MATHEY SADDLE MACHINE MOTORIZED / MANUAL



The industry standard for over 90 years, the Mathey Dearman saddle machine is versatile, simple to use, and perfect for almost any pipe cutting and beveling application. Lightweight and durable, the Mathey Dearman machine is designed for accurate, quality cuts on $1\frac{1}{2}$ " - 48" (48.3 mm - 1,219 mm) pipes.

Versatile - Every model works on a range of pipe sizes
Adaptable - Works with all standard torches, including plasma
Portable - Light and compact, perfect for shop or field applications
Easy Set-Up - Mount and begin cutting in as little as 5 minutes
Proven - Depended on by professionals for over 70 years
Fast - Pipe is ready to weld up to five times quicker than hand cutting and grinding

Mathey Dearman has been the leader in pipe cutting since its invention of the saddle machine in 1934.





Manual saddle machine includes:

- Saddle machine
- Torch arm
- Torch carrier assembly
- Boomer assembly (fastens the machine to the pipe)
- Spacer bolt set
- Parts and operating manual

Note: Machine torches sold separately.





Want the easiest way to get a perfect cut every time?

Motorized saddle machines from Mathey Dearman are precise and fast, delivering smooth cuts requiring little or even no grinding.

Both experienced and inexperienced welders can benefit from the increased productivity (up to 5 times quicker!) and cut quality of motorized saddle machines compared to traditional hand-cutting or manual machines.

Motorized PLASMASPEED saddle machines can use 110/230 VAC for pipe sizes 1%" - 48" (48.3 mm - 1,219 mm) and can operate at increased cutting speeds to use powerful plasma torches.

It's what Mathey Dearman calls PLASMASPEED!

Motorized saddle machine includes:

- 110/230 VAC motorized saddle machine
- Torch arm
- Torch carrier assembly
- Boomer assembly (fastens the machine to the pipe)
- Spacer bolt set
- Parts and operating manual
- Mounting bracket
- Right-angle precision stepper motor
- Motor control box
- Plasma communication cable

Note: Machine torches sold separately - machine shown with optional step spacers and pro model torch.



Conventional cutting vs saddle cutting time

Hand cutting

Time: 30 minutes

- 8" schedule 40 pipe being cut by hand. Time includes measuring, cutting and grinding
- Longer than necessary layout time
- Excessive amount of time to cut the pipe
- Inaccurate/uneven cut requiring grinding
- Extended fit-up time
- Uneven weld gap

Mathey Dearman cutting

Time: 6 minutes

- 8" schedule 40 Pipe being cut with a 1SA manual saddle machine
- Perfect cut
- No grinding
- Perfect fit-up







Manual saddle machines

MACHINE MODEL	MSA	1SA	2SA	
Manual with spacer bolts	03.0100.000	03.0101.000	03.0102.000	
Manual with step spacers	n/a	03.01\$1.000	03.0152.000	

Motorized saddle machines / PLASMASPEED

MACHINE MODEL	MSA	1SA	2SA	
Motorized with spacer bolts 115/230 VAC	03.0100.S01	03.0101.S01	03.0102.S01	
Motorized with step spacers 115/230 VAC	n/a	03.01\$1.\$01	03.01S2.S01	

PLASMASPEED retrofit kits

MACHINE MODEL	MSA	1SA	2SA	
PLASMASPEED retrofit kits 115/230 VAC	03.0100.SA1	03.0101.SA1	03.0101.SA1	

General specifications

MACHINE MODEL	MSA	1SA	2SA
Pipe size in (mm)	2" - 4" (60.3 - 114.3 mm)	3" - 8" (88.9 - 219 mm)	6" - 12" (168.2 - 323.8 mm)
Net weight lbs. / kg	10 lbs. / 5.00 kg	16 lbs. / 7.00 kg	26 lbs. / 12.00 kg
Estimated shipping weight lbs. / kg	12 lbs. / 5.40 kg	24 lbs. / 11.00 kg	34 lbs. / 15.50 kg
Shipping dimensions in (mm)	12" x 12" x 10" (305 x 305 x 254 mm)	18" x 18" x 11½" (457 x 457 x 492 mm)	23" x 23" x 12½" (584 x 584 x 318 mm)
Maximum speed (motorized) ipm* / mpm**	141 / 3581	71 / 1803	89 / 2261
Minimum speed (motorized) ipm* / mpm**	4 / 102	4 / 102	6 / 152
Includes spacer bolts to cut pipe sizes	2", 3", 4" (60.3, 88.9, 114.3 mm)	3", 4", 6", 8" (88.9, 114.3, 168.2, 219 mm)	6", 8", 10", 12" (168.2, 219, 273, 323.8 mm)

* inches per minute | ** millimeters per minute





3SA	4SA	5SA	6SA	8SA
03.0103.000	03.0104.000	03.0105.000	03.0106.000	03.0108.000
03.01\$3.000	n/a	n/a	n/a	n/a

3SA	4SA	5SA 6SA		8SA
03.0103.S01	03.0104.S01	03.0105.\$01	03.0106.S01	03.0108.501
03.01\$3.\$01	n/a	n/a	n/a	n/a

3SA	4SA	5SA	6SA	8SA	
03.0103.SA1	03.0103.SA1	03.0105.SA1	03.0105.SA1	03.0105.SA1	

3SA	4SA	5SA	6SA	8SA
12" - 20" (323.8 - 508 mm)	20" - 26" (508 - 660 mm)	24" - 30" (610 - 762 mm)	28" - 36" (711 - 914 mm)	36" - 48" (914 - 1,219 mm)
50 lbs. / 22.00 kg	75 lbs. / 34.00 kg	110 lbs. / 50.00 kg	180 lbs. / 82.00 kg	287 lbs. / 130.00 kg
73 lbs. / 33.00 kg	150 lbs. / 68.00 kg	185 lbs. / 84.00 kg	295 lbs. / 134.00 kg	537 lbs. / 244.00 kg
34" x 32" x 12" (864 x 813 x 305 mm)	40½" x 41" x 19" (1,029 x 1,041 x 423 mm)	40½" x 41" x 19" (1,029 x 1,041 x 423 mm)	57" x 43" x 18" (1,488 x 1,002 x 483 mm)	69" x 60" x 21" (1,753 x 1,524 x 533 mm)
47 / 1194	53 / 1346	34 / 864	35 / 889	36 / 914
7 / 178	7 / 178	8 / 203	5 / 127	5 / 127
12", 14", 16", 18", 20" (323.8, 356, 406, 457, 508 mm)	20", 22", 24", 26" (508, 559, 610, 660 mm)	24", 26", 28", 30" (610, 660, 711,762 mm)	28", 30", 36" (711, 762, 914 mm)	36", 38", 40", 42", 48" (914, 964, 1,016, 1,067, 1,219 mm)



SADDLE MACHINE ACCESSORIES

Contour cutting attachment - When cutting a 90° saddle on 8" pipe, the combination of the saddle machine and contour cutting attachment reduces cutting and grinding time by up to 80%.



MODEL	PIPE SIZE		PART NO. PACKAGED WEIGHT		PACKAGED DIMENSIONS		
MSA	1.5" - 4"	48.3 - 114.3 mm	03.0116.MSA	7 lbs.	3.20 kg	23" x 10" x 9"	584 x 254 x 229 mm
1 - 2 SA	3" - 12"	88.9 - 323.8 mm	03.0116.1SA	7 lbs.	3.20 kg	36" x 12" x 12"	914 x 305 x 305 mm
3SA	12" - 20"	323.8 - 508 mm	03.0116.3SA	9 lbs.	4.10 kg	36" x 12" x 12"	914 x 305 x 305 mm
4SA	20" - 26"	508 - 660 mm	03.0116.4SA	9 lbs.	4.10 kg	36" x 12" x 12"	914 x 305 x 305 mm
5SA	24" - 30"	610 - 762 mm	03.0116.5SA	11 lbs.	5.00 kg	48" x 12" x 12"	1,219 x 305 x 305 mm
6SA	28" - 36"	711 - 914 mm	03.0116.6SA	13 lbs.	5.90 kg	48" x 12" x 12"	1,219 x 305 x 305 mm
8SA	36" - 48"	914 - 1,219 mm	03.0116.8SA	16 lbs.	7.20 kg	48" x 12" x 12"	1,219 x 305 x 305 mm

Contour cutting shape templates - Produce perfect miter and saddle cuts with the easy to use Mathey Dearman contour cutting attachment. Simply choose the template for the desired type of cut and the torch will follow the template around the pipe. Contour cutting attachments and templates are available for $1\frac{1}{2}$ " - 48" (48.3 mm - 1,219 mm) pipe.



NOTE: Template form is required prior to order - template cannot be returned

MODEL	MODEL SPACERS FOR PIPE SIZES		PART NO	PACKAGED WEIGHT		PACKAGED DIMENSIONS	
MSA	1.5" - 4"	48.3 - 114.3 mm	03.0115.M	3.5 - 5 lbs.	1.60 - 2.30 kg	12" x 12" x 9"	305 x 305 x 229 mm
1SA	3" - 8"	88.9 - 219 mm	03.0115.1	4.5 - 6 lbs.	2.00 - 2.70 kg	18" x 18" x 11"	457 x 457 x 279 mm
2SA	8" - 12"	219 - 323.8 mm	03.0115.2	6 - 8 lbs.	2.70 - 3.60 kg	23" x 23" x 13"	584 x 584 x 330 mm
3SA	12" - 20"	323.8 - 508 mm	03.0115.3	11 - 15 lbs.	5.00 - 7.00 kg	36" x 12" x 12"	914 x 305 x 305 mm
4SA	20" - 26"	508 - 660 mm	03.0115.4	18 - 27 lbs.	8.00 - 12.00 kg	36" x 36" x TBD	914 x 914 x TBD mm
5SA	24" - 30"	610 - 762 mm	03.0115.5	22 - 31 lbs.	10.00 - 14.00 kg	42" x 48" x TBD	1,067 x 1,219 x TBD mm
6SA	28" - 36"	711 - 914 mm	03.0115.6	27 - 35 lbs.	12.00 - 16.00 kg	48" x 48" x TBD	1,219 x 1,219 x TBD mm
8SA	36" - 48"	914 - 1,219 mm	03.0115.8	31 - 40 lbs.	14.00 - 18.00 kg	60" x 60" x TBD	1,524 x 1,524 x TBD mm

Double torch arm - Reduce set up and cutting time by up to 50% with the double torch arm accessory. By eliminating the need to rotate one torch to obtain a forward or back bevel on the pipe end, the double torch arm dramatically reduces cutting and beveling time.



MODEL	PIPE SIZE		PART NO	PACKAGED WEIGHT		PACKAGED DIMENSIONS	
1SA	3" - 8"	88.9 - 219 mm	03.0101.030	5 lbs.	2.30 kg	20" x 6" x 6"	508 x 152 x 152 mm
2SA	8" - 12"	219 - 323.8 mm	03.0102.015	5 lbs.	2.30 kg	20" x 6" x 6"	508 x 152 x 152 mm
3SA	12" - 20"	323.8 - 508 mm	03.0103.030	5 lbs.	2.30 kg	23" x 10" x 9"	584 x 254 x 229 mm
4SA	20" - 26"	508 - 660 mm	03.0104.021	5 lbs.	2.30 kg	23" x 10" x 9"	584 x 254 x 229 mm
5SA	24" - 30"	610 - 762 mm	03.0105.025	5 lbs.	2.30 kg	23" x 10" x 9"	584 x 254 x 229 mm
6SA	28" - 36"	711 - 914 mm	03.0106.018	5.5 lbs.	2.50 kg	23" x 10" x 9"	584 x 254 x 229 mm
8SA	36" - 48"	914 - 1,219 mm	03.0108.014	5.5 lbs.	2.50 kg	23" x 10" x 9"	584 x 254 x 229 mm

Pro model torch arm - Choose the pro model torch arm with the innovative out-ofround roller attachment to create perfect cuts and bevels on oversize, undersize or out-of-round pipe.



Torch holders that can accommodate up to 2" barrel diameter torches are available





MATHEY SADDLE MACHINE ACCESSORIES

Out-of-round roller attachment

The out-of-round roller attachment kit, that can be fitted on the pro model torch arm, compensates for oversize and undersize pipe, handling out-of-round conditions up to ¼" (6 mm).

This separate attachment comes with all required parts and assembly instructions.



Pro model with out-of-round roller attachment kit installed

DESCRIPTION	PART NO	PACKAGED WEIGHT		PACKAGED DIMENSIONS		
Out of round kit	03.0209.003	2.50 lbs.	1.10 kg	12" x 6" x 6"	305 x 152 x 152 mm	

Cam-adjustable torch carrier

The cam-adjustable torch carrier makes it simple to make perfect, no-notch cuts, every time. Just start the cut away from the desired cut line, use the knurled cam adjustment knob to move the torch into the cut line then start cutting. In addition, the torch holder's large wing screw makes tightening the torch in the torch holder easy, even when wearing gloves. The innovative design even allows forward or back-beveling without the need to reverse the torch holder in the torch arm.

ITEM NO. 03.0100.052

Saddle machine storage box

Store and help protect the saddle machine, torch, torch arm, torch carrier, spacer bolts and parts and operating manual in this specially-designed storage box.

MSA, 1SA, and 2SA storage boxes are made of 16 gauge, powder-coated steel, with attached lifting handles.

Storage boxes for saddle machines larger than the 3SA are made of plywood with reinforced corners and edges.



MODEL	PART NO	DIMENSIONS		MANUAL OR MOTORIZED	ВОХ ТҮРЕ	PACKAGED WEIGHT	
MSA	03.0100.BOX	17" x 17" x 17"	432 x 432 x 432 mm	Manual only	Metal	23 lbs.	11.00 kg
1SA	03.0101.BOX	20" x 18" x 17"	205 x 457 x 432 mm	Manual only	Metal	33 lbs.	15.00 kg
2SA	03.0102.BOX	25" x 22" x 18"	635 x 559 x 457 mm	Manual only	Metal	41 lbs.	19.00 kg
3SA	03.0103.BOX	34" x 34" x 14"	864 x 864 x 356 mm	Manual or motorized	Wood	60 lbs.	27.00 kg
4SA	03.0104.BOX	40" x 38" x 14"	1,016 x 965 x 356 mm	Manual or motorized	Wood	75 lbs.	34.00 kg
5SA	03.0105.BOX	42" x 40" x 14"	1,067 x 1,016 x 356 mm	Manual or motorized	Wood	75 lbs.	34.00 kg
6SA	03.0106.BOX	56" x 48" x 16"	1,422 x 1,219 x 406 mm	Manual only	Wood	175 lbs.	79.00 kg
8SA	03.0108.BOX	70" x 56" x 19"	1,778 x 1,422 x 483 mm	Manual only	Wood	250 lbs.	102.00 kg

* No spacers required for 4" pipe set up



SADDLE MACHINE ACCESSORIES

Self-storing step-down spacer

Combining multiple spacer bolt sizes into one easy-to-use part, the step-down spacers are machined to the same tolerances as spacer bolts. Each step spacer covers a range of four (4) pipe sizes; eliminating the need to store 16 spacer bolts. No more searching for lost or misplaced spacer bolts with high quality aluminum alloy or stainless steel self-storing step-down spacers.

Step spacer kit

DESCRIPTION	PART NO	FOR PIPE SIZES		PACKAGED WEIGHT	
1SA Step Spacers	03.0110.1SAKIT	3", 4", 6", 8"	88.9 mm, 114.3 mm, 168.2 mm, 219 mm	1.60 lbs.	0.70 kg
2SA Step Spacers	03.0110.2SAKIT	6", 8", 10", 12"	168.2 mm, 219 mm 273 mm, 323.8 mm	1.60 lbs.	0.70 kg
3SA Step Spacers	03.0110.3SAKIT	12", 14", 16", 18", 20"	323.8 mm, 356 mm, 406 mm, 457 mm, 508 mm	1.60 lbs.	0.70 kg

Step spacers (individual)

DESCRIPTION	PART NO	FOR PIPE SIZES		PACKAGED WEIGHT	
1SA Step Spacer	03.0110.1SA	3", 4", 6", 8"	88.9 mm, 114.3 mm, 168.2 mm, 219 mm	0.40 lbs.	0.20 kg
2SA Step Spacer	03.0110.2SA	6", 8", 10", 12"	168.2 mm, 219 mm 273 mm, 323.8 mm	0.40 lbs.	0.20 kg
3SA Step Spacer	03.0110.3SA	12", 14", 16", 18", 20"	323.8 mm, 356 mm, 406 mm, 457 mm, 508 mm	0.40 lbs.	0.20 kg





Saddle machine spacer bolts

Spacer Bolt Kits include the spacer bolts in one handy container available for any Mathey Dearman saddle machine model. An actual-size diagram is located on the lid, making finding the correct Spacer Bolts quick and easy. All spacer bolts are precision-machined for maximum cutting accuracy and labeled with the Mathey Dearman logo and item number for quick identification.

Actual size is shown on box lid for quick spacer bolt identification. Spacer bolts can be replaced individually or in sets.

Step spacers (individual)

DESCRIPTION	PART NO	FOR PIPE SIZES			PACKAGED WEIGHT	
MSA	03.0MSA.KIT	2", 3"	60.3 mm, 88.9 mm	1 lbs.	0.50 kg	
1SA	03.01SA.KIT	3", 4", 6", 8"	88.9 mm, 114.3 mm, 168.2 mm, 219 mm	4 lbs.	1.80 kg	
2SA	03.02SA.KIT	6", 8", 10", 12"	168.2 mm, 219 mm, 273 mm, 323.8 mm	5 lbs.	2.30 kg	
3SA	03.03SA.KIT	12", 14", 16", 18", 20"	323.8 mm, 356 mm, 406 mm, 457 mm, 508 mm	9 lbs.	4.10 kg	
4SA	03.04SA.KIT	20", 22", 24", 26"	508 mm, 559 mm, 610 mm, 660 mm	10 lbs.	4.50 kg	
5SA	03.05SA.KIT	24", 26", 28", 30"	610 mm, 660 mm, 711 mm, 762 mm	10 lbs.	4.50 kg	
6SA	03.06SA.KIT	28", 30", 36"	711 mm, 762 mm, 914 mm	20 lbs.	9.00 kg	
8SA	03.08SA.KIT	36", 38", 40", 42", 48"	916 mm, 964 mm, 1,016 mm, 1,069 mm, 1,219 mm	20 lbs.	9.00 kg	

* No spacers required for 4" pipe set up







