CINCINNATI



HYDRAULIC SHEARS

VALUE

EXCELLENT ACCURACY
GREATER PRODUCTIVITY
UNMATCHED VERSATILITY
SOLID RELIABILITY
SUPERIOR SAFETY
PREFERENTIAL SERVICE

cincinnati hydraulic shears are designed for exceptional performance by every standard, and have proven that performance in hundreds of installations. Their versatility easily handles a wide variety of jobs. They increase productivity through fast, simple setup and easier operation. Superior accuracy provides higher quality blanks and minimizes scrap, while their rugged reliability withstands the toughest applications.



Model 250HS8 with optional Touchscreen Shear Control, squaring arm, frontgage support arms

Cincinnati Shears are designed to meet the construction requirements of ANSI B11.4. Safeguarding covers all moving parts and areas of potential hazards.



Deep, solid shear table resists horizontal deflections to maintain accurate cuts. The table is machined with dovetail slots for gage stops and hand slots for rapid material handling.

Maximum strength steel frame members provide a rigid base while interlocked construction improves reliability by eliminating load-bearing welds.

Hydraulic holddowns on 12" centers clamp material with tons of pressure to prevent slippage regardless of material thickness. Recessed guarding allows close positioning to knives. Close tolerance four-edge ground and hardened knives provide strength, accuracy and multiple edges for long life.

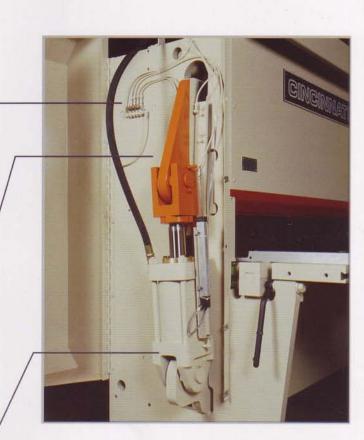
Adjustable knife clearance provides optimal edge quality in different materials, thicknesses and back piece depths.

AN INDUSTRY-LEADING, FIVE-YEAR PARTS WARRANTY.

An automatic system lubricates the front gibs every 200 strokes to ensure years of dependable service. A closed-circuit hydraulic system with dual linear potentiometers maintains the relative position of the two pistons to ensure proper rake angle throughout the stroke.

Unique two-degree inclined ram travel shears the edge perpendicular to the work surface.

Clevis-mounted cylinders with swivel bearings minimize wear to piston seals.





Manifold hydraulics with cartridge control valves and 0-ring seals reduce piping and maintenance.

Deep, rigid ram brace with precision knife straightener on 12" centers provides superior control of knife clearance without shims (250HS shown).

Twin precision lead screws mounted in heavy-duty steel weldment housings maintain precise backgage positioning.



Micrometer adjustment in .001" increments easily adjusts the gage parallel to the knives. Pull-back cylinders, standard on 250-750 models, avoid material binding between the lower knife and backgage.

Shock-absorbing springs protect backgage screws from material impact.

Automatic backlash compensation, steel guides, bronze slides and automatic lubrication ensure accuracy and long life.

Backgage drive shaft is located underneath the ram brace, preventing damage from lift trucks and crane hooks.

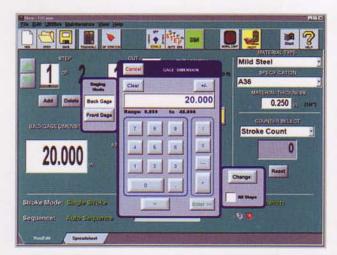


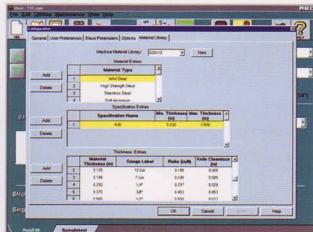
The standard Shear Control Center provides simple, easy-to-use controls for material thickness, cut length, footswitch, optional probes and backgage settings. The backgage readout is displayed in increments of 1/64" and numbered every 1/16."



The optional PC-based Touchscreen Shear Control (TSC) provides fast, repeatable setup of the machine and gages for productive shearing and accurate blanks. Repeat jobs can be saved on the hard drive, floppy drive or network storage location using the standard Ethernet communication port.

To produce quality blanks with minimal burr and distortion, preloaded rake and knife clearance parameters are stored in the Material Library. The operator selects material type and thickness to obtain the proper machine settings.



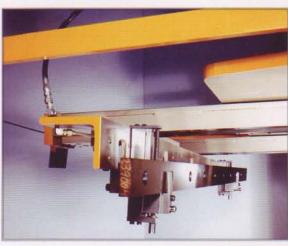




Your shear investment is protected by a comprehensive warranty and service program. Field-based, factory-trained service representatives provide assistance before, during and after installation. Located in major cities throughout the United States and Canada, Cincinnati representatives supervise the installation of new machines, provide startup assistance, demonstrate the equipment, and furnish instruction on operation, maintenance and safety.

Cincinnati Incorporated stocks a large inventory of parts for all Cincinnati shears. Operator and maintenance training programs to help develop the skills of your personnel are available at your facility or at Cincinnati Incorporated.





Each new Cincinnati shear complies with ANSI B11.4 and OSHA construction requirements. Knife and holddown guards, specifically designed for each model, allow a good view of the work area. A unique knife-change fixture is included with each machine for safe and efficient knife handling during rotation or changes.

- · Front-controlled power backgage
- · 60 ipm backgage speed
- 460/3/60 electricals
- . Dovetail and hand slots in shear table
- · Automatic lubrication to ram guides and backgage
- · Manifold hydraulics with cartridge valves
- · Hydraulic oil
- · Stroke counter
- · Electronic adjustable cut length
- · Short stroke on left end
- · Hardened piston rods
- · Hydraulic holddowns
- · Dual holddowns on left end
- Guarded footswitch
- · Precision knife straightener
- · Knife change fixture
- OSHA and ANSI B11.4 compliance for construction
- · Five-year parts warranty, one-year control and labor
- · Operator, maintenance, safety manuals
- Adjustable knife clearance (250-750HS)
- Electronic adjustable rake (250-750HS)
- Hydraulic pullback of backgage (250-750HS)
- Dual holddowns on both ends (375-750HS)
- · Power swing-up backgage (375-750HS)
- Ball transfers in shear table (500-750HS)
- Air cooled heat exchanger (250-750HS) except 250HS 6', 8' & 14'
- · Paint color Tech beige
- · English/Spanish control display
- · Squaring arm
- · Hardened insert in squaring arm
- · Frontgage support arm
- Light beam shearing gage and area lights
- Additional footswitch
- · Decimal backgage readout in place of fractional
- · 208, 230, 575 voltage
- TEFC motors
- Power knife clearance adjustment (250-750HS)
- · Touchscreen Shear Control (TSC)
 - Pendent mounted in place of pedestal mounted
 - Ethernet convenience outlet
 - · Programmable knife clearance adjustment
- . Multi-Axis Gaging with TSC (MATSC)
- Probes in backgage angle (135-375HS)
- Increased backgage range (250HS)
- · Increased backgage speed
- · Hinged backgage angle (250HS)
- Pneumatic sheet supports (135-375HS) except 375HS14
- · Holddown cups
- · Cushion clamp holddown system
- · Ball transfers in shear table (250-375HS)
- Individual air chambers for ball transfers (375-750HS)
- · Power front feed rolls (500-750HS)
- · Heater for oil reservoir
- · Special paint color
- Special language legend plates



Power swing-up backgage



Power front feed rolls



Pneumatic sheet supports



Multi-Axis gaging

Cincinnati offers a choice of conveyor/separator/stacker and machine options to dramatically speed material handling and free the operator for more productive shearing. A sheet or plate conveyor improves blank accuracy, safely guides blanks from under the shear, and removes finished blanks for stacking. Cincinnati conveyors can be installed on both new and existing Cincinnati shears.

Conveyor includes standard features such as steel belts, material support rollers and shielding between belts for smooth material flow.

Scrap Separator includes air actuated scrap door and 12" deep bin on casters for quick side removal.

Stacker includes heavy tubular frame, pneumatic side tamper, swing out backstops, front stops.

Optional Roller Conveyors.



CONVEYOR/SEPARATOR/STACKER

STANDARD FEATURES

Model 2CV and 4CV Conveyor

- Two 7-1/2" wide belts on left end with remaining 3-1/4" wide belts
- 1-1/2 HP TEFC motor
- 460/3/60 electrics
- · Shielding between belts
- · Start/Stop "pushbutton" operator station
- · Air filter, regulator and lubricator
- 18" convex mirror for hydraulic shears
- · Material support rollers
- · Paint color: Yellow

Separator

- · Air-actuated scrap door
- · Scrap bin with casters
- · Control selector: "normal/open"
- Portable magnetic base "pushbutton" operator station

Stacker

- . Heavy tubular frame with casters
- . Heavy-duty adjustable front stops
- · Heavy-duty swing-up adjustable back stops
- Automatic side tamper with manual left/right adjustment, (two on 4CV)
- Pneumatic backstop lift (4CV)
- . Drop leaf tamper (4CV)

OPTIONS

Model 2CV and 4CV Conveyor

- · Additional belt configurations
- . Material supports for 48" range backgage
- . Neoprene pads bonded to steel belts
- · Bar-type sheet supports
- · Roller conveyors
- Conveyor stop button mounted in magnetic operator station in front of shear
- · Parts counter
- · Footswitch control for material supports
- Pedestal mounted controls in front of machine
- · Special paint color
- Special language legend plates
- 208, 230, 575 voltage

Separator

- · Phenolic cover bonded to scrap door
- · Footswitch control for scrap door
- · Scrap door open indicator light

Stacker

· Increased stack height

Model 6CV conveyor for 750HS is available upon request



Bar-type sheet supports

| -/ | / | (i) / | / | / | / | HOLD | 1 | DISTANCE UNDER | GAG | E RANGI | | STROKES PER MINUTE | | // |
|---------------|-------------|------------|-----------|------------|--------|--------|-------------|----------------|------|---------|--------|-----------------------|------|-------------|
| MACHINE MODE. | MUD STELLO. | CUTING IC. | MON- WOTH | FORCE MATT | Wille. | HOLDOS | NAMO CONTRO | FROM (2) | BACK | Way. | (b):/W | MITE STE HOUSE | More | APPROX SHIP |
| 135HS x 6 | 10 GAUGE | 74-3/4" | 1/4" | 3.5 | 8 | 1/2" | 1/4" | 48-1/2" | 36" | 85 | 60 | 1 x 3 x 78 | 15 | 9,200 |
| 135HS x 10 | 10 GAUGE | 122-3/4" | 1/4" | 5.3 | 12 | 1/2" | 1/4" | 48-1/2" | 36" | 70 | 38 | 1 x 3 x 126 | 15 | 11,600 |
| 250HS x 6 | 1/4" | 74-3/4" | 3/8" | 5.7 | 8 | 1/2" | 1/2" | 55" | 36" | 65 | 32 | 1 x 3 x 78 | 15 | 14,600 |
| 250HS x 8 | 1/4" | 98-3/4" | 3/8" | 7.1 | 10 | 1/2" | 1/2" | 55" | 36" | 63 | 26 | 1 x 3 x 102 | 15 | 15,600 |
| 250HS x 10 | 1/4" | 122-3/4" | 3/8" | 8.5 | 12 | 1/2" | 1/2" | 55" | 36" | 70 | 32 | 1 x 3 x 126 | 25 | 16,600 |
| 250HS x 12 | 1/4" | 146-3/4" | 3/8" | 9.9 | 14 | 1/2" | 1/2" | 58-1/2" | 36" | 65 | 28 | 1 x 3 x 150 | 25 | 17,600 |
| 250HS x 14 | 1/4" | 170-3/4" | 3/8" | 11.3 | 16 | 1/2" | 1/2" | 63-1/2" | 36" | 52 | 16 | 1 x 3 x 174 | 15 | 18,600 |
| 375HS x 10 | 3/8" | 122-3/4" | 7/16" | 14.9 | 13 | 5/8" | 5/8" | 58-1/2" | 48" | 60 | 18 | 1 x 3 x 126 | 25 | 19,100 |
| 375HS x 12 | 3/8" | 146-3/4" | 7/16" | 17.2 | 15 | 5/8" | 5/8" | 63-1/2" | 48" | 56 | 16 | 1 x 3 x 150 | 25 | 20,600 |
| 375HS x 14 | 3/8" | 170-3/4" | 7/16" | 19.5 | 17 | 5/8" | 5/8" | 61-15/16" | 48" | 41 | 7 | 1 x 4 x 172 | 25 | 31,600 |
| 500HS x 10 | 1/2" | 122-3/4" | 1/2" | 20.6 | 13 | 1" | 1" | 53-15/16" | 48" | 53 | 19 | 1 x 4 x 124 | 40 | 25,600 |
| 500HS x 12 | 1/2" | 146-3/4" | 1/2" | 23.8 | 15 | 1" | 1" | 58-15/16" | 48" | 50 | 17 | 1 x 4 x 148 | 40 | 28,600 |
| 750HS x 10 | 3/4" | 122-1/2" | 3/4" | 32.3 | 13 | 1-1/2" | 1-1/2" | 54" | 48" | 45 | 10 | 1-1/8 x 5 x 124 | 40 | 35,600 |
| 750HS x 12 | 3/4" | 146-1/2" | 3/4" | 37.3 | 15 | 1-1/2" | 1-1/2" | 59" | 48" | 43 | 8 | 1-1/8 x 5 x 148 | 40 | 39,600 |

| 1 | | /mm | | / | / | HOLD | | DISTANCE NDER (MM) | | E RANGE (MM) | 1 | STROKES PER MINUTE | | / |
|---------------|-----|-------------------|----------------|---------|-------|--------|-------|-----------------------|------|-----------------|---------|-----------------------|-------|----------|
| Macante Model | Muo | CUTING CHORETT MA | MAX. CARETH MA | FORCE L | NUMBE | HOLONG | SUMAN | Rour | BACK | Max | (b): MM | MINTE STEMM | MOTOR | APPROX C |
| 135HS x 6 | 3 | 1895 | 1 12' | 30 | 8 | 13 | 6 | 1230 | 915 | 85 | 60 | 25 x 76 x 1981 | 11.2 | 4180 |
| 135HS x 10 | 3 | 3115 | 1 12' | 45 | 12 | 13 | 6 | 1230 | 915 | 70 | 38 | 25 x 76 x 3200 | 11.2 | 5275 |
| 250HS x 6 | 6 | 1895 | 1 47' | 50 | 8 | 13 | 13 | 1395 | 915 | 65 | 32 | 25 x 76 x 1981 | 11.2 | 6640 |
| 250HS x 8 | 6 | 2505 | 1 47' | 65 | 10 | 13 | 13 | 1395 | 915 | 63 | 26 | 25 x 76 x 2590 | 11.2 | 7090 |
| 250HS x 10 | 6 | 3115 | 1 47' | 75 | 12 | 13 | 13 | 1395 | 915 | 70 | 32 | 25 x 76 x 3200 | 14.9 | 7550 |
| 250HS x 12 | 6 | 3725 | 1 47' | 90 | 14 | 13 | 13 | 1485 | 915 | 65 | 28 | 25 x 76 x 3810 | 14.9 | 8000 |
| 250HS x 14 | 6 | 4335 | 1 47' | 100 | 16 | 13 | 13 | 1610 | 915 | 52 | 16 | 25 x 76 x 4419 | 11.2 | 8455 |
| 375HS x 10 | 9 | 3115 | 2 5' | 135 | 13 | 16 | 16 | 1485 | 1220 | 60 | 18 | 25 x 76 x 3200 | 14.9 | 8680 |
| 375HS x 12 | 9 | 3725 | 25' | 155 | 15 | 16 | 16 | 1610 | 1220 | 56 | 16 | 25 x 76 x 3810 | 14.9 | 9365 |
| 375HS x 14 | 9 | 4335 | 2 5' | 175 | 17 | 16 | 16 | 1570 | 1220 | 41 | 7 | 25 x 101 x 4368 | 14.9 | 14365 |
| 500HS x 10 | 12 | 3115 | 2 23' | 185 | 13 | 25 | 25 | 1370 | 1220 | 53 | 19 | 25 x 101 x 3149 | 29.8 | 11640 |
| 500HS x 12 | 12 | 3725 | 2 23' | 210 | 15 | 25 | 25 | 1495 | 1220 | 50 | 17 | 25 x 101 x 3759 | 29.8 | 13000 |
| 750HS x 10 | 19 | 3110 | 3 35' | 285 | 13 | 38 | 38 | 1370 | 1220 | 45 | 10 | 28 x 127 x 3149 | 29.8 | 16180 |
| 750HS x 12 | 19 | 3720 | 3 35' | 330 | 15 | 38 | 38 | 1495 | 1220 | 43 | 8 | 28 x 127 x 3759 | 29.8 | 18000 |

⁽¹⁾ Refer to CINCINNATI Shear Capacity chart for equivalent capacity thickness based on specific grade of ASTM steels.

Due to a continuing product development program, engineering data and dimensions are subject to change without notice. Certified foundation plans will be furnished for each installation.

⁽²⁾ Front gage range based on use of optional front support arms.

⁽³⁾ Speed is reduced to 5/6 when machine is equipped for 50 cycle service.

⁽⁴⁾ Maximum strokes per minute based on 12" (300 mm) cut length with minimum rake angle.

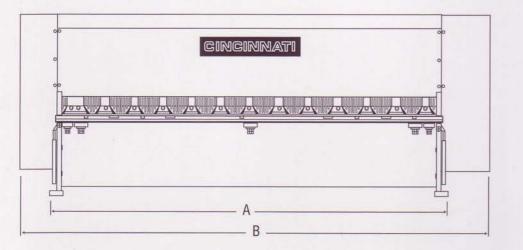
⁽⁵⁾ Minimum strokes per minute based on full length cut with maximum rake angle.

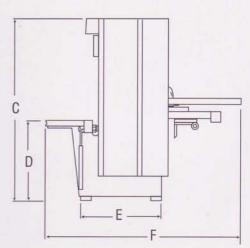
ENGLISH DIMENSIONS

| MODEL | A | В | C | D | E | F |
|------------|----------|----------|----------|-----|----------|----------|
| 135HS x 6 | 85-1/4" | 123-1/2" | 71" | 32" | 30-1/4" | 78-3/4" |
| 135HS x 10 | 133-1/4" | 171-1/2" | 71" | 32" | 30-1/4" | 78-3/4" |
| 250HS x 6 | 89" | 124" | 73" | 32" | 33-3/8" | 86-3/8" |
| 250HS x 8 | 113" | 148" | 73" | 32" | 33-3/8" | 86-3/8" |
| 250HS x 10 | 137" | 172" | 73" | 32" | 33-3/8" | 86-3/8" |
| 250HS x 12 | 161" | 196" | 73" | 32" | 33-3/8" | 89-7/8" |
| 250HS x 14 | 185" | 220" | 75" | 34" | 37-1/8" | 94-7/8" |
| 375HS x 10 | 139" | 173-1/2" | 92-5/16" | 32" | 37-1/8" | 100-3/4 |
| 375HS x 12 | 163" | 197-1/2" | 92-5/16" | 32" | 37-1/8" | 105-3/4" |
| 375HS x 14 | 187" | 222" | 99-5/8" | 36" | 38-1/2" | 108-1/2" |
| 500HS x 10 | 139" | 174" | 99-5/8" | 36" | 38-1/2" | 101-1/2" |
| 500HS x 12 | 163" | 198" | 99-5/8" | 36" | 38-1/2" | 106-1/2 |
| 750HS x 10 | 140" | 176-1/2" | 104-7/8" | 38" | 46-7/16" | 102-7/8 |
| 750HS x 12 | 164" | 200-1/2" | 104-7/8" | 38" | 46-7/16" | 107-7/8 |

METRIC DIMENSIONS

| MODEL | A | В | C | D | E | F |
|------------|------|------|------|-----|------|------|
| 135HS x 6 | 2170 | 3135 | 1810 | 820 | 770 | 2000 |
| 135HS x 10 | 3390 | 4355 | 1810 | 820 | 770 | 2000 |
| 250HS x 6 | 2270 | 3150 | 1860 | 820 | 770 | 2200 |
| 250HS x 8 | 2880 | 3760 | 1860 | 820 | 850 | 2200 |
| 250HS x 10 | 3480 | 4370 | 1860 | 820 | 850 | 2200 |
| 250HS x 12 | 4090 | 4980 | 1860 | 820 | 850 | 2290 |
| 250HS x 14 | 4700 | 5590 | 1910 | 870 | 850 | 2410 |
| 375HS x 10 | 3540 | 4405 | 2345 | 820 | 950 | 2560 |
| 375HS x 12 | 4150 | 5015 | 2345 | 820 | 970 | 2690 |
| 375HS x 14 | 4750 | 5640 | 2530 | 920 | 970 | 2760 |
| 500HS x 10 | 3540 | 4420 | 2530 | 920 | 980 | 2580 |
| 500HS x 12 | 4150 | 5030 | 2530 | 920 | 980 | 2710 |
| 750HS x 10 | 3560 | 4485 | 2670 | 970 | 1180 | 2620 |
| 750HS x 12 | 4170 | 5095 | 2670 | 970 | 1180 | 2740 |





CINCINNATI INCORPORATED HEADQUARTERS INCLUDES MANUFACTURING FACILITIES, OFFICES AND A TECHNICAL CENTER.



A technologically advanced manufacturer of metalworking machinery, Cincinnati Incorporated places its reputation for quality and productivity behind every product.

Cincinnati Incorporated maintains a modern industrial facility where product development, manufacturing, sales and support functions combine to assure complete customer service and satisfaction.

An experienced, competent staff of engineers conducts research and development in new areas of metalworking technology, as well as ongoing improvement programs for current products. CAD/CAM machine design contributes to low-cost customization and shorter deliveries.

Customers may visit the Customer Productivity Center to watch parts being cut and discuss unique applications with Product Specialists to verify production efficiency and savings. Like all CINCINNATI products, the HS Shear offers exceptional value. To learn more, call your CINCINNATI representative or phone us direct.



The Customer Productivity Center demonstrates today's latest shearing, forming, stamping and laser-cutting technologies.