

SOLUTION

SPARTAN IRONWORKERS

MSIW66S • MSIW60D • MSIW71D • MSIW93D • MSIW126D/DX • MSIW192DX



STANDARD WORK STATIONS | PUNCH. SHEAR. NOTCH.

1. PUNCHING STATION

The punch cylinder is machined and faced to assure proper alignment of the cylinder shaft. Cylinder stroke length is adjustable both top and bottom with two easily set limit switches. The see-through stripper provides a full view of the punch for ease of alignment and operation. The stripper is also adjustable for varying thickness of material. The various machines punch from 1/8" to 2" in diameter. Punching from 2-1/16" to 4" is achievable with usage of the oversize attachment feature. Punches and dies are easily interchangeable. Both round and shaped tools can be used in the machine.

1. DIE HOLDER

The die holder will accept standard tooling and has two hole sizes (D and DX series only). The die holder slides in and out on two T-slots for ease of alignment and makes tooling changeover quick and trouble-free. The overhanging feature of the die holder allows for punching channel flange.

1. PUNCH TABLE

The punch table provides support for the workpiece and also incorporates a worktable scale and an adjustable back stop for gauging. The punch work table is segmented and the front portion can be removed for punching angle iron and channel legs.

2. BAR SHEARING STATION

The round and square bar station allows for shearing various sizes. T-bar and channel shear blades are also available for this station. With the bar shearing feature, rounds and squares can be cut from 1/8" to 2-1/8" (Larger sized holes are available on larger machines only). By changing the blades you can also cut T-bars, H-beams, and channel iron.

3. ANGLE SHEAR

The angle shear allows for both straight and miter cuts of varying sizes of angle material without a drop-out slug. The two wear guides assure the squareness of every cut, while the adjustable holddown keeps distortion to a minimum. The angle shearing feature allows the option to cut angle iron at 90 degrees, and smaller angle iron at 45 degrees. This feature can be done with both the top and bottom leg.

4. FLAT BAR SHEAR

The flat bar shear station has a cast iron support table with guides for accurate positioning and has scribe marks at 90 and 45 degrees for miter cuts. With the adjustable holddown and an upper blade with only a 6 degree rake angle, deformation is held to a minimum. The lower blade has four useable sides.

A special feature of the flat bar shear is its variable degree miter-cutting on the bottom leg of the angle iron. Complete daily flat bar shearing with flat and precise results, complimented by the unique anti-distortion blade.

5. NOTCHING STATION

The notcher is ideal for notching on either flat bars or angles. The gauging table has adjustable stops for precise positioning and the safety guard is electrically interlocked for maximum safety and visibility. Notching needs are met with a rectangular notching tool, standard on each machine. Marvel can provide a V-Notching tools for a variety of desired applications.

*Some safety equipment may have been removed or opened to illustrate products clearly and must be in place, and functioning, prior to operation.



PUNCH STATION



ANGLE IRON SHEAR



NOTCH STATION



*LED LIGHTING ON ALL WORKSTATIONS

STANDARD EQUIPMENT

- **FIVE (5) SETS OF PUNCHES AND DIES:**
Punches: 9/16", 11/16", 13/16", 15/16", 1-1/16"
Dies: 19/32", 23/32", 27/32", 31/32", 1-3/32"
- **CPD SERIES:** 26 punch, 62 die
- **MAGNETIC BASE WORK LIGHT**
- **ADJUSTABLE ELECTRIC BACK GAUGE (36")**
- **24 VOLT DC CONTROL VOLTAGE**
- **SCRAP BOXES AT PUNCHING & NOTCHING STATIONS**
- **ADJUSTABLE STROKE DEPTH AT PUNCH**
- **TWO (2) FULL-CONTROL FOOT PEDALS**
- **TWO (2) HOLE DIE HOLDERS**
- **TWO (2) PIECE GAUGING TABLE AT PUNCH STATION**
- **KEYED PUNCH HOLDER FOR SHAPED TOOLING**
- **STANDARD VOLTAGE:** 230 or 460 Volt, 3 Phase, 60Hz
- **ELECTRIC BACK GAUGE:** 3 ft.

OPTIONAL FEATURES

- **V-Notcher at Notcher Station**
- **MSIW71PA18189: V-Notcher at Notcher Station**
- **MSIW71PA18196: Bending Single V**
- **MSIW71JA01359: Bending Multi V**
- **MSIW60PA18160: Electric Back Gauge 6 ft.** (in place of standard 3 ft.)
- **MSIW71PA18205: Channel Web Die Holders**
- **MSIW60JA19894: Oversize Punching Kit**
- **MSIW71JA20614: Channel Shear 3"x4.1" lb. per foot**
- **MSIW71JA20092: Channel Shear 4"x5.4" lb. per foot**

*Pictures may include some optional equipment.



ELECTRIC BACK GAUGE



FULL-CONTROL FOOT PEDAL



CHANNEL WEB DIE HOLDER



MULTI V BENDING ATTACHMENT

MSIW66S

5 H.P.
3175 LBS
60" X 37-1/2" X 70"
66 TON



MSIW60D

7.5 H.P.
3350 LBS
63-1/2" X 35" X 66"
60 TON



MSIW71D

7.5 H.P.
3520 LBS
63-1/2" X 35" X 66"
71 TON



MSIW93D

10 H.P.
5110 LBS
75" X 36" X 74"
93 TON



MSIW126D/DX

15 H.P.
D: 6550 LBS
DX: 7650 LBS
D: 81" X 38" X 86"
DX: 93" X 38" X 86"
126 TON



MSIW192DX

15 H.P.
13,200 LBS
104" X 42-1/2" X 93"
192 TON



All specifications are based on 65,000 PSI tensile strength material. **With special tooling only. (Measurements converted from metric units and may not be exact.)

*Contact your Regional Sales Manager for more information.

PRODUCT SPECIFICATIONS

	MSIW66S	MSIW60D	MSIW71D	MSIW93D	MSIW126D/DX	MSIW192DX
Work Stations	5	5	5	5	5	5
PUNCHING						
Punching Pressure	66 Tons	60 Tons	71 Tons	93 Tons	126 Tons	192 Tons
Standard Tooling	1-1/4" x 5/8"	1-1/2" x 1/2"	1-1/2" x 9/16"	1-1/2" x 3/4"	1-1/2" x 1"	1-1/2" x 1-1/2"
Large Tooling	n/a	2" x 3/8"	2" x 7/16"	2" x 9/16"	2" x 3/4"	2" x 1-3/16"
*Oversize Tooling	n/a	4" x 3/16"	4-5/16" x 3/16"	4-5/16" x 1/4"	4-5/16" x 5/16"	4-5/16" x 1/2"
Throat Depth	8-5/8"	12"	12"	14"	D: 14" DX: 24"	24"
Stroke Length	2-1/8"	2-5/16"	2-5/32"	3-1/8"	3-1/8"	3-1/8"
Cycle/Min. (3/4")	25	25	25	25	25	22
Work height	41-1/4"	40-7/8"	40-9/16"	42-1/2"	43-3/4"	44-1/2"
FLAT BAR SHEARING						
Flat Bar Shearing Capacity	12" x 9/16"	14" x 1/2"	14" x 5/8"	18" x 9/16"	14" x 1"	16" x 1"
Width & Thickness	8" x 3/4"	10" x 3/4"	12" x 3/4"	14" x 3/4"	24" x 9/16"	24" x 3/4"
Blade Length	12-7/16"	12-1/2"	15"	19"	24"	24"
Angle Flange Trim	3" x 3/8"	3" x 1/4"	4" x 3/8"	4" x 1/2"	5" x 5/8"	5" x 5/8"
Work Height	37-9/16"	35-3/4"	35-1/2"	37"	37"	37"
ANGLE SHEAR						
90 Degrees	4" x 4" x 7/16"	4" x 4" x 3/8"	4" x 4" x 3/8"	6" x 6" x 1/2"	6" x 6" x 5/8"	8" x 8" x 3/4"
45 Degrees	3" x 5/16"	2-1/2" x 2-1/2" x 3/8"	2-1/2" x 2-1/2" x 3/8"	3" x 3" x 5/16"	3" x 3" x 3/8"	3" x 3" x 3/8"
Work Height	45-1/2"	44-1/2"	44-7/8"	47-1/4"	48"	44-1/2"
BAR SHEARING						
Round Bar	1-1/2"	1-1/2"	1-3/4"	2"	2"	2-1/4"
Square Bar	1-3/8" x 1-3/8"	1-1/2" x 1-1/2"	1-3/4" x 1-3/4"	2" x 2"	2" x 2"	2" x 2"
**Channel Shear	3"	4"	5"	6"	7"	10"
**H Beams	3"	4"	5"	6"	7"	10"
**T Beams	3" x 5/16"	3" x 1/4"	3-1/2" x 7/16"	4" x 7/16"	5" x 1/2"	6" x 9/16"
Work Height	45-1/2"	44-1/2"	44-7/8"	37"	37"	44-1/2"
NOTCHING						
Rectangular Notcher	1-5/8" x 3-15/16" x 3/8"	1-3/4" x 3-1/2" x 3/8"	1-3/4" x 3-9/16" x 3/8"	2" x 4" x 1/2"	2-3/8" x 4" x 1/2"	2-3/8" x 4" x 5/8"
**Large V	4" x 4" x 3/8"	4" x 4" x 3/8"	4" x 4" x 3/8"	4" x 4" x 1/2"	4" x 4" x 1/2"	4" x 4" x 5/8"
Work Height	41-9/16"	35-1/2"	35-1/2"	37"	37"	36-1/2"
SPECIAL TOOLING						
Single V Bending Attachment	4" with 2-1/2" wide V	10" with 3" wide V	10" with 3" wide V	10" with 3" wide V	10" with 3" wide V	10" with 3" wide V
Multi V Bending Attachment	n/a	19-1/2" with 1/2", 3/4", 1", 1-1/4" wide V	19-1/2" with 1/2", 3/4", 1", 1-1/4" wide V	19-1/2" with 1/2", 3/4", 1", 1-1/4" wide V	27-1/2" with 1/2", 3/4", 1", 1-1/4" wide V	27-1/2" with 1/2", 3/4", 1", 1-1/4" wide V