1066.8mm 0D (34" - 42")**

Externally mounted SF-3442 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 863.6 mm to 1066.8 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	1223	1223	1223
В	1092	1092	1092
С	131	131	131
D	114	114	114



### **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic	
Locking Range	mm	863.6 - 1066.8	863.6 - 1066.8	863.6 - 1066.8	
LUCKING Hange	(inch)	(34" - 42")	(34" - 42")	(34" - 42")	
Idle Speed	rpm	10	9	9	
Pneumatic Power	HP	4.2	-	-	
Air Consumption	cfm	95	-	-	
Air Pressure	bar (psi)	6.2 (90)	-	-	
Electric Power	Watts	-	2600	-	
Voltage	V	-	230	-	
Hydraulic Motor Power	HP	-	-	15	
Working Power	HP	-	-	7.5	
Machine Weight	kg (lb)	159 (349.8)	159 (349.8)	159 (349.8)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- **TOOL SLIDE** Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
- PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.

**SF-3442** is used for Piping industry.



**Electric** 

**Recommended for :** Tube Bevelling, Cutting, Piping Industries

# **TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE**

#### Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **1016.0mm 0D to 1219.2mm 0D (40" - 48")**

Externally mounted SF-4048 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 1016.0 mm to 1219.2 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Electric (mm)	Hydraulic (mm)
Α	1382	1382	1382
В	1251	1251	1251
С	131	131	131
D	114	114	114



### **Technical Specification**

Drive		Pneumatic	Electric	Hydraulic	
Locking Range	mm	1016 - 1219.2	1016 - 1219.2	1016 - 1219.2	
LUCKING Hange	(inch)	(40" - 48")	(40" - 48")	(40" - 48")	
Idle Speed	rpm	9	9	9	
Pneumatic Power	HP	4.2	-	-	
Air Consumption	cfm	95	-	-	-
Air Pressure	bar (psi)	6.2 (90)	-	-	
Electric Power	Watts	-	2600	-	
Voltage	V	-	230	-	
Hydraulic Motor Power	HP	-	-	15	
Working Power	HP	-	-	7.5	
Machine Weight	kg (lb)	177 (389.4)	177 (389.4)	177 (389.4)	

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- **TOOL SLIDE** Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- PLANETARY GEAR BOX It gives a high speed reduction with increasing torque.
- **PNEUMATIC, ELECTRIC OR HYDRAULIC DRIVE** - High quality pneumatic, electric drive or hydraulic for reliable service and long working life.



# **TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE**

Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **1219.2mm 0D to 1371.6mm 0D (48" - 54")** 

Externally mounted SF-4854 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 1219.2 mm to 1371.6 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Hydraulic (mm)
Α	1637	1637
В	1397	1397
С	120	120
D	158	158



### **Technical Specification**

Drive	-	Pneumatic	Hydraulic
Looking Pongo	mm	1219.2 - 1371.6	1219.2 - 1371.6
Locking Range	(inch)	(48" - 54")	(48" - 54")
Idle Speed	rpm	8	8
Pneumatic Power	HP	4.2	-
Air Consumption	cfm	100/110	-
Air Pressure	bar (psi)	6.2 (90)	-
Hydraulic Motor Power	HP	-	15
Working Power	HP	-	7.5
Machine Weight	kg (lb)	466 (1025)	466 (1025)

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- **TRIP ASSEMBLY** It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- **TOOL SLIDE** Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- **PNEUMATIC OR HYDRAULIC DRIVE** High quality pneumatic or hydraulic drive for reliable service and long working life.



Hydraulic

**Recommended for :** Tube Bevelling, Cutting, Facing, Counterboring





# **TUBE / PIPE BEVELLING AND CUTTING SPLIT FRAME MACHINE**

Light and Portable Flange/Pipe Beveling and Cutting Split Frame Machine Locking Range **1371.6mm 0D to 1524mm 0D (54" - 60")** 

Externally mounted SF-5460 is a split frame, clamshell type light and portable design. A rugged and slim machine suitable for tubes and pipes in the size range of 1371.6 mm to 1524 mm in external diameter. It is a new generation heavy duty facing, bevelling and cutting machine designed for the Piping industry.



	Pneumatic (mm)	Hydraulic (mm)
Α	1794	1794
В	1550	1550
С	122	122
D	159	159



# Technical Specification

Drive		Pneumatic	Hydraulic
Looking Pongo	mm	1371.6 - 1524	1371.6 - 1524
Locking Range	(inch)	(54" - 60")	(54" - 60")
Idle Speed	rpm	7	7
Pneumatic Power	HP	4.2	-
Air Consumption	cfm	100/110	-
Air Pressure	bar (psi)	6.2 (90)	-
Hydraulic Motor Power	HP		15
Working Power	HP	-	7.5
Machine Weight	kg (lb)	515 (1133)	515 (1133)

- SPLIT FRAME MACHINE It consists of a split mobile ring and fixed ring. Light weight, slim design.
- JAWS Wedge style hardened tool steel jaws for maximum life and secure positioning. 8 points of contact locking system. It provides stability and avoids vibration.
- TRIP ASSEMBLY It gives an auto feed to the tool bit assembly. Trip can be engaged or disengaged depending on feed required.
- **TOOL SLIDE** Holds the cutting tool bit assembly tightly at the desired position for the cutting and bevelling operation. Its robust construction and support to the cutting bits ensures vibration free performance.
- **PNEUMATIC OR HYDRAULIC DRIVE** High quality pneumatic or hydraulic drive for reliable service and long working life.



# **Drive Unit**

# PNEUMATIC, ELECTRIC AND HYDRAULIC

To meet the varying needs of job-sites worldwide, POWERMASTER Clamshell Motors and Drives are available in a range of configurations. Drive motors are available in hydraulic, pneumatic and electric configurations. Motor mounting flanges are available in straight back (in-line), right angle and front drive reversible options.



**Pneumatic Drive** 

**Hydraulic Drive** 





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