

Overdriven Hydraulic Heavy Duty Shears





Your Partner in Accurate Fabrication Shearing



The hydraulic system uses a motor with 2 hydraulic pumps and a multifunction manifold block for the control of the machine, easy accessible located at the front of the machine under the cutting table.

We use flexible hoses to connect the cylinders, holddowns, pump and manifold.

Two high pressure relief valves protect the holddowns and the cutting pressure from overloading. The HDS has an oversized hydraulic fluid tank for trouble-free high production shearing.

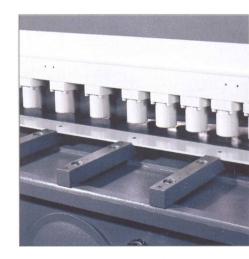
The ram parallel is controlled by and based on the so- called differential theory. We guide the ram with heavy-duty roller bearings on hardened plates.



HYDRAULIC HOLDDOWNS

The hydraulic holddowns work independently, which makes it possible to clamp plates of different lengths and thickness correctly. The holddowns also operate independently from the shearing pressure. We use a separate pump and pressure valve to control the holddown pressure. The holddowns are placed closer on each side of the machine to make it easier to cut small plates

Picture shown of HDSX with optional hydraulic blade gap adjustment with optional hydraulic.



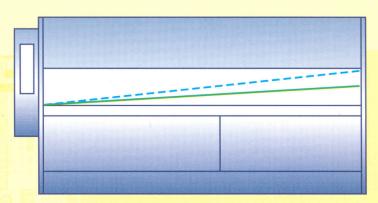












RAKE ANGLE ADJUSTMENT

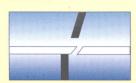
The rake angle of the top blade can be electro-hydraulic adjusted by two push buttons on the control panel. A digital LED readout shows the position of the rake angle on the HDS model. The optional SC70 control will set the rake angle automatically in function of the programmed thickness and material. The rake angle setting allows cutting thin material at a smaller rake to decrease sheet curling and makes cutting thicker material easier. Cutting stainless steel requires a larger rake angle.



Too small



Correct



Too big

BLADE GAP ADJUSTMENT

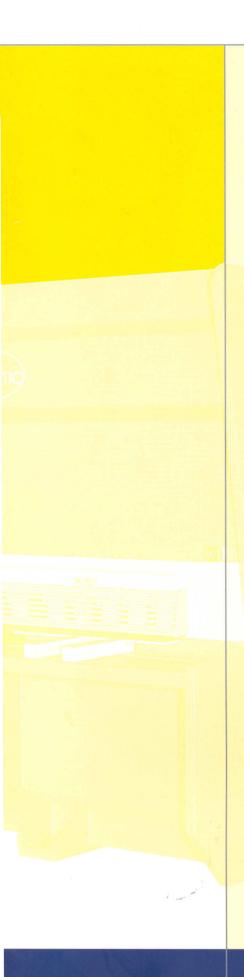
The blade clearance between the blades can be set manually by moving 2 easy accessible levers (one on each side) at the at the rear of the machine. The optional SC70 CNC control on the HDSX model sets the clearance automatically with 2 hydraulic cylinders. The control calculates the required clearance from the entered thickness and material.





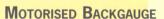
- Hydraulic system, located in the front of the machine, under the cutting table. Complete open back side for easy removal of material or to connect sheet support, stacking or conveying systems to the machine.
- 2 top driven hydraulic cylinders. Electro-hydraulic rake angle setting by pushbuttons on the control panel.
- Quick blade clearance setting by 2 easy accessible levers at the rear of the machine.
- Tilting plate holddowns with separate pressure system to clamp various sheet thicknesses correctly
- Hydraulic and electric overload protection.
- HC/HC blades with 4 cutting edges, std on 1/4" models
- High shock resistant premium quality blades with 4 cutting edges on all other models.

- Motorised "Go-To" backgauge (SP8) with digital readout
- Shear table with a number of square iron table blocks, easying the sheet feed-in and drastically increasing operator's safety.
- Squaring arm with scale, T-slot and tilting stop, attached to the left side of the machine.
- Electro-hydraulic controls, operated from the control panel. All operations are in the immediate reach of the operator.
- Pendant control panel on HDS(X) 12x1/2, 10x5/8 and 12x5/8.
- Movable footpedal control with long cord.
- Instructions and maintenance manual.
- Filled oiltank.
- Shadow line lighting



BACKGAUGES

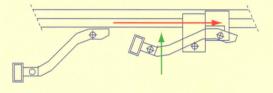
The backgauge consists of 2 rigid arms (containing guidings and control spindle) and the parallel adjustable backgauge bar. This assembly assures a precise positioning of the sheet. Swing-up and swing-away types enable cutting of sheets longer than the standard stroke length of the backgauge. The standard programmable "Go-To" backgauge has a SP8 control with LED readout. We also offer the SC70 multi-functional CNC control. A digital readout shows the selected and actual position of the backgauge.



Power backgauge stroke 39"
This back gauge comes standard on 1/4" and 3/8" models. Lateral movement front to back.



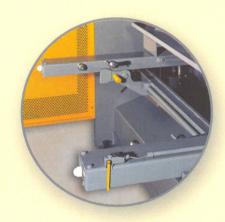
Power backgauge stroke 32". Available as option on 10'x1/4" models When the back gauge approaches the end of the stroke to the back, it will mechanically lift up to cut longer sheets. A 39" stroke is available as an option.

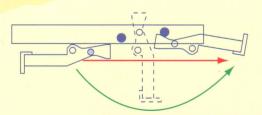


SWING-AWAY BACKGAUGE

Power backgauge stroke 39". This system comes standard on all 1/2" and 5/8" models. Available as an option on 12' x 1/4" and 3/8" models.

To activate the swing-away motion, the operator pulls a shaft out in each carrier and runs the back gauge to the back. The back gauge bar will swing completely out of the way, making it very easy to cut longer sheets.





OPTIONAL EQUIPMENT

SC 70 CONTROL

HDS executed with the optional SC70 control is called HDSX.

Basic features of the SC70 control:

- LCD screen with 16 lines of 26 characters.
- Memory capacity:
 Max 200 programs with max. 400 steps
 Max 127 steps per program.
 Material list of max. 32 materials
- Each program contains the basic cutting parameters such as material type, material thickness, blade gap and cutting angle setting
- Electro-hydraulic blade gap setting by 2 cylinders.
- Stroke control adjustment.
- Automatic programmable retraction of the back gauge.

- Possibility of jog mode on backgauge.
- Backlash compensation, delayed sheet release.
- Mode selection Inch-Metric.
- (preset) Counter with 0-step.

Programming modes:

• Automatic:

By entering the sheet thickness for mild steel, the control automatically sets the blade gap and the cutting angle as a function of the sheet thickness. All

parameters can be manually modified according to the actual data.

Manual

All cutting parameters such as material type, sheet thickness, cutting angle and blade gap are programmed manually.

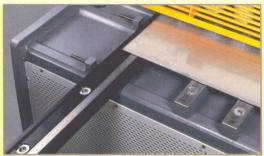




PROTRACTOR for angle shearing.



SQUARING ARMS AND FRONT SUPPORT ARMS with or without scale, T-slots and tilting stop. Lengths from 40" up to 120"



BALL TRANSFERS mounted in the iron table blocks, for easy feed-in of the sheets.

A specific feature of the HDS/HDSX range is the complete free rear space between the frames, so the machine can be executed with different sheet, conveying and stacking systems to improve production time.

PNEUMATIC SHEET HOLD-UP SYSTEM for sheet thickness up to 10 ga assuring the perfect gauging while entering the sheet into the machine.

During the cutting action and when not in use, the support arms rest under a cover, thus avoiding damage to the arms while cutting heavier material.

Pneumatic sheet support system, scrap chute and scrap container, counter rolls, alignment cylinders and stacker with automatic adjustable arms.

The pneumatic sheet support arms hold the thin sheets for perfect gauging. A trim cut can be made and removed when starting a series of cuts with a new sheet. The conveyor transports the plate to the stacker.

A counter roll prevents scratching of the previously stacked sheets. The stacker arms lower automatically during stacking action.







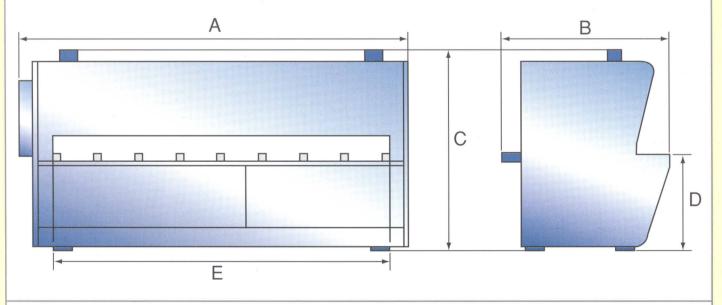


HEAVY DUTY CONVEYOR and sheet support system

TECHNICAL DATA HDS-HDSX

	10'x1/4"	12'x1/4"	10'x3/8"	12'x3/8"	10'x1/2"	12'x1/2"	10'x5/8"	12'x5/8"
Capacity mild steel	1/4"	1/4"	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"
Capacity stainless steel	3/16"	3/16"	9/32"	9/32"	3/8"	3/8"	1/2"	1/2"
Cutting length E	120"	146"	120"	159"	120"	159"	120"	159"
Angle adjustment (°)	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3	1 - 3
Number of plate hold-downs	18	21	18	23	18	23	18	23
Number of strokes / min.	11-25	11-20	10-23	8-15	9-18	7-11	8-15	6-13
Length squaring arm	40"	40"	40"	40"	40"	40"	40"	40"
Stroke backgauge								
- version MOT	39"	39"	39"	39"		-	1 - I	
- version SUB	32"	32"	<u> </u>	_	- 1-111	-		_ `
- version SAB			39"	39"	39"	39"	39"	39"
Working height D	30"	32"	37"	40"	37"	40"	39"	39"
Motor (Hp)	15	20	25	25	30	30	40	40
Length A	150"	180"	159"	196"	159"	.196"	158"	191"
Width B	69"	82"	85"	85"	86"	86"	88"	88"
Height C	67"	83"	87"	89"	89"	94"	98"	102"
Approx weight (Lbs)	13,200	22,000 16,500	18,900	24,000	20,500	26,000	33,000	39,600

specifications are subject to change without prior notice. Capacities are based on 80.000 tensile strength mild steel.



EXPRESSED WARRANTY

All HACO-Atlantic machine tools are warranted to be free from defects for a period of one full year from date of installation by our serviceman. This includes all parts and labor except shear blades. Warranty will be considered void if the machine is not used in a normal and proper manner, not properly maintained, or modified for any special use.

No other warranty is either expressed or implied by HACO-Atlantic, Inc. or any of its representatives.

SAFETY - All HACO-Atlantic machine tools are built conformable to American Standard Institute B 11.4 1983 Safety Standards for hydraulic power shear. However, due to the multipurpose use of some of the equipment the purchaser shall be responsible for the proper installation and continued use of point of operation guards or awareness between or assure complete operator safety



HACO - ATLANTIC, Inc.

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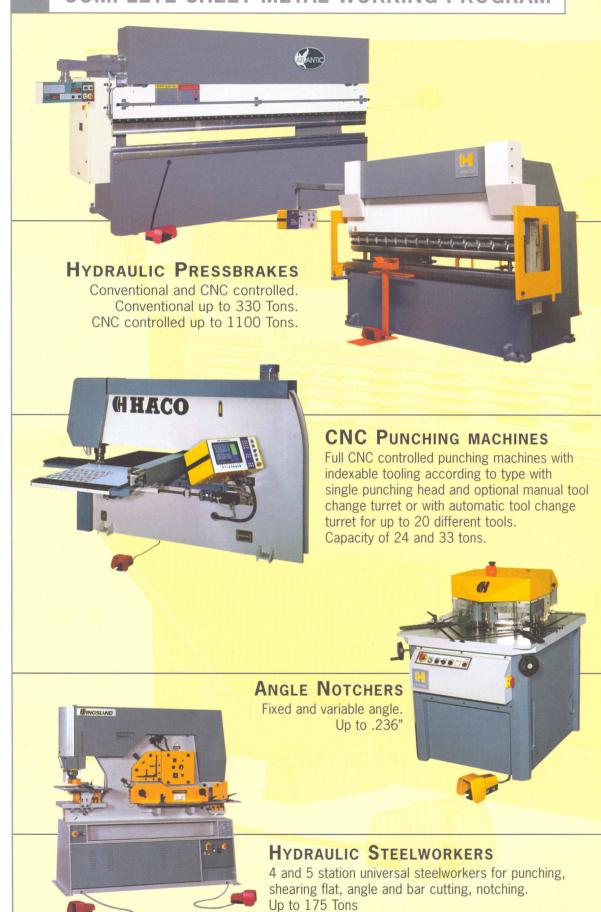
Fabricating Machinery, Inc. 6315 Toronto St. Dallas, TX, 75212 (214) 688-0472 sales@fabmachine.com

Safety features and fences as shown are standard for countries within the EC requiring the CE safety specifications. These are available as option for other countries.

The manufacterer reserves the right to change any specifications without prior notice and reserves the right to correct any clerical and typographical errors.

F.HDS/2003/03

COMPLETE SHEET METAL WORKING PROGRAM



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