# BETENBENDER

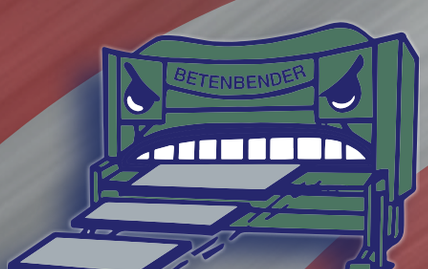
## Manufacturing, Inc.

**AMERICAN MADE WITH PRIDE & DURABILITY**

# Shears


## *The Betenbender Family of American Made Hydraulic Shears and Press Breaks*

*Since 1972*




**Located in Coggon, Iowa**

**Also on the Web at www.betenbender.com**

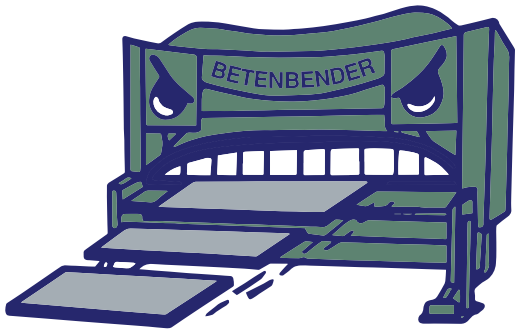
HMI
Hydraulic Machines of Iowa

BETENBENDER MANUFACTURING, INC.

*Family Tradition and American Pride*

# WELCOME

# Shears
# Press Brakes
# C Frame Presses




If you're not already a customer of Betenbender Manufacturing, Inc. we welcome you as a future owner of an American made Betenbender Hydraulic Shear, Hydraulic Press Brake or C Frame Press. If you've purchased one before, we welcome you back. We are pleased that our customers come back again and again, as they grow and need more equipment.

Our full range of Hydraulic machines are engineered for simplicity and ease of operation. We have a national and international sales and service team ready to serve you.

Since 1972 we have continually updated our designs and equipment to meet our customers' needs. We always appreciate and welcome feedback from our customers.

-Max Betenbender, President



Betenbender Manufacturing, Inc. 5806 Quality Ridge Road / PO Box 140 / Coggon, Iowa 52218
**Office** 319-435-2378 / **Fax** 319-435-2262 / **Web** www.betenbender.com / **E-mail** sales@betenbender.com

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# ABOUT US

**1971**

**2014**



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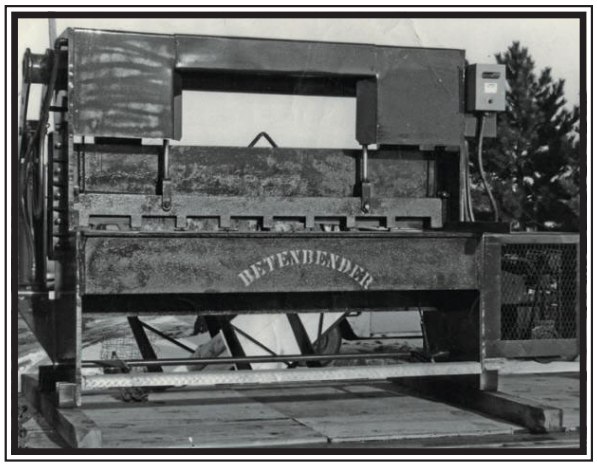
# ABOUT US



## Our History

The Betenbender Family of American Hydraulic Shears and Hydraulic Press Brakes is made by Betenbender Manufacturing,Inc. in Coggon, Iowa, U.S.A. Now in our fifth decade in business, our Midwestern Company continues to produce what we believe is America's best built Shears and Press Brakes.

Glen (Pete) Betenbender began as a blacksmith in Coggon during the 1930s. During WWII, he ran a small fabrication and repair shop. In 1948 he and his wife, Blanche, moved their growing business into their current location as a repair and manufacturing facility. Their son, Max, joined the company in 1967 after serving in the United States Army. In 1972, Pete and Max built their first shear for their own use, but demand from other local businesses for their shear prompted the Betenbenders to begin producing shears for national and international resale. In 1984 Betenbender Manufacturing, Inc. got its first contract to produce shears for a major company.




*This Betenbender Shear, one of our first machines- built in 1972, is still in operation!*

In 2012, Betenbender Manufacturing, Inc. purchased Hydraulic Machines, Inc. from long time friends, Alan and Whitney Hanner. Under the HMI (Hydraulic Machines of Iowa) name we offer a line of C frame presses ranging from 35 ton to 200 ton.

Betenbender Manufacturing, Inc. continues to be a family owned business. Today Max is President and his wife, Donna, is the corporations Secretary-Treasurer. The Vice President, Kyle Rawson, handles the operation of the manufacturing facility which includes customer service and fabrication.

Today there are over 3,900 Betenbender machines in use with very few on the used market.


*High Profile Shear - 2004*

We have always said...

***"If it says Betenbender on the nameplate, you've got a machine that will do the job."***

American Made Hydraulic
# SHEARS

## A Precision Cut Doesn't Happen By Chance

It takes a shear that can make a razor-sharp cut time after time. Betenbender overdriven and underdriven Hydraulic Shears are designed to do exactly that. Choose from a family of nine different models:1/8" (10 GA), 3/16", 1/4", 3/8", 1/2", 5/8", 3/4", 1" and 1 1/4".

Betenbender designs simplicity and safety into its shears-with an advanced hydraulic system and flexible operation. They're easy to operate, easy to maintain and able to withstand the rigors of today's production demands. A wide range of options are available -- See pages 6 & 7

*1/8" (10 GA), 3/16"*

**Controls:** Push button and switch controls are at your fingertips. The fully guarded, 2-position 110v footswitch lets you interrupt the cutting stroke at any point in its cycle.

**Easy Material Handling:** A sturdy backgauge and rake angle adjustment minimizes twist and distortion. This makes it possible to increase the rake for cutting heavier stock and extend maximum capacity of the machine. A 4' squaring arm with a recessed scale makes for fast, easy measurement.

*1/4"*

**Precision Cutting System:** Our single piece top and bottom, high carbon, high chrome shock resistant knives **p**rovide four separate edges for clean cuts and long blade life. Easy blade gap adjustment means precise cuts for a wide variety of materials.

**Electrical System:** Meets NFPA 79 and construction requirements of the ANSI B11.4. All machines have disconnect switches, magnetic starters, 110/120v controls, and 208-230/460v 3 phase, others optional.

*3/8", 1/2", 5/8", 1", & 1-1/4"*

**Backgauges:** A Betenbender Shear is capable of shearing 1/8" (10 GA) material to the following tolerance: Dimension - The width of the off-cut portion of the workpiece is within ±0.005 inch of the backgauge setting.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American Made Hydraulic
# SHEARS

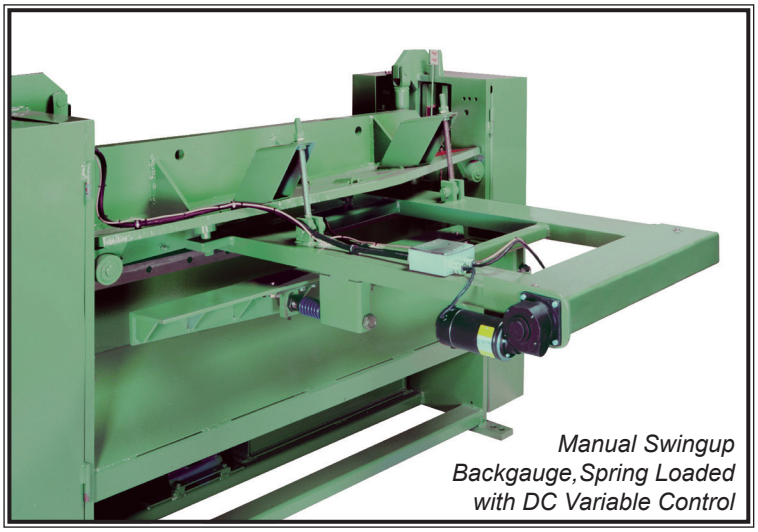


## There's One To Meet Your Needs

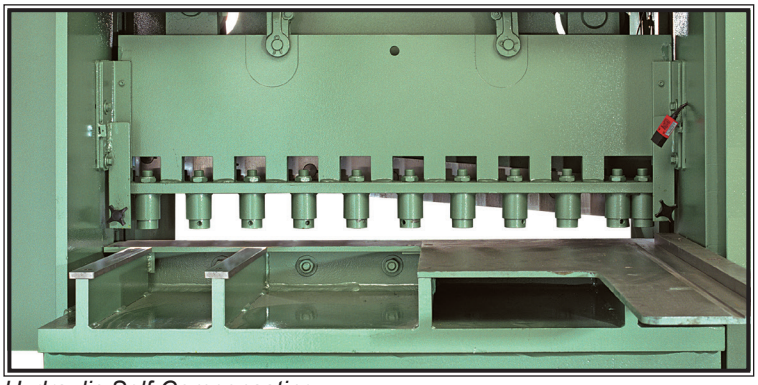
Ask your Betenbender representative how you can make precision cutting an everyday part of your manufacturing process.

### STANDARD FEATURES

- 208-230/460v 3 phase
- 36" Power Backgauge with LED Readout Inch / Metric
- 4' Squaring Arm with Inlaid Scale
- All Hydraulic Fluids Included
- All Steel Construction
- American Made Hoses and Fittings
- American Made Motor and Valves
- Disconnect Switch
- Hour Meter
- Hydraulic Pressure: 2250 psi
- Hydraulic Self-Compensating Holddown Bar Assembly
- Light Beam Gauge (Shadow Line)
- Linemaster Foot Switch
- Manual Rapid Blade Gap Adjustment (3/8" and Larger)
- Manual Swingup Backgauge
- NEMA Electrics
- Power Adjust Variable Rake
- Safety Switch for Front Guard
- Single Piece Top and Bottom, Shock Resistant Knives with Four Cutting Edges



*Manual Swingup Backgauge, Spring Loaded with DC Variable Control*



*Hydraulic Self-Compensating Holddown Bar Assembly*

*Safety Switch for Front Guard*


*Control Panel w/ 5 Station NC "GO-TO" Backgauge Positioner (emergency up, rake control, shear palm button standard)*

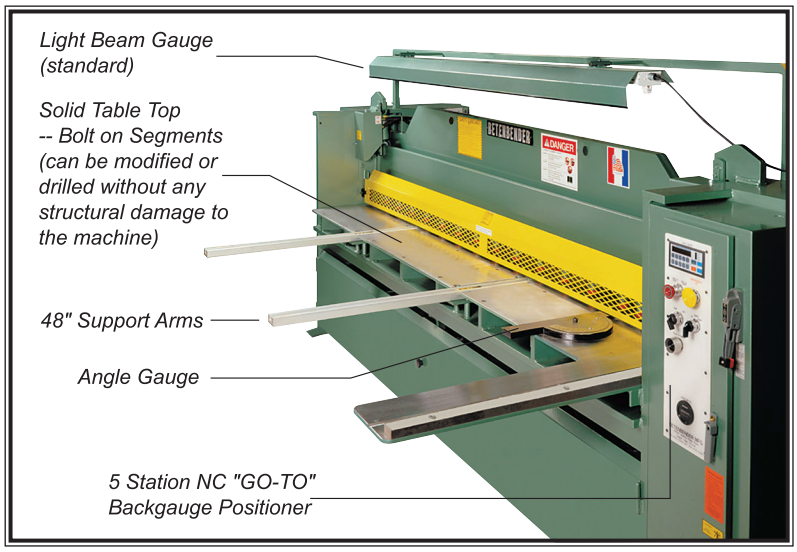
*Linemaster Footswitch*

American Made Hydraulic
# SHEARS

## Take Betenbender's High Quality Shear & Add Shear Options To "Build It Your Way!"

### OPTIONS

- 5 Station NC "GO-TO" Positioner
- 48" Support Arms/Front Gauges
- Inlaid Scale (0-48")
- Disappearing Stops (Support Arms)
- Solid Table Top - Bolt on Segments
- Machined Solid Table Top Bed
- Neoprene Holddown Caps
- One Shot Lubrication
- Automatic Lubrication
- Oil Cooler
- Ball Transfers
- Angle Gauge
- Electronic Stroke Control
- Continuous Stroke (Includes Stroke Counter)
- Stroke Counter
- Independent Holddown Control
- Extra Foot Pedal with Keylock Switch
- Extended Squaring Arm (4' Standard)
- Flip Up Stops (Squaring Arm)
- Left Hand Squaring Arm (4')
- Dovetail Slots or T-Slots
- Keylock Switch
- 2 Position Power Blade Gap Adjustment (3/8" and Larger)
- 3 Position Power Blade Gap Adjustment (3/8" and Larger)
- Pneumatic Sheet Support
- 208v Single Phase
- Special Paint Colors
- Other Electrics and Motors
- Bolt/Shim Kit for Leveling
- Harder Grade of High Carbon, High Chrome Knives
- CSA
- Phenolic Tabletop


### BACKGAUGES

- Manual Swing Up Backgauge (Standard)
- Power Lift
- Automatic Power Lift
- Extra Length on Backgauge

ASK ABOUT OPTIONS NOT LISTED
RECOMMENDED OPTIONS FOR ALL MACHINES
ADDITIONAL RECOMMENDED OPTIONS FOR 3/8", 1/2", 5/8" & 3/4" MACHINES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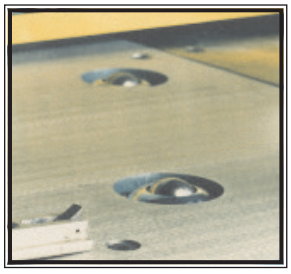
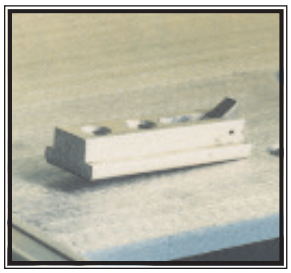
# Betenbender's Options Help Optimize Your Production Needs

## OPTIONS

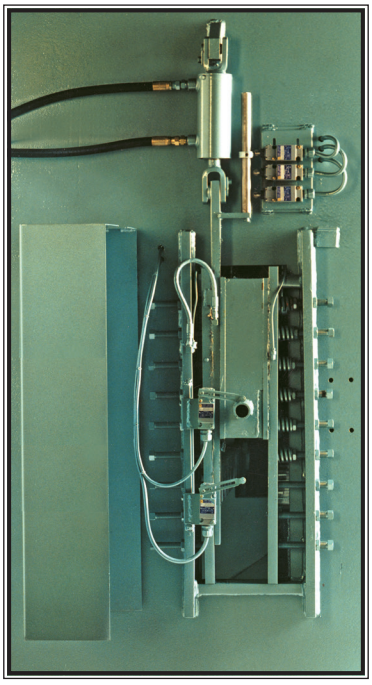
*Segmented Table Top with Angle Gauge, Front Support Arms, Ball Transfers, Disappearing Stop and Inlaid Scale.*



*Ball Transfers*

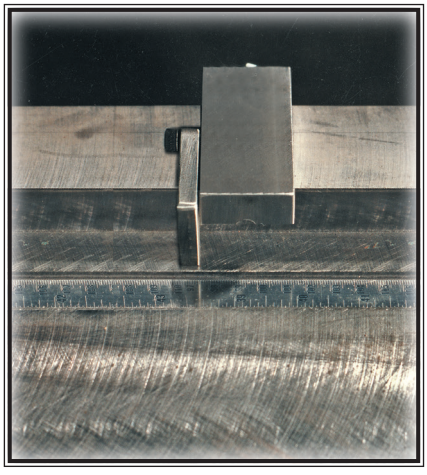


*Dissapearing Stop*



*3-Position Power Rapid Blade Gap Adjustment*


*Control Panel with Hour Meter, Stroke Control, 3-Position Power Rapid Blade Gap with Indicator Lights (power backgauge standard, shear palm button standard) Indicator Lights Show Position of Blade Gap*



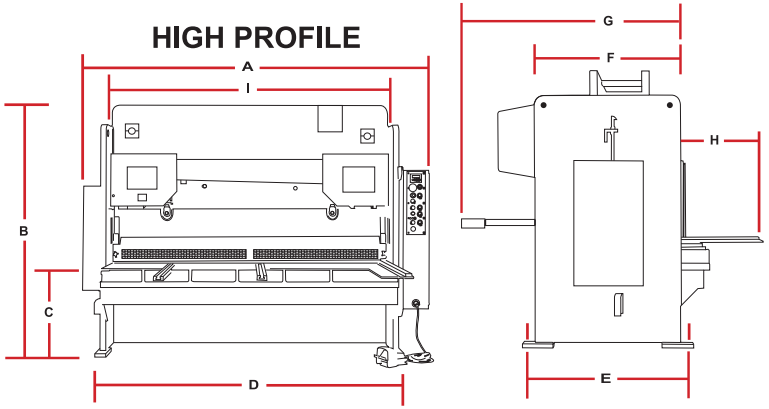
*Flip Up Stop*

∞ BETENBENDER MANUFACTURING, INC.

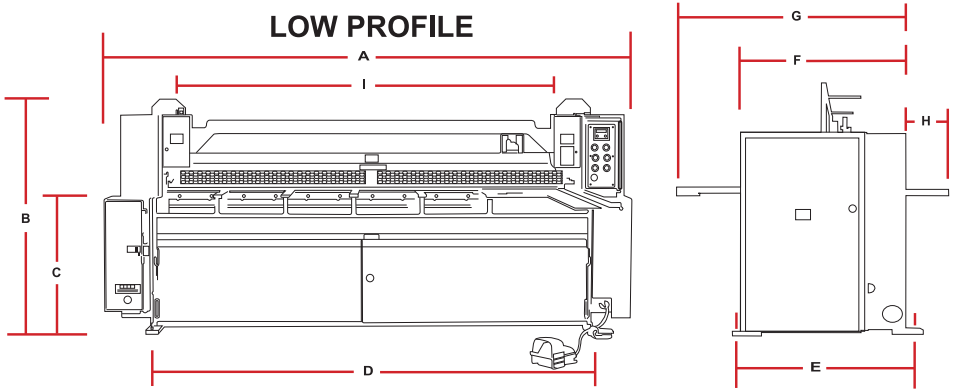
American Made Hydraulic
# SHEARS

# SHEAR SPECIFICATIONS

HIGH PROFILE




LOW PROFILE




**Please Note: ALL measurements and weights may vary from the figures given in this Specification Chart.**

All dimensions are in inches unless otherwise noted.
(To convert to centimeters multiply by 2.54)

Engineering data and dimensions are subject to change without notice due to continuing product development.

Foundation plans are available upon request.

10 GA, 3/16”, and 1/4", machines will be low profile, unless it is a gap type machine.

*Larger motor sizes are available. To convert from horsepower to KW, multiply by 0.746
**ESTIMATED WEIGHTS. The weight of your machine may vary from the estimated weight listed here. Weights may vary according to options included.

***1 x 12” has separate power unit.

| HP | AMPS | |
|---|---|---|
| | 208/230 | 460 |
| 5 | 14 | 7 |
| 10 | 28 | 14 |
| 15 | 39.6 | 19.3 |
| 20 | 52 | 26 |
| 25 | 68 | 34 |
| 30 | 80 | 40 |
| 40 | 104 | 52 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| A | Overall Length | D | Anchor Bolt Dimension/Length | G | Machine w/ Backgauge | J | Rake Angle per Rated Capacity |
| B | Overall Height | E | Anchor Bolt Dimension/Width | H | Squaring Arm Length (4’ Std.) | K | Strokes Per Minute |
| C | Table Height | F | End Plate Width | I | Knife Length | L | Number of Holddown Pins |

| MODEL | KNIVES | H.P. * | A | B | C | D | E | F | G | H | I | J | K | L | Wt.** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2'-125** | ½ x 2 | 10 | 48 | 55 | 32 | 33 | 36 | 30 | 74 | 30 | 28 | 1/4 | 35 | 6 | 3,400 |
| **4'-125** | 1x3 | 10 | 75 | 55 | 32 | 52 | 36 | 30 | 74 | 30 | 52 | 1/4 | 35 | 13 | 4,500 |
| **5'-125** | ½ x 2 | 10 | 85 | 55 | 32 | 64 | 36 | 30 | 74 | 30 | 62 | 1/4 | 35 | 11 | 4,800 |
| **6'-125** | 1x3 | 10 | 97 | 55 | 32 | 76 | 36 | 30 | 74 | 30 | 76 | 1/4 | 35 | 13 | 6,500 |
| **8'-125** | 1x3 | 10 | 121 | 55 | 32 | 100 | 36 | 30 | 74 | 30 | 100 | 1/4 | 32 | 15 | 6,800 |
| **10'-125** | 1x3 | 10 | 145 | 55 | 32 | 124 | 36 | 30 | 74 | 30 | 124 | 1/4 | 30 | 19 | 9,100 |
| **12'-125** | 1x3 | 10 | 169 | 60 | 32 | 148 | 36 | 30 | 74 | 30 | 148 | 1/4 | 26 | 21 | 14,000 |
| **14'-125** | 1x3 | 10 | 193 | 60 | 32 | 172 | 36 | 30 | 74 | 30 | 172 | 1/4 | 24 | 23 | 18,000 |
| **16'-125** | 1x3 | 10 | 217 | 60 | 32 | 196 | 36 | 30 | 74 | 30 | 196 | 1/4 | 22 | 25 | 20,000 |
| | | | | | | | | | | | | | | | |
| **2'-1875*** | ½ x 2 | 10 | 48 | 64 | 32 | 40 | 36 | 30 | 74 | 30 | 28 | 1/4 | 35 | 6 | 3,500 |
| **4'-1875** | 1x3 | 10 | 75 | 55 | 32 | 52 | 36 | 30 | 74 | 30 | 52 | 1/4 | 35 | 13 | 4,500 |
| **5'-1875** | ½ x 2 | 10 | 85 | 55 | 32 | 64 | 36 | 30 | 74 | 30 | 62 | 1/4 | 35 | 11 | 4,800 |
| **6'-1875** | 1x3 | 10 | 97 | 55 | 32 | 76 | 36 | 30 | 74 | 30 | 76 | 1/4 | 35 | 13 | 6,700 |
| **8'-1875** | 1x3 | 10 | 121 | 55 | 32 | 100 | 36 | 30 | 74 | 30 | 100 | 1/4 | 32 | 15 | 7,000 |
| **10'-1875** | 1x3 | 10 | 145 | 55 | 32 | 124 | 36 | 30 | 74 | 30 | 124 | 1/4 | 30 | 19 | 9,100 |
| **12'-1875** | 1x3 | 10 | 169 | 60 | 32 | 148 | 36 | 30 | 74 | 30 | 148 | 1/4 | 26 | 21 | 15,000 |
| **14'-1875** | 1x3 | 10 | 193 | 60 | 32 | 172 | 36 | 30 | 74 | 30 | 172 | 1/4 | 24 | 23 | 19,000 |
| **16'-1875** | 1x3 | 10 | 217 | 60 | 32 | 196 | 36 | 30 | 74 | 30 | 196 | 1/4 | 23 | 25 | 20,500 |
| | | | | | | | | | | | | | | | |
| **4'-250** | 1x4 | 15 | 84 | 61 | 32 | 55 | 50 ½ | 44 | 76 | 35 | 52 | 1/4 | 20 | 13 | 7,500 |
| **6'-250** | 1x4 | 15 | 108 | 61 | 32 | 79 | 50 ½ | 44 | 76 | 35 | 76 | 1/4 | 19 | 13 | 8,400 |
| **8'-250** | 1x4 | 15 | 132 | 61 | 32 | 103 | 50 ½ | 44 | 76 | 35 | 100 | 1/4 | 17 | 15 | 9,800 |
| **10'-250** | 1x4 | 15 | 156 | 61 | 32 | 127 | 50 ½ | 44 | 76 | 35 | 124 | 1/4 | 15 | 19 | 12,500 |
| **12'-250** | 1x4 | 15 | 180 | 61 | 32 | 151 | 50 ½ | 44 | 76 | 35 | 148 | 1/4 | 13 | 21 | 14,000 |
| **14'-250** | 1x4 | 15 | 204 | 61 | 32 | 175 | 50 ½ | 44 | 76 | 35 | 172 | 1/4 | 11 | 23 | 20,000 |
| **16'-250** | 1x4 | 15 | 228 | 61 | 32 | 199 | 50 ½ | 44 | 76 | 35 | 196 | 1/4 | 10 | 25 | 22,000 |
| | | | | | | | | | | | | | | | |
| **2'-375*** | ½ x 2 | 15 | 48 | 64 | 38 | 40 | 35 | 34 | 80 | 10 | 28 | 1/4 | 12 | 6 | 4,400 |
| **4'-375** | 1x4 | 20 | 75 ½ | 84 | 32 | 56 | 55 | 48 | 80 | 24 | 52 | 3/8 | 17 | 11 | 11,000 |
| **6'-375** | 1x4 | 20 | 99 ½ | 84 | 32 | 80 | 55 | 48 | 80 | 24 | 76 | 3/8 | 17 | 14 | 15,100 |
| **8'-375** | 1x4 | 20 | 123 ½ | 84 | 32 | 104 | 55 | 48 | 80 | 24 | 100 | 3/8 | 13 | 14 | 18,500 |
| **10'-375** | 1x4 | 20 | 147 ½ | 84 | 32 | 128 | 55 | 48 | 80 | 24 | 124 | 3/8 | 11 | 17 | 21,000 |
| **12'-375** | 1x4 | 20 | 171 ½ | 84 | 32 | 152 | 55 | 48 | 80 | 24 | 148 | 3/8 | 10 | 20 | 24,000 |
| **14'-375** | 1x4 | 20 | 195 ½ | 84 | 32 | 176 | 55 | 48 | 80 | 24 | 172 | 3/8 | 9 | 23 | 27,000 |
| | | | | | | | | | | | | | | | |
| **4'-500** | 1x4 | 20 | 75 ½ | 84 | 32 | 56 | 55 | 48 | 80 | 24 | 52 | 1/2 | 13 | 11 | 13,800 |
| **6'-500** | 1x4 | 20 | 99 ½ | 84 | 32 | 80 | 55 | 48 | 80 | 24 | 76 | 1/2 | 13 | 14 | 17,000 |
| **8'-500** | 1x4 | 20 | 123 ½ | 84 | 32 | 104 | 55 | 48 | 80 | 24 | 100 | 1/2 | 10 | 14 | 22,500 |
| **10'-500** | 1x4 | 20 | 147 ½ | 84 | 32 | 128 | 55 | 48 | 80 | 24 | 124 | 1/2 | 9 | 17 | 28,000 |
| **12'-500** | 1x4 | 20 | 171 ½ | 84 | 32 | 152 | 55 | 48 | 80 | 24 | 148 | 1/2 | 8 | 20 | 32,000 |
| | | | | | | | | | | | | | | | |
| **10'-625** | 1x4 | 30 | 147 ½ | 84 | 32 | 128 | 55 | 48 | 80 | 24 | 124 | 1/2 | 9 | 17 | 28,000 |
| **12'-625** | 1x4 | 30 | 171 ½ | 84 | 32 | 152 | 55 | 48 | 80 | 24 | 148 | 1/2 | 8 | 20 | 32,000 |
| | | | | | | | | | | | | | | | |
| **4'-750** | 1 1/8x5 | 40 | 77 | 97 | 32 | 56 | 55 | 48 | 80 | 32 | 52 | 5/8 | 11 | 11 | 15,700 |
| **6'-750** | 1 1/8x5 | 40 | 101 | 97 | 32 | 80 | 55 | 48 | 80 | 32 | 76 | 5/8 | 10 | 14 | 22,000 |
| **8'-750** | 1 1/8x5 | 40 | 125 | 97 | 32 | 104 | 55 | 48 | 80 | 32 | 100 | 5/8 | 8 | 14 | 27,000 |
| **10'-750** | 1 1/8x5 | 40 | 149 | 97 | 32 | 128 | 55 | 48 | 80 | 32 | 124 | 5/8 | 7 | 17 | 31,000 |
| **12'-750** | 1 1/8x5 | 40 | 173 | 97 | 32 | 152 | 55 | 48 | 80 | 32 | 148 | 5/8 | 6 | 20 | 35,000 |
| | | | | | | | | | | | | | | | |
| **1"-12"** | 1/4 | 20 | 48 | 64 | 38 | 128 | 55 | 36 | 80*** | 12 | 18 | 1/4 | 12 | 8 | TBA |

American Made Hydraulic SHEARS

# TECHNICAL SPECIFICATIONS

**Frame and Base:** Side frames are welded to the table base assembly as a closed end type, which is standard. With the gap end option, base of end housings have provisions to anchor machines to flat surface. The upper knife is manufactured with means of adjustment for obtaining and maintaining clearance adjustment between upper and lower knives. Mounting holes in the feet allow for firmattachmentto the floor and leveling of the machine.

**Table:** The table is constructed of fabricated steel, which is flat to ±0.005 inch per linear foot. The standard table is solid for the first 24 inches on the right side with support beams 16 inches on center for balance of machine.

***Options:***

1. Solid table top bolt on segments
2. Machined bed
3. Hand slots (optional where specified)
4. Ball transfers (available in any of the table top patterns - open, bolt on segments or machined solid table top)

**Ram:** The ram is guided through the shearing stroke by a bronze slide assembly and a steel assembly. The assemblies guide the ram on a vertical shearing plane with 2 angular degrees off the shearing plane of the stationary knife. The bronze slides have a large surface area to dissipate pressure per square inch. The PSI is low in comparison to machines that use swings or have many pins and little area to dissipate the pressure. Optional non-metalic slide assemblies are available to replace bronze.

**Hydraulic System:** The hydraulic system is designed for the capacity of the rated machine to JIC standards. The hydraulic system has safety overload protection. Hoses, tubes and fittings are rated at no less than 150% of the rated working pressure.

**Hydraulic Cylinder Drive:** There are two direct acting hydraulic cylinders for directing the ram. The hydraulic cylinder drive has double acting pistons and ball sockets for self-aligning joints.

**Hydraulic Hold down System:** On the 1/8" (10 GA), 3/16" and 1/4" machines the hydraulic self-compensating spring plunger bar assembly has plungers every 4 inches for the first 24 inches and plungers 8 inches on center for the remainder of the bar. On 3/8", 1/2", 5/8", 3/4", and 1" machines, the plungers are spread every 5 inches for the first 24 inches and plungers 8½ inches on center for the remainder of the bar. The hydraulic holddown system automatically secures the workpiece during ram down-stroke and releases on return stroke. Optional independent holddown control is available. Refer to chart for the number of plungers.

**Reservoir:** The reservoir features combination level and temperature gauges and a cleanable filter system capable of removing particles 10 microns in size.

**Shear Knife:** Our knives are made of a shock resistant grade of modified high carbon, high chrome with four edges. Harder grade of high carbon, high chrome is available.

**Controls:** Controls include:

1. Pull to start, push to stop.
2. Jog (inch)- Single stroke – run
   Optional: Continuous stroke
3. Single palm button for stroke
4. Backgauge controls:
   - forward/reverse
   - variable speed
5. Emergency up-switch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# American Made Hydraulic SHEARS



**Rake Angle and Rake Angle Adjustment:** Power rake angle adjustment is standard. Angle is maintained throughout cutting cycle, when rake angle is adjusted to require angle. Refer to chart.

Increased adjustable rake angle is standard on all machines to allow for cutting of harder and heavier material.

**Electrical System:** The electrical systems meets NFPA 79 standards. All machines have disconnect switches, magnetic starters, 110/120v controls, 208-230/460v 3 phase, others optional.

**Motors:** Motors are open drip with sealed and permanent lubricated bearings.

**Control Circuit Voltage:** Control voltage is 110/120v supplied by a transformer.

**Backgauge:** 36” power operated backgauge is standard. Controls are located on front of the machine. 5 Station NC “GO-TO” Positioner is standard.

**Front Support Arms (Optional):** Front support arms are available with or without scales.

**Squaring Gauge:** 4’ squaring arm on right-hand side with scale is standard. Left-hand squaring arm and longer gauges are optional.

**Angle Gauge (Optional):** Angle gauge marked in 1/2° increments.

**Light Beam Gauge (Standard):** Shearing gauge utilizes light beam shadow as the shearing line.

**Capacity:** Machines are based on 80,000 pounds tensile. Other options are available upon request.

**Shearing Accuracy:** The Betenbender Hydraulic Shears will meet or exceed shearing accuracy of material ranging up to the full width capacity of the machine to precision tolerances. The width of the sheared workpiece shall be within ±0.005 inch of the
backguage settings.

**Safety Features:** The Betenbender Hydraulic Shears are built to meet ANSI B11.4 standards. Some of the safety features of the Betenbender Shears are:

- Finger Guard for holddown w/ safety switch
- 110/120v control
- Guarded foot petal
- Warning signs, safety markings & covers
- Electronics meet NFPA 79 standards
- Central systems provide the operator with complete control to stop & reverse the ram by simply releasing the control
- For multiple operators, a separate control for each person, can be provided within reach of the machine
- Emergency up-switch on control panel

**Specifications are subject to change without notice.**

Compliance with OSHA requirements is the legal responsibility of the user and is subject to local inspectors’ interpretation of existing standards.

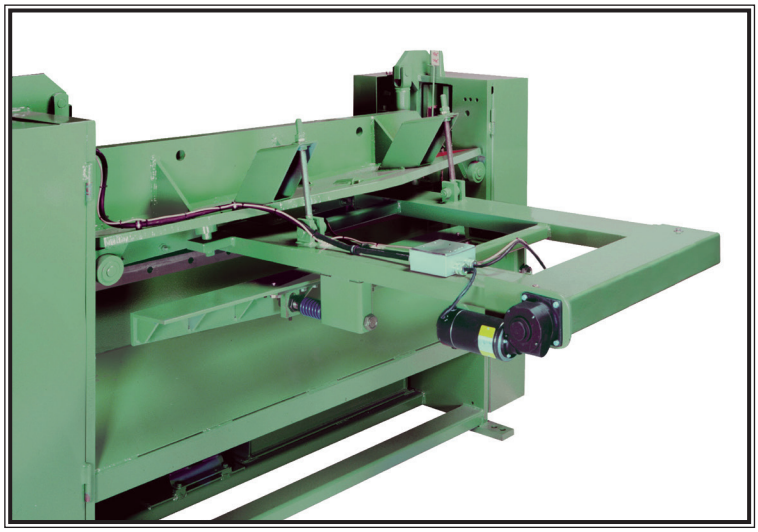
**Betenbender Shears are built to meet ANSI B11.4 standards**

| Convert Feet to Millimeters Multiply By 304.8 | |
|---|---|
| 2’ | 609.6 mm |
| 4’ | 1219.8 mm |
| 5’ | 1524.0 mm |
| 6’ | 1828.8 mm |
| 8’ | 2438.4 mm |
| 10’ | 3048.2 mm |
| 12’ | 3657.6 mm |
| 14’ | 4267.2 mm |

| Convert Inches to Millimeters Multiply By 25.4 | | |
|---|---|---|
| 1/8” | 0.125 | 3.18 mm |
| 3/16” | 0.188 | 4.77 mm |
| 1/4” | 0.250 | 6.35 mm |
| 3/8” | 0.375 | 9.53 mm |
| 1/2” | 0.500 | 12.7 mm |
| 5/8” | 0.625 | 15.88 mm |
| 3/4” | 0.750 | 19.05 mm |
| 1” | 1.000 | 25.4 mm |
| 1 ¼” | 1.250 | 31.75 mm |

American Made Hydraulic SHEARS

# BACKGAUGES FOR SHEARS



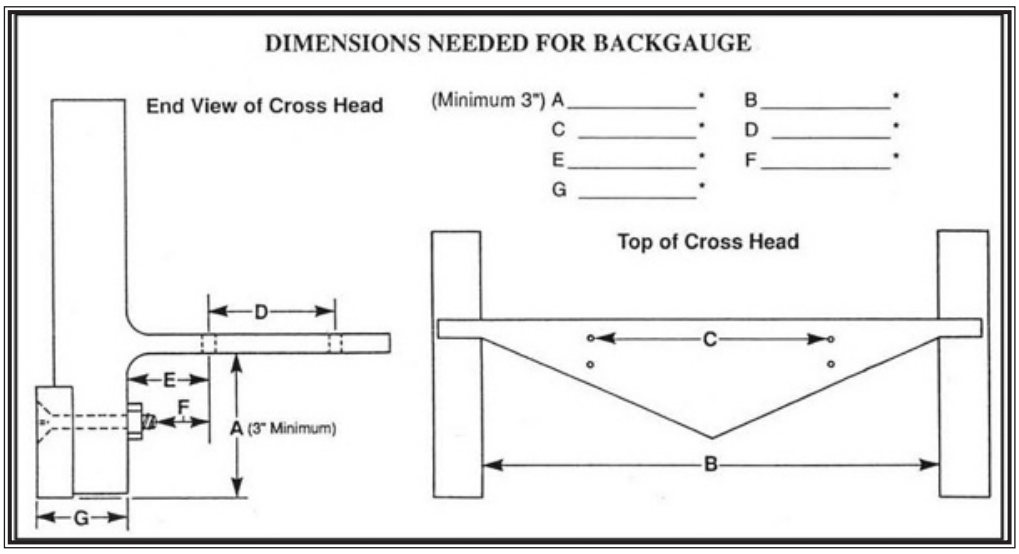
Backgauges available in
4' - 12' bar lengths.
Longer lengths...P.O.R.

Backgauges for machines
3/8" and larger... P.O.R.

**#92MB**
**Backgauge Package:**
Rear Operated Manual Backgauge, with Spring Loaded Backbar,
Mechanical Readout and Handwheel.

**#92FBEL-GT**
**Backgauge Package:**
Front Operated Electric, Front Operated Backgauge
with Single Axis 5-Station "GO-TO" Positioner and Spring Loaded Backbar
Controls located in NEMA 12 box.

**#92EVL-GT**
**Controller Package:** (For Existing Manual Operated Backguages)
Electric, Front Operated, Single Axis 5-Station "GO-TO"
Located in NEMA 12 box



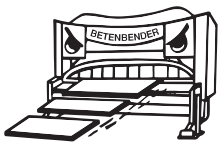


Betenbender Manufacturing, Inc. 5806 Quality Ridge Road / PO Box 140 / Coggon, Iowa 52218
**Office** 319-435-2378 / **Fax** 319-435-2262 / **Web** www.betenbender.com / **E-mail** sales@betenbender.com


# Serial Numbers & Oil Information

| Model No. | Serial No. |
|---|---|
| | |

**BETENBENDER MANUFACTURING, INC.**

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Coggon, IA 52218
319-435-2378
www.betenbender.com

HMI

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Hydraulic Oil.....Mobil DTE 25
Grease Points.....Lubriplate 930-AA

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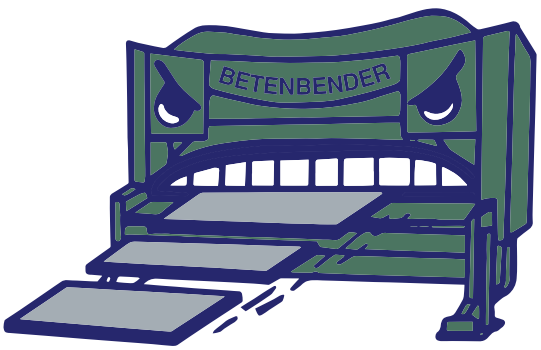


**All machines are made in the heartland of the USA in Coggon, Iowa**