# UNI-HYDRO IRONWORKER

1974













# UNI-HYDRO

For over 45 years Uni-Hydro has built the finest line of ironworkers, plate shears and punch tooling in the fabrication industry. All Uni-Hydro machines feature our patented linkage system and are engineered for exceptional performance and longevity. The result is each ironworker does exactly what an ironworker is supposed to do; cut, bend, notch and punch steel with the least amount of deformation possible.

Some people call us the best kept secret in the Machine Tool Industry. We hope you enjoy exploring our machines and decide to put a legendary Uni-Hydro on your shop floor soon!

FOR MACHINERY & TOOLING INQUIRIES CALL OUR SALES TEAM AT

(800) 328-0036









\* Shown with optional Slug Type Angle Shear

Uni-Hydro **Model 80-24** is an 80 ton ironworker with a 24" bar shear that does the work of our competitor's 90 & 100 ton machines. This burly 3-station ironworker is the definition of value, providing our customers large capacities without a large investment. We built this model with an oversized upper punch system and give you access to the world of 6" x 6" x 1/2" Angle Shearing. The 80-24 is the best heavy-duty punching and shearing ironworker for the money.

### FEATURES:

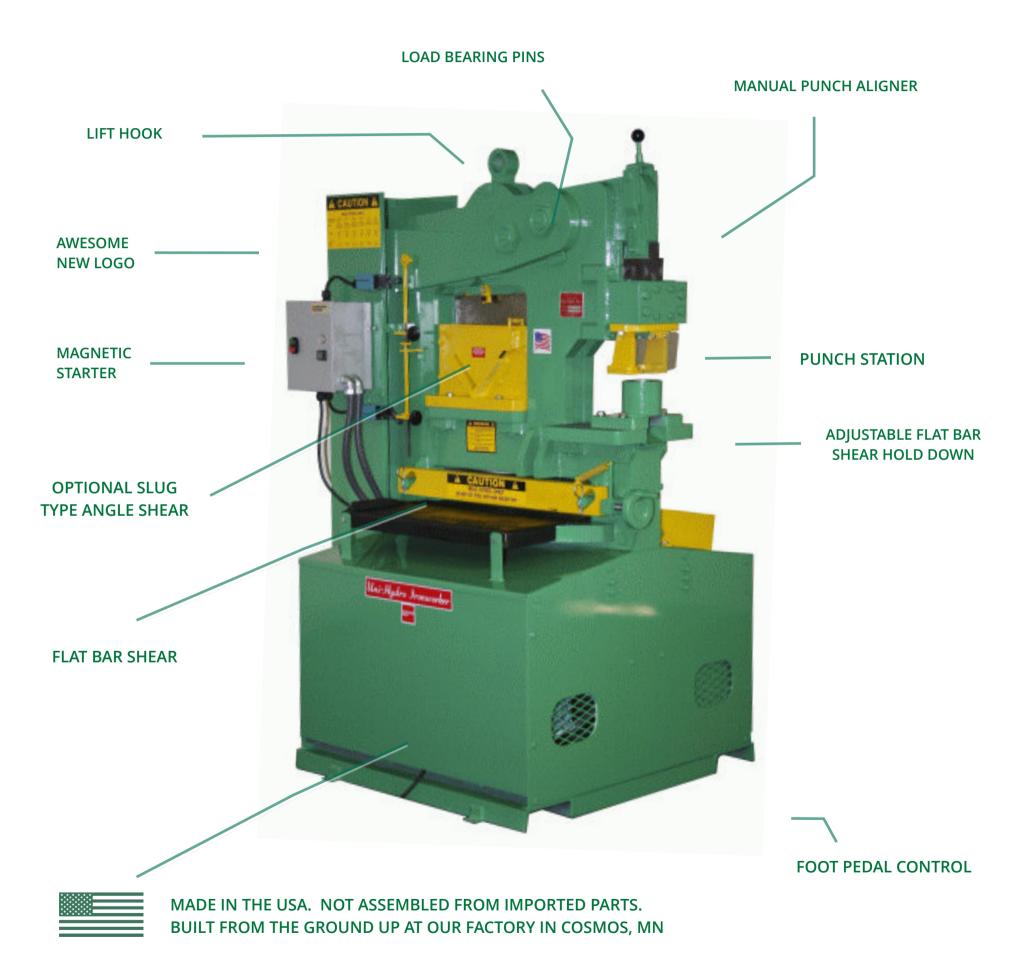
- 80-ton open throat punch
- 24" Bar Shear with Four Sided Blades
- Manual Punch Aligner
- Bar Shear Hold-Down can be Fixed or Adjustable
- Variable stroke control
- Eyelet and forklift accommodations
- Magnetic Starter for Safety & Reliability
- Electric foot control

### **SPECIFICATIONS**

Model	80-24
Tonnage	80
Throat Depth	9"
Punch	2" hole in 1/2" mild steel 1-3/8" hole in 3/4" mild steel
Bar Shear	1/4" x 24" , 1/2" x 20", 3/4" x 10", 1" x 6"
Angle Shear 90°	Slug Type - 6" x 6" x 1/2" Sever Cut - 4" x 4" x 3/8"
Miter Angle 45°	Slug Type - 4" x 4" x 1/2" Sever Cut - 4" x 4" x 3/8"
Rod Shear	Round (Max) - 1-1/4" Square (Max) - 1-1/4"
Coper Notcher 90°	4" x 4" x 3/8"
Square Notcher	3" x 3" x 3/8"

Pipe Notcher (Sch 40 or 80)	1/2", 3/4", 1", 1-1/4", 1-1/2", 2"					
Brake	6", 9", 14", 18", 24" capacity					
Channel Shear	2" & 3" combined, 4" standard					
Strokes Per Min Light Material Max Capacity	Light Material - 50 Max Capacity - 9					
Hydraulics	2,000 psi					
Oil Capacity	16 gallons					
Motor	Standard - 7.5 HP, 220v / 3ph Optional - 7.5 HP / 1ph					
Dimensions (L x W x H)	46" x 37" x 70"					
Weight	2,900 lbs					
TOOLING AND ACCESSORIES - PAGE 18 & 19						

# UNI-HYDRO IRONWORKER MODEL 80-24 FEATURES



ENGINEERED TO DO THE JOB RIGHT

Outfit your Ironworker for maximum productivity with these exceptional tooling choices, optimized for the Power Cavity, Punch and Notching Stations.







SLUG TYPE ANGLE SHEAR

UNIVERSAL SEVER HOUSING FRONT

UNIVERSAL SEVER HOUSING BACK







UNIVERSAL SEVER HOUSING

SPEING RETURN BRAKE

2-PART BRAKE





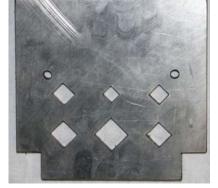


PIPE NOTCHER

SQUARE NOTCHER

V-COPER NOTCHER





ROD SEVER PLATE





CHANNEL SEVER PLATE

BAR SEVER PLATE

ANGLE SEVER PLATE



# ACCESSORIES

**OPTIMIZED FOR PRODUCTIVITY** 







PUNCH TABLE WITH ADJUSTABLE JIG

BAR SHEAR TABLE

STEEL BIN CATCHER

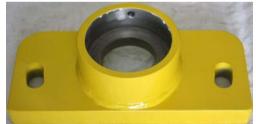




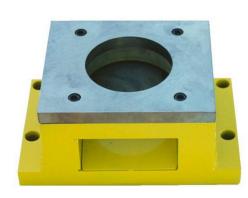
OFFSET DIE STANDS



DELUXE BACK GAUGE







SPECIAL DIE STAND WITH 7x7 PLATE DIE







OVERSIZE DIE SETS GREASE BANK OFFSET DIE STANDS

OVERSIZE DIE STAND

# WHY INVEST IN A UNI-HYDRO?

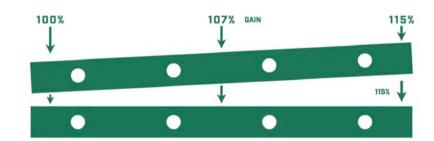
WE HAVE A LONG HISTORY BUILDING IRONWORKERS IN AMERICA

The Dvorak family has been producing hydraulic ironworkers since 1949, with the Uni-Hydro brand in business for over 45 years. Jim Dvorak holds 30 international and 6 stateside patents on ironworkers, with no other ironworker manufacturer or individual coming close to as many patents held by Jim.

# PATENTED POWER

The patented mechanical linkage system designed by Jim Dvorak moves the working center plate downward with a slight movement which breaks the molecules of steel in multiple directions in a slicing motion. This ensures the cleanest cuts available in the industry. The design methods found on a Uni-Hydro ironworker have incorporated the tooling stations to push in a non-attached or non-binding method. This ensures our punch stations and power cavity stations operate tooling in a vertical position.

UNI-HYDRO SHEARS
GAIN POWER UP TO 115%
THROUGH THE CUT!



# **ENGINEERED FOR A TIGHT FIT AND FINISH**

Our rigorous manufacturing process ensures the primary plates are 100% accurate. Each machine has almost 70% more load bearing pin surface than a competitor's machine. This creates a more efficient working cycle throughout the machine's working process. Coupled with this is our world famous mechanical linkage system, that ensures each guillotine cut on our bar shear is as accurate as is possible.

### **EXCEPTIONAL PUNCHES AND TOOLING**

Our tooling doesn't wear out like other machines. Our four-side bar shear blades come with an unconditional 3-Year warranty on the original edge. No other manufacturer offers this guarantee. Our punches and dies are purchased in pairs of the exact same size, not mismatched like the rest of the industry. Each punch and die is coated with oil with a next-level bluing process to prevent oxidation and reduce slag build up. With our punches and dies sitting on the shelf and not rusting you are ensured of getting the best punches & dies for your money.

# **DESIGNED WITH YOUR SAFETY IN MIND**

Uni-Hydro machines are designed for safety of an operator, with shields and pedals in exactly the right place. Uni-Hydro Inc is an American based manufacturing company that **protects our company AND customers** with appropriate product Liability Insurance. Even UNI-HYDRO MANUFACTURED Punches, Dies and Tooling are covered by Uni-Hydro's Product Liability Certification when used in a Uni-Hydro ironworker. With Foreign importers depending on liability pass-through to off-shore manufacturers, who do trust more with your valuable purchase dollars?

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# IRONWORKER

HOLE DIAMETER	3/16"	5/16"	7/16"	1/2"	9/16"	5/8"	11/16"	3/4"	13/16"	7/8"	15/16'	1"	1-1/8"	1-1/4"	1-1/2"
THICKNESS	PRESSURE IN TONS														
18 GA	0.5	0.7	1.6	1.9	2.1	2.4	2.6	2.8	3.1	3.3	3.5	3.8	4	4.2	5.6
16 GA	0.6	0.9	2.1	2.3	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7	4.8	6	7
14 GA	0.7	1.2	2.6	2.9	3.3	3.7	4	4.4	4.8	5.1	5.5	5.9	5	7.2	10
12 GA	1	1.5	3.6	4.1	4.6	5.1	5.7	6.2	6.7	7.2	7.7	8.2	7	10	12
10 GA	1.3	2	4.6	5.3	5.9	6.6	7.3	7.9	8.6	9.2	9.9	10.6	10	13	15
5/32"	-	2.3	5.4	6.1	6.9	7.7	8.4	9.2	10	10.7	11.5	12.3	11	16	19
3/16"	-	2.8	6.4	7.4	8.3	9.2	10.1	11	12	12.9	13.8	14.8	17	19	23
1/4"	-	-	8.6	9.8	11.1	12.3	13.5	14.7	16	17.2	18.4	19.7	23	25	30
3/8"	-	-	12.8	14.8	16.5	18.5	20.2	22.1	23.8	25.8	27.5	29.5	33	38	45
1/2"	-	-	-	19.7	22	24.6	26.9	29.5	31.8	34.4	36.8	39.4	45	50	60
5/8"	-	-	-	-	-	30.8	33.7	36.9	39.9	43	46	49.2	56	63	<i>7</i> 5
3/4"	-	-	-	-	-	-	-	44.3	47.7	<b>51.7</b>	55.2	59	68	<i>7</i> 5	90
1"	-	-	-	-	-	-	-	-	-	-	-	80	90	100	120

**OVER 20,000 PUNCH & DIE SETS IN STOCK!** 

