

# AHB

**TOOLING & MACHINERY**

**COMPLETE METALWORKING SOLUTIONS**

**HYDRAULIC  
IRONWORKERS  
& PUNCHING MACHINES**



**QUALITY | VERSATILITY | DEPENDABILITY**

# INTRODUCTION

With a highly dedicated team, Sunrise Fluid Power Inc. has been specializing in the manufacturing of hydraulic ironworkers, punching machines, bending machines, and other hydraulic machinery and equipment for near 30 years. Total customer satisfaction is our number one goal. We are passionate about providing engineering excellence in everything we do, and we are dedicated to manufacturing world-class, high-value products for our global customers.

## Product Differentiation

Sunrise is ISO-9001 certified by BVQI, and our products meet the CE safety requirements and regulations. We relentlessly seek continuous improvement and product development. Currently Sunrise has the broadest range of ironworker and punching machine models compared to any other manufacturer. Sunrise product advantages: Durability, Accuracy, and Versatility. Besides our very popular single and dual operator models, we have introduced the K-series, a new line of ironworker with vertical movement at all stations. The center beam in the entire range of K-series moves in straight up and down motion to provide less deformation, better results and longer tooling life.

## Quality Control

Quality of the highest standard is the key factor in success. All key components of our ironworkers, punching machines, etc. are made in-house at our modern plant and automated production lines. We use the latest control system to ensure highly efficient production, and the quality assurance team measures and tests each component to ensure precision standards of machined parts are met or surpassed. Finally, before shipping, each complete machine goes through intensive quality and performance tests to make absolute sure it meets our strict company quality standards before it arrives at the customer's operation.

## Sales and Service

Our global sales network covers almost 50 countries in Europe, Australia, North America, Southeast Asia, the Middle East and more. This coverage, combined with the quality of our machines, makes Sunrise one of the best choices when it comes to metal forming. In this highly competitive international market, Sunrise's market share continues to grow. Thank you to our many and growing list of satisfied customers for your continued support. Sunrise is now one of the leading brands in the fabricating industry. We look forward to your continued support and comments -- together we will push quality at Sunrise ever higher.



Sunrise Hydraulic Ironworkers are designed with multiple functions to save labor, time, energy and cost. This allows Sunrise Ironworkers to meet the diversified needs of the metal fabricating industry.

Maximum efficiency and long life is guaranteed by using the latest manufacturing methods, including powerful CAD design, modern production line with CNC equipment and continuous quality control.

Each work station is equipped with specially designed hold-downs to ensure safety while providing precision and ease of use. These ironworkers are the most economical and efficient machines in the industry for the manufacturing of metal products.

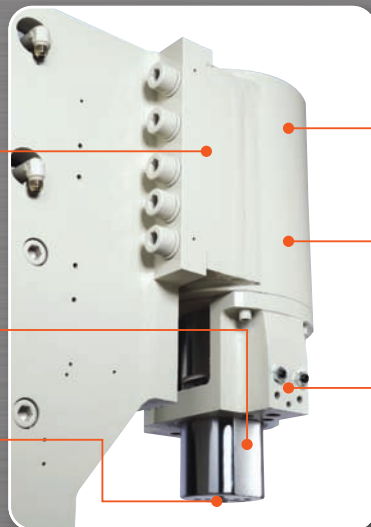
All Sunrise ironworkers and punching machines come standard with a low pressure tool alignment mode. The operator can use the JOG mode to run the machine in low pressure and low speed for tool alignment, blade changes and maintenance operations. This greatly improves operator safety and prevents tool damage in case of mis-alignment.

### Key features on the dual cylinder models:

The dual cylinder models feature a separate cylinder for independent operation from shearing stations.

Cylinder ram with flat surface for rigid guiding and to ensure proper alignment of tool.

Keyed punch ram to ensure alignment of shaped tooling.



The cylinder ram is guided at three positions to provide extra support and absorb side-load forces for added protection of cylinder seals.



The punching station features a large cylinder mounting plate to ensure maximum cylinder support under heavy load. The punching base is one solid plate with T-slot grooves for universal tool fixture.








The base of the machine is made from welded channel in a grid pattern for a rigid machine foundation.

The frame of the machine is a monoblock construction that integrates both bolts and welding reinforcement to provide maximum frame structure rigidity.

# FEATURES

# HYDRAULIC IRONWORKERS &

	
*Pipe Notching	Punching
	
*Angle Bending	*Radius Corners
	
Punching	*Pipe Punching
	
*Rounding off Corners	*Cutting and Rounding off
	
*Press Brake	*Bilateral Rounding off

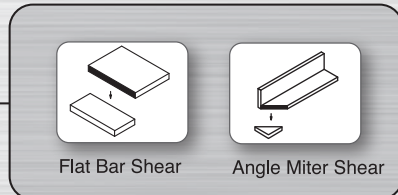
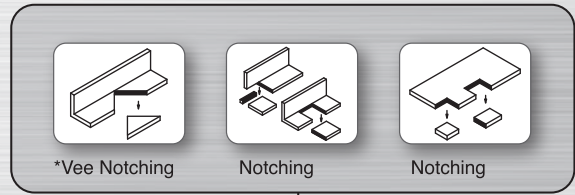
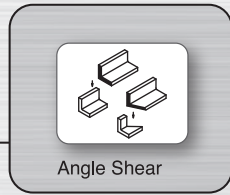
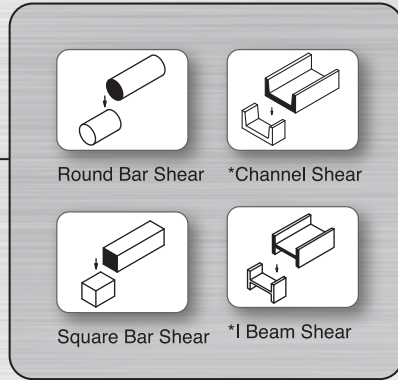
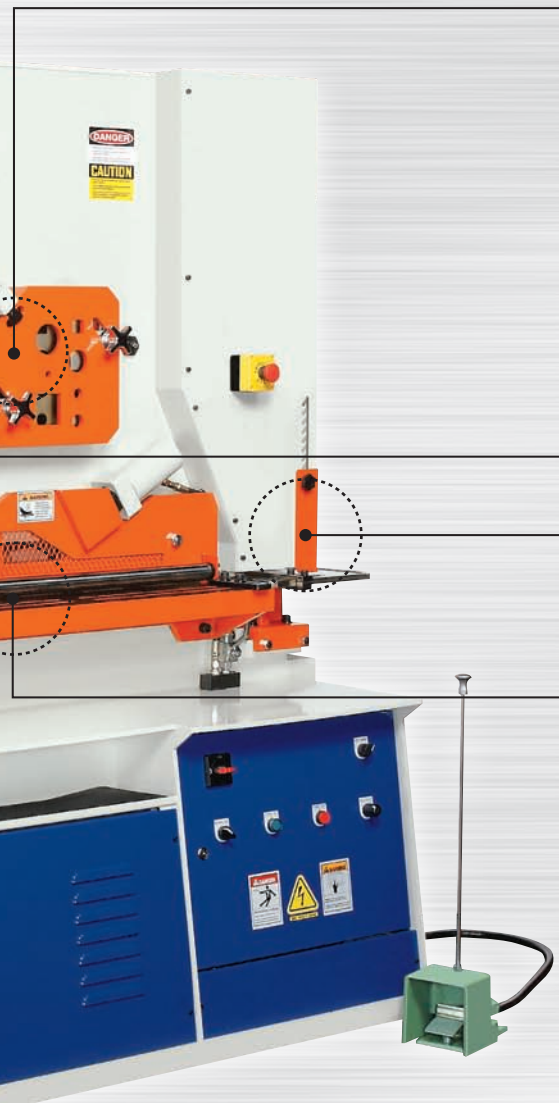


IW-185SD

\* : Optional tooling



# PUNCHING MACHINES



The use of name-brand hydraulic components ensure excellent reliability of the hydraulic system.



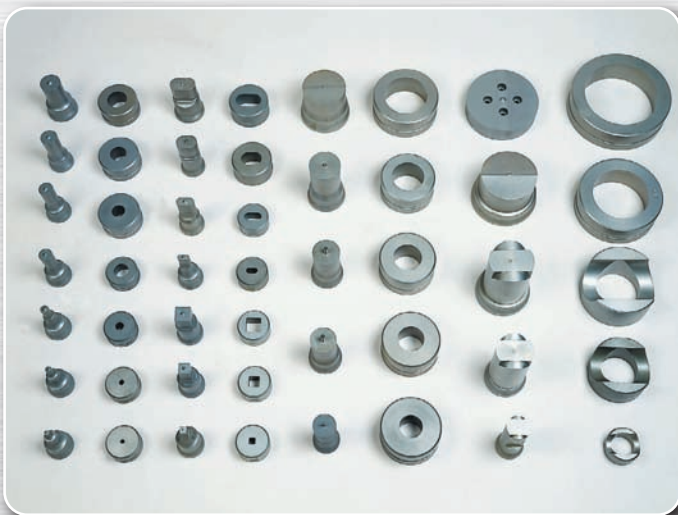
Electric cabinet with low 24 volt DC control circuit provides full protection and safety.

# WORK STATIONS

## Punching Station

- A full range of punches and dies are available for various punching needs.
- Quick change retaining nut system for fast punch tooling change.
- Thoughtfully designed stripper for visibility, safety and ease of use.

- A large 2-piece table with scales and gauging stops is standard on all models.
- Stripper with interchangeable plates of various openings to minimize deformation is standard on all models.
- Optional hydraulic stripper is available on dual-cylinder ironworkers and all punching machines.



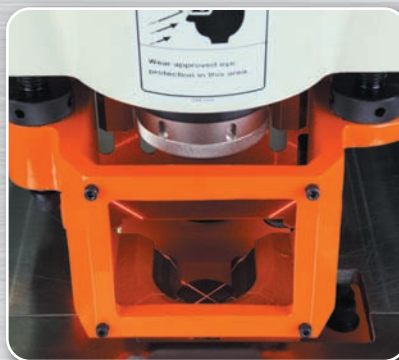
\*Punches and dies are sold separately.



\*Standard dual-opening die block for up to 50mm round punch and die.



Overhang die holder for punching channel flanges and angles. (optional on single cylinder models)



\*Laser alignment system for more accurate positioning of marked parts.



\*Goose-neck die holder for punching channel flanges and webs.



\*Urethane spring stripper for minimal deformation.

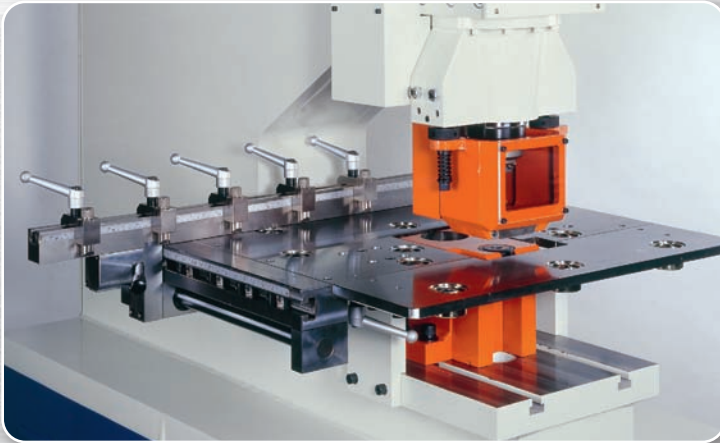


\*Pipe notcher.



\*Oversize punch attachment.





\*Multi-stop gauge table. (S/SD/KD and PM models only)



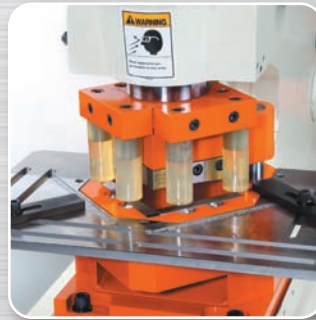
\*Optional angle leg up stripper



\*Single vee press brake.



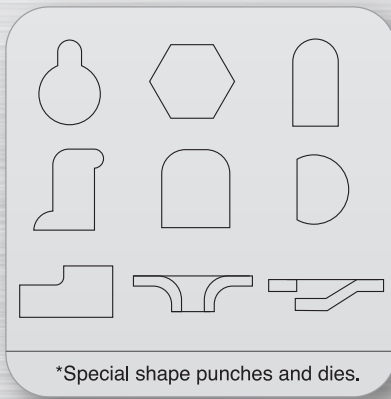
\*Multi vee press brake.



\*Large vee-notcher. (Punch side)



\*Angle bending press.



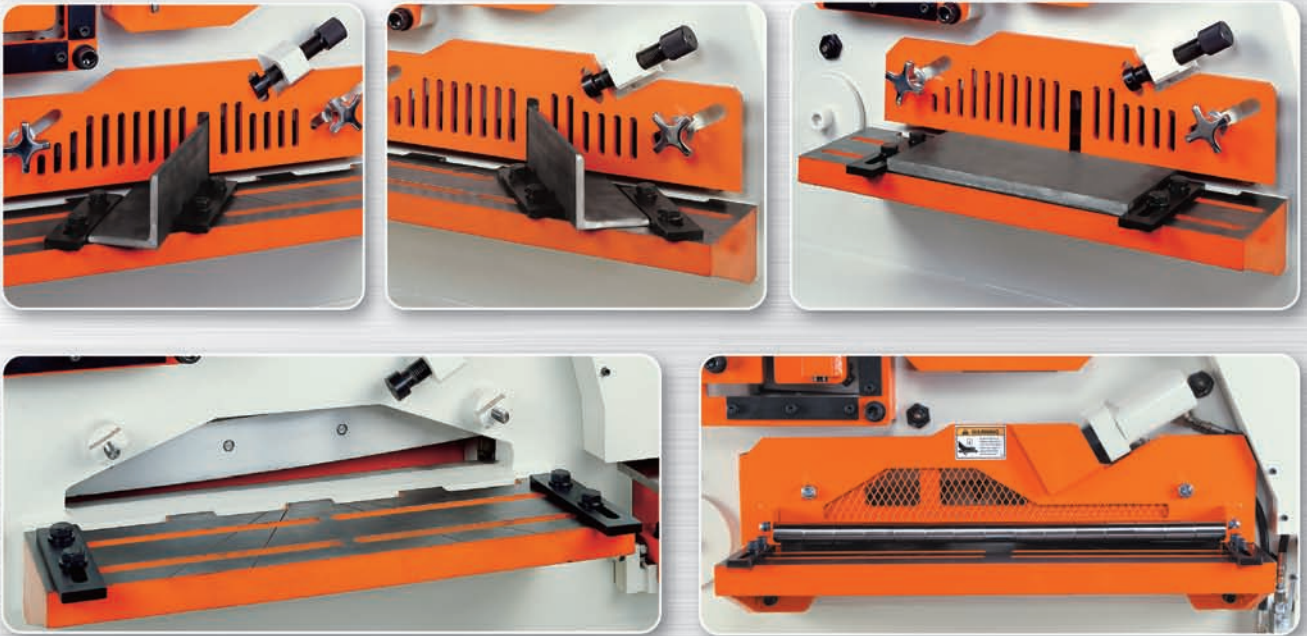
\*Optional Semi-Automatic CNC Tables with 1000x400mm travel.



# WORK STATIONS

## Flat Bar Shearing Station

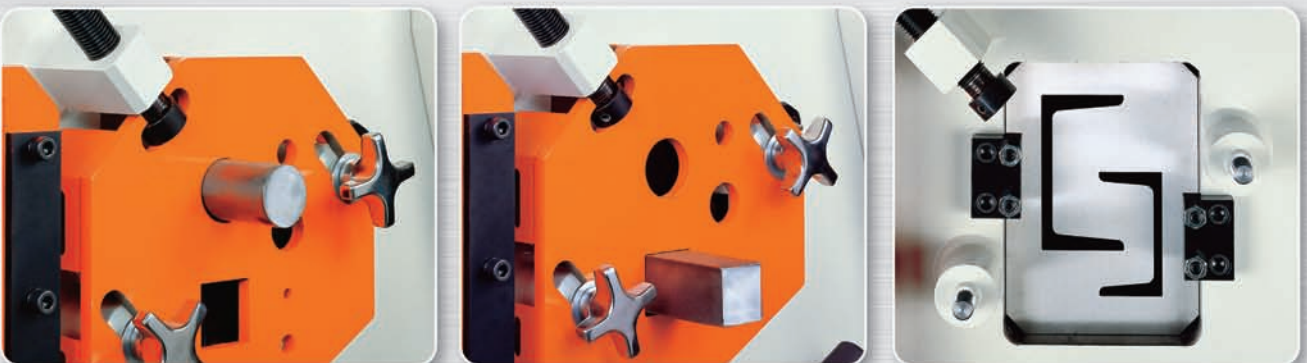
- Specially machined upper blade to give a clean shear with minimum distortion.
- Lower blade has four usable cutting edges.
- Variable degree miter-cutting on angle flange.
- Easily adjustable hold-down.
- Support table with guides for accurate positioning.



\*Optional hydraulic hold-down for double cylinder ironworkers.

## Bar Shearing Station

- One hold-down for various sizes of square bar shearing and round bar shearing.
- Optional channel and section bar shear tooling is available for most models. (See specification chart for details)

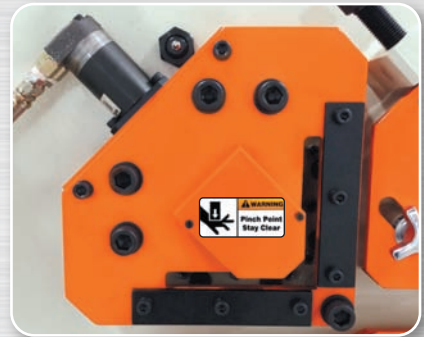
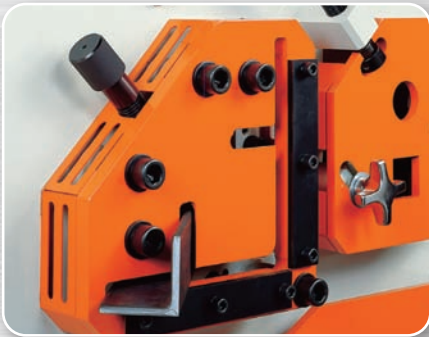


\*Channel blades. (optional)



## Angle Shearing Station

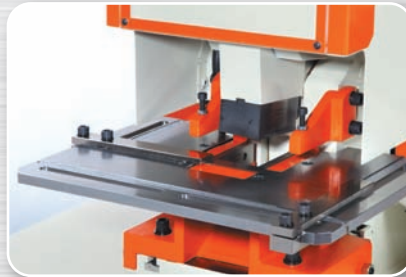
- Single shear with no material loss and minimal deformation.
- 45° miter-cut is easy and clean.
- Stationary blades with four usable cutting edges.
- Selectable corner radii on moving blades for optimum results on small or large angles.



\*Optional hydraulic hold-down for angle shear.

## Notching Station

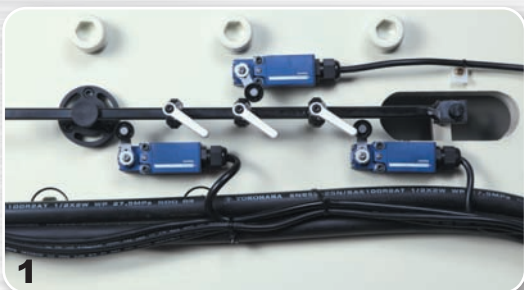
- Ideal for notching of flat bars and angles.
- Electrically interlocked safety guard for maximum safety and visibility.
- Gauging table included with stops for precise positioning.



\*Optional.

## Other Included Features

1. Three limit switches enable setting of short notch stroke to improve efficiency. (on IW-55A, IW-66H and S/SD models)
2. Magnetic base LED work light for safer operation. (optional on IW-50M)
3. 1000mm electric backgauge for higher efficiency in repetitious work.  
The gauge extension is available depending on request.



\*Optional on IW-50M, IW55A, IW-66H.

# K SERIES

## K - SERIES IRONWORKERS

The K-series are special designed compact ironworkers with vertical movements at all stations. The entire main slide moves in straight up and down motion to provide the optimum results for punching, shearing, notching, and bending. Hydraulic hold-down and urethane spring stripper are also available for the best performance. The fast cylinder stroke greatly improves the efficiency. This model incorporates versatility, efficiency, accuracy, and ease of use at an excellent price.



Hydraulic hold-down.  
(optional on IW-50K)



IW-50K



IW-66K

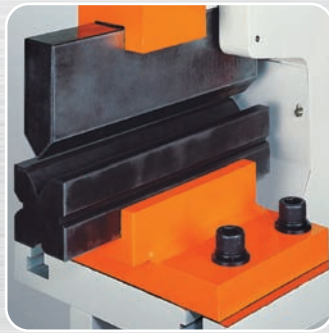




Single vee press brake.



\*Urethane spring stripper.



\*Multi vee press brake.



\*Channel Shear.



IW-66KB



IW-95KD

# SINGLE CYLINDER

## Single Cylinder Models

### IW-50M

The IW-50M has four standard stations, capable of a wide range of applications. The punching station can be converted into a notching station. IW-50M is heavier and stronger than other competitive machines. This durable and economical model is perfect for small shops with a limited budget.



IW-50M

### IW-55A

The IW-55A features a vertical moving ram at the punching station which improves the punching result and enables use of optional tooling such as pipe notching and press braking tool. The square/round bar shear is a stand-alone station with the possibility of optional channel shear and section bar shear tooling. This model also features lower angle shearing and bar shearing stations.



IW-55A



## IW-66H

The IW-66H features the "Z" shape aperture at the angle shear station, which makes this model capable of doing both the internal and external miter shear on angles. The round/square bar shearing on this model is a stand-alone station that has large shearing capability.



IW-66H

# K - SERIES IRONWORKERS

## Capacities and Specifications

Unit: inch

MODEL	IW-50K	IW-66K	IW-66KB	IW-95KD
<b>PUNCHING</b>				
Punching Pressure	50 Ton	66 Ton	66 Ton	95 Ton
Punch Capacity (Diameter x Thickness)	$\phi^{3/4} \times 5/8$ $\phi^{1 1/2} \times 5/16$	$\phi^{7/8} \times 3/4$ $\phi^{1 1/2} \times 7/16$	$\phi^{7/8} \times 3/4$ $\phi^{1 1/2} \times 7/16$	$\phi^1 \times 7/8$ $\phi^2 \times 1/2$
Throat Depth	6 <sup>1</sup> / <sub>2</sub>	7 <sup>7</sup> / <sub>8</sub>	7 <sup>7</sup> / <sub>8</sub>	16 <sup>1</sup> / <sub>8</sub>
Channel Flange Punch (Height)	--	--	--	3~7
Maximum Stroke Length	1 <sup>1</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub>	4
Cycles / Min. (1/2" stroke)	37	34	34	38
Working Height Up to Die	41 <sup>1</sup> / <sub>2</sub>	41 <sup>1</sup> / <sub>4</sub>	41 <sup>1</sup> / <sub>4</sub>	41 <sup>1</sup> / <sub>4</sub>
<b>ANGLE SHEARING</b>				
Shearing Capacity	50 Ton	66 Ton	66 Ton	120 Ton
Shearing Cylinder Stroke Length	--	--	--	2
At 90° Shearing	3 x 3 x 1 <sup>1</sup> / <sub>4</sub>	4 x 4 x 5 <sup>5</sup> / <sub>16</sub>	4 x 4 x 5 <sup>5</sup> / <sub>16</sub>	5 x 5 x 1 <sup>1</sup> / <sub>2</sub>
Working Height	39 <sup>1</sup> / <sub>2</sub>	42	42	41
<b>FLAT SHEARING</b>				
Flat Bar Shear	12 x 3 <sup>3</sup> / <sub>8</sub>	14 x 5 <sup>5</sup> / <sub>8</sub>	14 x 9 <sup>9</sup> / <sub>16</sub>	16 x 5 <sup>5</sup> / <sub>8</sub>
Blade Length	12 <sup>1</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	14 <sup>1</sup> / <sub>4</sub>	16 <sup>1</sup> / <sub>8</sub>
Working Height	31 <sup>1</sup> / <sub>2</sub>	31 <sup>3</sup> / <sub>4</sub>	31 <sup>3</sup> / <sub>4</sub>	28 <sup>1</sup> / <sub>2</sub>
<b>BAR SHEARING</b>				
Round Bar Shear	$\phi^1 1/8$	$\phi^1 1/2$	$\phi^1 1/2$	$\phi^1 3/4$
Square Bar Shear	1 x 1	1 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub>	1 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub>	1 <sup>3</sup> / <sub>4</sub> x 1 <sup>3</sup> / <sub>4</sub>
Channel Shear	3*	4*	4*	6*
I Beam Shear	3*	4*	4*	6*
<b>NOTCHING</b>				
Rectangular Notcher (W x D x T)	2 x 3 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>4</sub>	2 x 3 <sup>1</sup> / <sub>2</sub> x 5 <sup>5</sup> / <sub>16</sub>	--	2 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> x 1 <sup>1</sup> / <sub>2</sub>
Vee-Notcher (Side x Side x T)	3 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> x 5 <sup>5</sup> / <sub>16</sub> *	3 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> x 5 <sup>5</sup> / <sub>16</sub> *	--	4 x 4 x 1 <sup>1</sup> / <sub>2</sub> *
Channel Notching	--	--	--	7~8
Working Height	41 <sup>1</sup> / <sub>4</sub>	41 <sup>1</sup> / <sub>4</sub>	--	41 <sup>1</sup> / <sub>4</sub>
<b>SPECIAL TOOLING</b>				
Large Vee-Notcher (Side x Side x T)	--	--	--	5 <sup>3</sup> / <sub>4</sub> x 5 <sup>3</sup> / <sub>4</sub> x 3 <sup>3</sup> / <sub>8</sub> *
Single Vee Press Brake (W x T)	6 x 5 <sup>5</sup> / <sub>16</sub> *	6 x 5 <sup>5</sup> / <sub>16</sub> *	--	10 x 9 <sup>9</sup> / <sub>16</sub> *
Multi Vee Press Brake (W x T)	10 x 1 <sup>1</sup> / <sub>8</sub> *	10 x 1 <sup>1</sup> / <sub>4</sub> *	12 x 1 <sup>1</sup> / <sub>4</sub> **	20 x 3 <sup>3</sup> / <sub>16</sub> *
Angle Bending	2 <sup>1</sup> / <sub>2</sub> x 5 <sup>5</sup> / <sub>16</sub> *	2 <sup>1</sup> / <sub>2</sub> x 5 <sup>5</sup> / <sub>16</sub> *	--	4 x 5 <sup>5</sup> / <sub>16</sub> *
Pipe Notching	$\phi^2$ *	$\phi^2$ *	$\phi^2$ *	$\phi^4$ *
<b>OTHER</b>				
Electric Power (HP)	5 HP	7.5 HP	7.5 HP	10 HP
Net Weight (Apr.)	1875 lb	2625 lb	2830 lb	6075 lb
Gross Weight (Apr.)	2100 lb	2925 lb	3160 lb	6400 lb
Machine Dimension (Apr.)	41 x 30 x 59	47 x 30 x 64	54 x 30 x 64	71 x 41 x 74
Packing Dimension (Apr.)	52 x 37 x 70	57 x 36 x 75	67 x 35 x 76	85 x 47 x 86

\* : Optional Tooling

\*\* : The multi-vee press brake is a standard station on the IW-66KB; notcher is not included.

Note: Based on low carbon / mild steel material strength of 65,000 PSI tensile.  
Design and specifications subject to change without notice.



# SINGLE CYLINDER IRONWORKERS

## Capacities and Specifications

Unit: inch

MODEL	IW-50M	IW-55A	IW-66H
<b>PUNCHING</b>			
Punching Pressure	50 Ton	55 Ton	66 Ton
Punch Capacity (Diameter x Thickness)	$\varnothing 3/4 \times 5/8$ $\varnothing 1 1/2 \times 5/16$	$\varnothing 7/8 \times 5/8$ $\varnothing 1 1/2 \times 3/8$	$\varnothing 1 \times 5/8$ $\varnothing 1 1/2 \times 7/16$
Throat Depth	7	7	$8 5/8$
Maximum Stroke Length	$1 3/8$	$1 5/8$	$2 1/8$
Cycles / Min. (1/2" stroke)	31	24	29
Working Height Up to Die	$38 1/4$	33	$39 1/2$
<b>ANGLE SHEARING</b>			
At 90° Shearing	$3 \times 3 \times 5/16$	$4 \times 4 \times 3/8$	$4 \times 4 \times 1/2$
At 45° Miter Shearing	$2 \times 2 \times 1/4$	$2 1/2 \times 2 1/2 \times 5/16$	$3 \times 3 \times 5/16$
Working Height	44	$33 1/2$	$48 1/2$
<b>FLAT SHEARING</b>			
Flat Bar Shear (Width x Thickness)	$14 \times 5/16$ $7 \times 1/2$	$12 \times 1/2$ $8 \times 5/8$	$14 \times 5/8$ $8 \times 3/4$
Blade Length	$14 1/4$	$12 1/4$	$14 1/4$
Angle Flange Trim	3	4	4
Working Height	$38 1/4$	$45 1/4$	$39 1/2$
<b>BAR SHEARING</b>			
Round Bar Shear	$\varnothing 1$	$\varnothing 1 1/4$	$\varnothing 1 1/2$
Square Bar Shear	$1 \times 1$	$1 1/8 \times 1 1/8$	$1 1/2 \times 1 1/2$
Channel Shear	---	3*	4*
I Beam Shear	---	3*	4*
Working Height	47	$34 1/2$	$49 1/2$
<b>NOTCHING</b>			
Rectangular Notcher (W x D x T)	$2 \times 3 1/2 \times 1/4$ **	$2 \times 3 1/2 \times 1/4$	$2 \times 3 1/2 \times 5/16$
Vee-Notcher (Side x Side x T)	$3 1/2 \times 3 1/2 \times 5/16$ **	$3 1/2 \times 3 1/2 \times 5/16$ *	$3 1/2 \times 3 1/2 \times 5/16$ *
Working Height	---	$41 1/4$	$39 1/2$
<b>SPECIAL TOOLING</b>			
Single Vee Press Brake (W x T)	$6 \times 1/4$ *	$6 \times 3/8$ *	$6 \times 5/16$ *
Multi Vee Press Brake (W x T)	---	$10 \times 1/4$ *	---
Angle Bending	$2 1/2 \times 5/16$ *	$2 1/2 \times 5/16$ *	$2 1/2 \times 3/8$ *
Pipe Notching	---	$\varnothing 2$ *	---
<b>OTHER</b>			
Electric Power (HP)	5 HP	5 HP	7.5 HP
Net Weight (Apr.)	1850 lb	2500 lb	3325 lb
Gross Weight (Apr.)	2075 lb	2775 lb	3650 lb
Machine Dimension (Apr.)(LxWxH)	$50 \times 28 \times 53$	$52 \times 31 \times 57$	$57 \times 31 \times 62$
Packing Dimension (Apr.)(LxWxH)	$61 \times 34 \times 64$	$63 \times 37 \times 68$	$68 \times 37 \times 73$

\* : Optional Tooling

\*\* : On IW-50M the notcher is optional tooling to be installed at the punching station.

Note: Based on mild steel material strength of 65,000 PSI tensile.

Design and specifications subject to change without notice.

A 1-hole die holder and a 2-piece gauging table are provided as standard equipment on all single cylinder models.

# S/SD SERIES

## Double Cylinder Models

The double cylinder "S/SD" series are in the Sunrise tradition of well engineered ironworkers built for high power, quality, and reliability. These ironworkers have two control foot pedals, and separate operations can be safely performed simultaneously. The low pressure setting for tool change provides maximum operation safety. The long punching cylinder stroke and deep throat enable mounting a wide range of special equipment. The large punching base with the "T-slot" mounting provides a solid base for securing the punching tooling, as well as a wide range of optional and custom designed tooling.



**IW-110S**



## Capacities and Specifications

Unit: inch

MODEL	IW-66S IW-66SD	IW-88S IW-88SD	IW-110S IW-110SD	IW-135S IW-135SD	IW-185SD
<b>PUNCHING</b>					
Punching Pressure	66 Ton	88 Ton	110 Ton	135 Ton	185 Ton
Punch Capacity (Diameter x Thickness)	$\varnothing 7/8 \times 3/4$	$\varnothing 1 \times 7/8$	$\varnothing 1 1/8 \times 1$	$\varnothing 1 1/4 \times 1 1/16$	$\varnothing 1 7/16 \times 1 1/4$
Throat Depth	$\varnothing 2 \times 5/16$	$\varnothing 2 \times 1/2$	$\varnothing 2 \times 9/16$	$\varnothing 2 \times 1 1/16$	$\varnothing 2 \times 7/8$
S:	12	12	12	12	---
SD:	20	20	20	20	20
Channel Flange Punch (Height)	7	7	7	7	7
Maximum Stroke Length	4	4	4	4	4
Cycles / Min. (3/4" stroke)	30	29	28	28	29
Working Height Up to Die	$39 3/4$	$41 1/4$	41	42	$41 1/4$
<b>ANGLE SHEARING</b>					
At 90 ° Shearing	$5 \times 5 \times 1/2$	$6 \times 6 \times 1/2$	$6 \times 6 \times 9/16$	$6 \times 6 \times 1 1/16$	$8 \times 8 \times 3/4$
At 45° Miter Shearing	$2 1/2 \times 2 1/2 \times 5/16$	$3 \times 3 \times 3/8$	$3 \times 3 \times 3/8$	$3 \times 3 \times 3/8$	$3 \times 3 \times 3/8$
Working Height	$43 3/4$	$45 3/4$	$47 7/8$	$46 1/2$	$46 1/2$
<b>FLAT SHEARING</b>					
Flat Bar Shear (Width x Thickness)	$14 \times 9/16$ $10 \times 3/4$	$18 \times 9/16$ $12 \times 7/8$	$24 \times 5/8$ $16 \times 3/4$	$24 \times 1 1/16$ $16 \times 1$	$30 \times 3/4$ $16 \times 1 1/8$
Blade Length	$14 1/4$	$18 1/4$	$24 3/8$	$24 3/8$	$30 1/4$
Angle Flange Trim	4	4	4	4	$4 3/4$
Working Height	36	$36 1/2$	$37 1/2$	36	36
<b>BAR SHEARING</b>					
Round Bar Shear	$\varnothing 1 1/2$	$\varnothing 1 3/4$	$\varnothing 1 3/4$	$\varnothing 2$	$\varnothing 2 1/4$
Square Bar Shear	$1 1/2 \times 1 1/2$	$1 3/4 \times 1 3/4$	$1 3/4 \times 1 3/4$	$2 \times 2$	$2 1/4 \times 2 1/4$
Channel Shear	5*	6*	6*	7*	8*
I Beam Shear	5*	6*	6*	7*	8*
Working Height	48	50	$52 1/2$	$51 1/2$	54
<b>NOTCHING</b>					
Rectangular Notcher (W x D x T)	$2 \times 3 1/2 \times 3/8$	$2 \times 3 1/2 \times 1/2$	$2 1/2 \times 3 1/2 \times 1/2$	$2 1/2 \times 3 1/2 \times 1/2$	$2 1/2 \times 3 1/2 \times 5/8$
Vee-Notcher (Side x Side x T)	$3 1/2 \times 3 1/2 \times 3/8^*$	$3 1/2 \times 3 1/2 \times 1/2^*$	$4 \times 4 \times 1/2^*$	$4 \times 4 \times 1/2^*$	$4 \times 4 \times 5/8^*$
Working Height	$35 3/4$	$36 1/2$	$37 1/2$	$36 1/4$	$36 1/4$
<b>SPECIAL TOOLING</b>					
Large Vee-Notcher (Side x Side x T)	$5 3/4 \times 5 3/4 \times 5/16^*$	$5 3/4 \times 5 3/4 \times 3/8^*$	$5 3/4 \times 5 3/4 \times 1/2^*$	$5 3/4 \times 5 3/4 \times 1/2^*$	$5 3/4 \times 5 3/4 \times 1/2^*$
Single Vee Press Brake (W x T)	$10 \times 9/16^*$	$10 \times 9/16^*$	$10 \times 3/4^*$	$10 \times 3/4^*$	$10 \times 3/4^*$
Multi Vee Press Brake (W x T)	$20 \times 3/16^*$	$20 \times 3/16^*$	$27 1/2 \times 3/16^*$	$27 1/2 \times 3/16^*$	$27 1/2 \times 3/16^*$
Angle Bending	$4 \times 1/4^*$	$4 \times 5/16^*$	$4 \times 1/2^*$	$4 \times 1/2^*$	$4 \times 1/2^*$
Pipe Notching	$\varnothing 4^*$	$\varnothing 4^*$	$\varnothing 4^*$	$\varnothing 4^*$	$\varnothing 4^*$
<b>OTHER</b>					
Electric Power (HP)	7.5 HP	10 HP	10 HP	15 HP	20 HP
Net Weight (Apr.)	S: 3975 lb	4825 lb	6525 lb	7375 lb	---
	SD: 4875 lb	5850 lb	7625 lb	8725 lb	10925 lb
Gross Weight (Apr.)	S: 4300 lb	5210 lb	7025 lb	7925 lb	---
	SD: 5250 lb	6360 lb	8175 lb	9325 lb	11600 lb
Machine Dimension (Apr.)	S: $67 \times 32 \times 68$	$73 \times 33 \times 70$	$83 \times 34 \times 72$	$86 \times 41 \times 73$	---
(LxWxH)	SD: $82 \times 32 \times 68$	$87 \times 33 \times 70$	$97 \times 34 \times 72$	$98 \times 41 \times 73$	$107 \times 43 \times 80$
Packing Dimension (Apr.)	S: $78 \times 38 \times 79$	$83 \times 39 \times 81$	$94 \times 40 \times 83$	$97 \times 47 \times 84$	---
(LxWxH):	SD: $93 \times 38 \times 79$	$98 \times 39 \times 81$	$108 \times 40 \times 83$	$109 \times 47 \times 84$	$118 \times 49 \times 91$

\* : Optional Tooling

Note: Based on low carbon / mild steel material strength of 65,000 PSI tensile.

Design and specifications subject to change without notice.

A 2-hole overhung die holder and a 2-piece gauging table are provided as standard equipment on all dual cylinder ironworkers.

# PM SERIES

## Hydraulic Punching Machine

- The patented dual-piston hydraulic cylinder enables the machine to retract faster, and also makes our cylinder slimmer, which brings a better appearance to the machine.
- Punching machines ranging from 38 to 220 tons of punching capacities, combined with different throat depths to choose from, provides a complete range of models to meet our customer's wide range of requirements.
- All optional tooling used on the punching station of S/SD ironworkers can also be used on the PM models, turning the punching machine into a universal machine.



PM-60LT



\*Bar shearing.



\*Channel shearing.



\*Angle shearing.



\*Flat bar shearing.



\*Rectangular notcher.



## Capacities and Specifications

Unit: inch

MODEL	PM-38T PM-38LT PM-38XT	PM-60T PM-60LT PM-60XT	PM-88T PM-88LT PM-88XT	PM-130LT PM-130XT	PM-175LT PM-175XT	PM-220LT PM-220XT
<b>PUNCHING</b>						
Punching Pressure	38 Ton	60 Ton	88 Ton	130 Ton	175 Ton	220 Ton
Punch Capacity (Diameter x Thickness)	$\varnothing 1\frac{1}{16} \times \frac{9}{16}$ $\varnothing 2 \times \frac{3}{16}$	$\varnothing 7\frac{7}{8} \times \frac{11}{16}$ $\varnothing 2 \times \frac{5}{16}$	$\varnothing 1 \times \frac{7}{8}$ $\varnothing 2 \times \frac{7}{16}$	$\varnothing 1\frac{1}{4} \times \frac{11}{16}$ $\varnothing 2 \times \frac{11}{16}$	$\varnothing 1\frac{3}{8} \times \frac{11}{4}$ $\varnothing 2 \times \frac{7}{8}$	$\varnothing 1\frac{5}{8} \times \frac{13}{8}$ $\varnothing 2 \times \frac{11}{8}$
Channel Flange Punch (Height)	7	7	7	7	7	7
Throat Depth	T: 12 LT: 20 XT: 30	12 20 30	12 20 30	---	---	---
Maximum Stroke Length	4	4	4	4	4	4
Cycles/Min. (3/4" stroke)	41	28	28	26	27	28
Table Size (W x D)	T: $27\frac{1}{2} \times 20$ LT: $27\frac{1}{2} \times 27\frac{1}{2}$ XT: $27\frac{1}{2} \times 37\frac{1}{2}$	$27\frac{1}{2} \times 20$ $27\frac{1}{2} \times 27\frac{1}{2}$ $27\frac{1}{2} \times 37\frac{1}{2}$	$27\frac{1}{2} \times 20$ $27\frac{1}{2} \times 27\frac{1}{2}$ $27\frac{1}{2} \times 37\frac{1}{2}$	---	---	$27\frac{1}{2} \times 27\frac{1}{2}$ $27\frac{1}{2} \times 37\frac{1}{2}$
Working Height Up to Die	$41\frac{1}{4}$	$41\frac{1}{4}$	$41\frac{1}{4}$	$41\frac{1}{4}$	$41\frac{1}{4}$	$41\frac{1}{4}$
<b>OPTIONAL TOOLING</b>						
Largest Hole*	$\varnothing 6 \times \frac{1}{16}$	$\varnothing 6 \times \frac{1}{8}$	$\varnothing 6 \times \frac{3}{16}$	$\varnothing 8 \times \frac{1}{4}$	$\varnothing 8 \times \frac{5}{16}$	$\varnothing 8 \times \frac{3}{8}$
Single Vee Press Brake (W x T)*	$10 \times \frac{1}{2}$	$10 \times \frac{5}{8}$	$10 \times \frac{5}{8}$	$10 \times \frac{3}{4}$	$10 \times \frac{3}{4}$	$10 \times \frac{3}{4}$
Multi Vee Press Brake (W x T)*	$20 \times \frac{1}{8}$	$20 \times \frac{3}{16}$	$20 \times \frac{3}{16}$	$27\frac{1}{2} \times \frac{3}{16}$	$27\frac{1}{2} \times \frac{3}{16}$	$27\frac{1}{2} \times \frac{3}{16}$
Angle Bending*	$4 \times \frac{1}{4}$	$4 \times \frac{3}{8}$	$4 \times \frac{1}{2}$	$4 \times \frac{1}{2}$	$4 \times \frac{1}{2}$	$4 \times \frac{1}{2}$
Rectangular Notcher (WxDxT)*	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{1}{4}$	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{5}{16}$	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{3}{8}$	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{1}{2}$	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{1}{2}$	$2\frac{1}{2} \times 3\frac{1}{2} \times \frac{1}{2}$
Vee Notcher (Side x Side x T)*	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{3}{16}$	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{1}{4}$	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{3}{8}$	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{1}{2}$	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{1}{2}$	$5\frac{3}{4} \times 5\frac{3}{4} \times \frac{1}{2}$
Pipe Notcher (Max diameter)*	$\varnothing 4$	$\varnothing 4$	$\varnothing 4$	$\varnothing 4$	$\varnothing 4$	$\varnothing 4$
Flat Bar Shearing*	$7 \times \frac{3}{16}$	$7 \times \frac{1}{4}$	$7 \times \frac{3}{8}$	$7 \times \frac{1}{2}$	$7 \times \frac{5}{8}$	$7 \times \frac{5}{8}$
Angle Shearing*	$3 \times 3 \times \frac{1}{4}$	$4 \times 4 \times \frac{1}{4}$	$4 \times 4 \times \frac{1}{2}$	$4 \times 4 \times \frac{1}{2}$	$4 \times 4 \times \frac{1}{2}$	$4 \times 4 \times \frac{1}{2}$
Round Bar Shearing*	$\varnothing 1\frac{1}{4}$	$\varnothing 1\frac{1}{4}$	$\varnothing 1\frac{1}{4}$	$\varnothing 1\frac{1}{4}$	$\varnothing 1\frac{1}{4}$	$\varnothing 1\frac{1}{4}$
Square Bar Shearing*	$1\frac{1}{8} \times 1\frac{1}{8}$	$1\frac{1}{4} \times 1\frac{1}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$	$1\frac{1}{4} \times 1\frac{1}{4}$
Channel Shearing*	$4 \times 2$	$4 \times 2$	$4 \times 2$	$4 \times 2$	$4 \times 2$	$4 \times 2$
<b>OTHER</b>						
Electric Power	5 HP	5 HP	7.5HP	10 HP	15 HP	20 HP
Net Weight (Apr.)	T: 2650 lb LT: 3325 lb XT: 4075 lb	3200 lb 4100 lb 4875 lb	3925 lb 4640 lb 6275 lb	---	---	---
Gross Weight (Apr.)	T: 2875 lb LT: 3625 lb XT: 4425 lb	3600 lb 4525 lb 5350 lb	4325 lb 5075 lb 6750 lb	---	---	---
Machine Dimension (Apr.)	T: $43 \times 33 \times 70$ LT: $56 \times 33 \times 71$ XT: $72 \times 33 \times 72$	$46 \times 33 \times 77$ $60 \times 33 \times 77$ $76 \times 33 \times 77$	$51 \times 34 \times 78$ $64 \times 34 \times 78$ $81 \times 34 \times 78$	---	---	$78 \times 50 \times 83$ $98 \times 50 \times 86$
Packing Dimension (Apr.)	T: $56 \times 38 \times 79$ LT: $69 \times 38 \times 80$ XT: $85 \times 38 \times 81$	$59 \times 38 \times 87$ $73 \times 38 \times 87$ $88 \times 38 \times 87$	$63 \times 40 \times 87$ $77 \times 40 \times 87$ $93 \times 40 \times 87$	---	---	---

\* : Optional Tooling

Note: Based on low carbon / mild steel material strength of 65,000 PSI tensile.

Design and specifications subject to change without notice.

A 2-hole structural die holder and a 2-piece gauging table are provided as standard equipment on all punching machines.