



Presses & Automation  
*SINCE 1975*



Clinching press  
GEN E



# Azimuth Clinching press

## GEN E Servo Clinching Press



### STEP 1 : CLAMP

The stripper clamps the sheet metal parts to be joined.

### STEP 2 : DRAW

The punch draws the sheet metal into the die and the metals expand when they hit the die anvil.

### STEP 3 : LOCK

The metals, unable to continue their downward expansion, are compressed against the anvil and are forced to expand laterally, forming an interlock below the bottom sheet. The die blades expand, allowing this interlock to occur.



### Standard features

- Servo motorized – Fully electrical
- 5 years warranty – Best in Industry
- Up to 350SPM - Fastest in Industry
- Manual oiling system
- 120VAC-1PH
- Several frame sizes available
- Fix guarding system

### Optional features

- Stainless steel tooling
- Counter & timer for automatic mode
- Automatic Oiling system





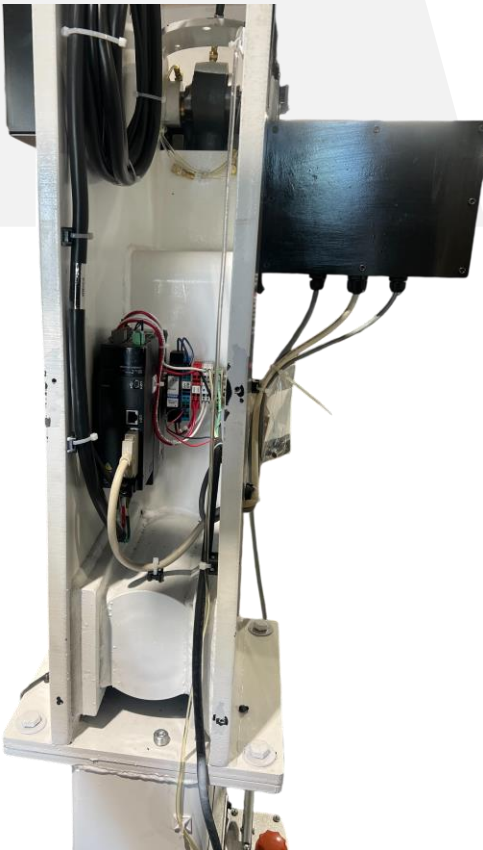
# Azimuth Clinching press

## GEN E Servo Clinching Press

Introducing our new, streamlined operator interface!

Designed with simplicity in mind, it makes switching between Full Stroke Mode and Pendulum Safety Mode effortless.

In Pendulum Safety Mode, the machine operates within 1/4" from the bottom, ensuring enhanced safety.



Additionally, the Manual Mode feature allows for easy jogging of the machine both forward and reverse, simplifying maintenance tasks. Enjoy greater control and ease of use with our latest upgrade.

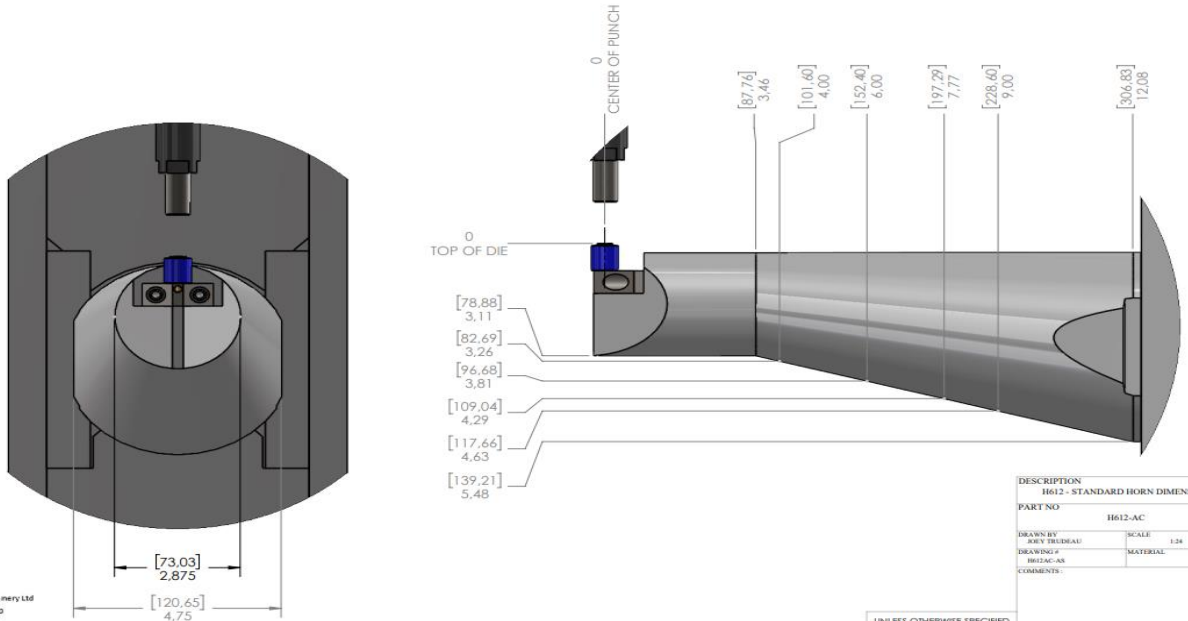
Our built-in controller allows a more compact machine





# Azimuth Clinching press

## H412/H612 standard arm & narrow arm



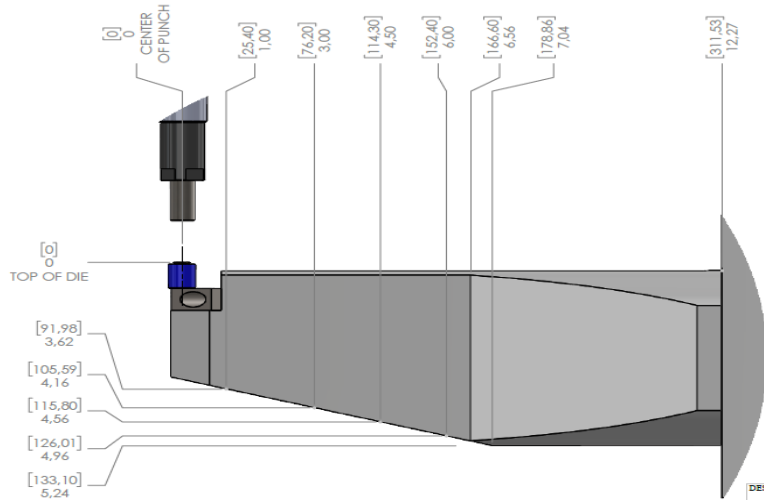
DESCRIPTION	
H612 - STANDARD HORN DIMENSION	
PART NO	H612-AC
DRAWN BY	ARY TREBDAJ
SCALE	1:24
DRAWING #	
MATERIAL	
COMMENTS	

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 FRACTIONAL ±1/64  
 TWO PLACE DECIMAL ±.01  
 THREE PLACE DECIMAL ±.005

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Z:\1. Ingénierie\2. Dessins\ENGINEERING DRAWING\1. PRESSE\DESIGN DE PRESSE\1



DESCRIPTION	
H612 - NARROW HORN DIMENSION	
PART NO	H612N-AC
DRAWN BY	ARY TREBDAJ
SCALE	1:24
DRAWING #	
MATERIAL	
COMMENTS	

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 FRACTIONAL ±1/64  
 TWO PLACE DECIMAL ±.01  
 THREE PLACE DECIMAL ±.005

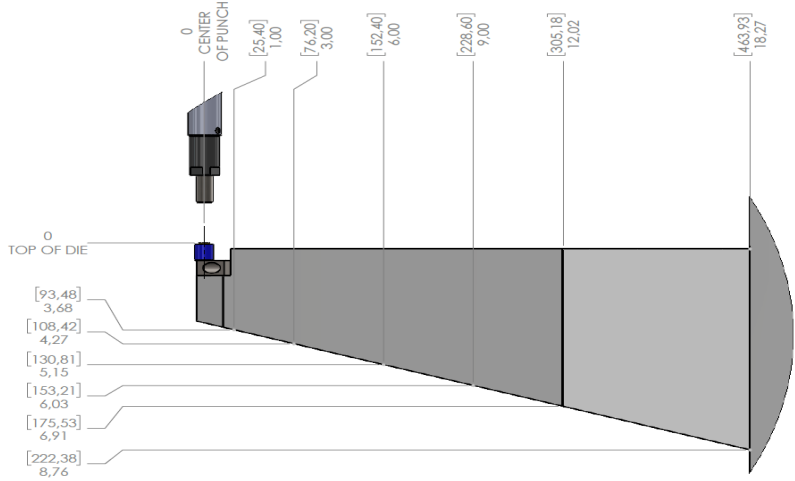
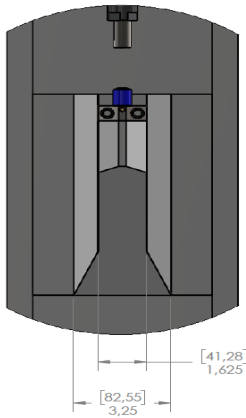
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# Azimuth Clinching press

## H618 & H624 narrow arm

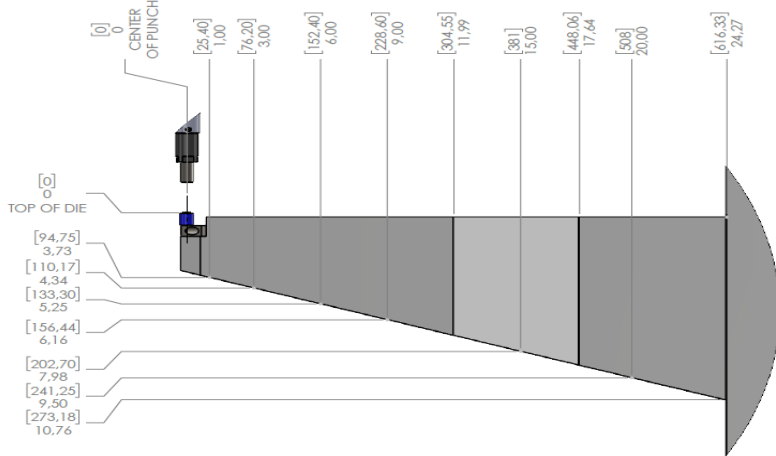
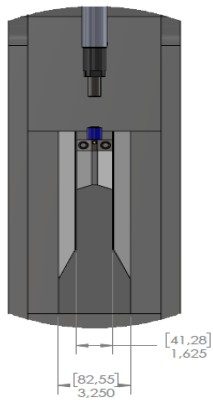


DESCRIPTION	
H618 - HORN DIMENSION	
PART NO	H618-AC
DRAWN BY	JOEY TREDEAU
SCALE	1:24
DRAWING #	
MATERIAL	
COMMENTS	

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 FRACTIONAL ±1/64  
 TWO PLACE DECIMAL ±.01

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DESCRIPTION	
H624 - NARROW HORN DIMENSION	
PART NO	H624-AC
DRAWN BY	JOEY TREDEAU
SCALE	1:24
DRAWING #	
MATERIAL	
COMMENTS	

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 FRACTIONAL ±1/64  
 TWO PLACE DECIMAL ±.01

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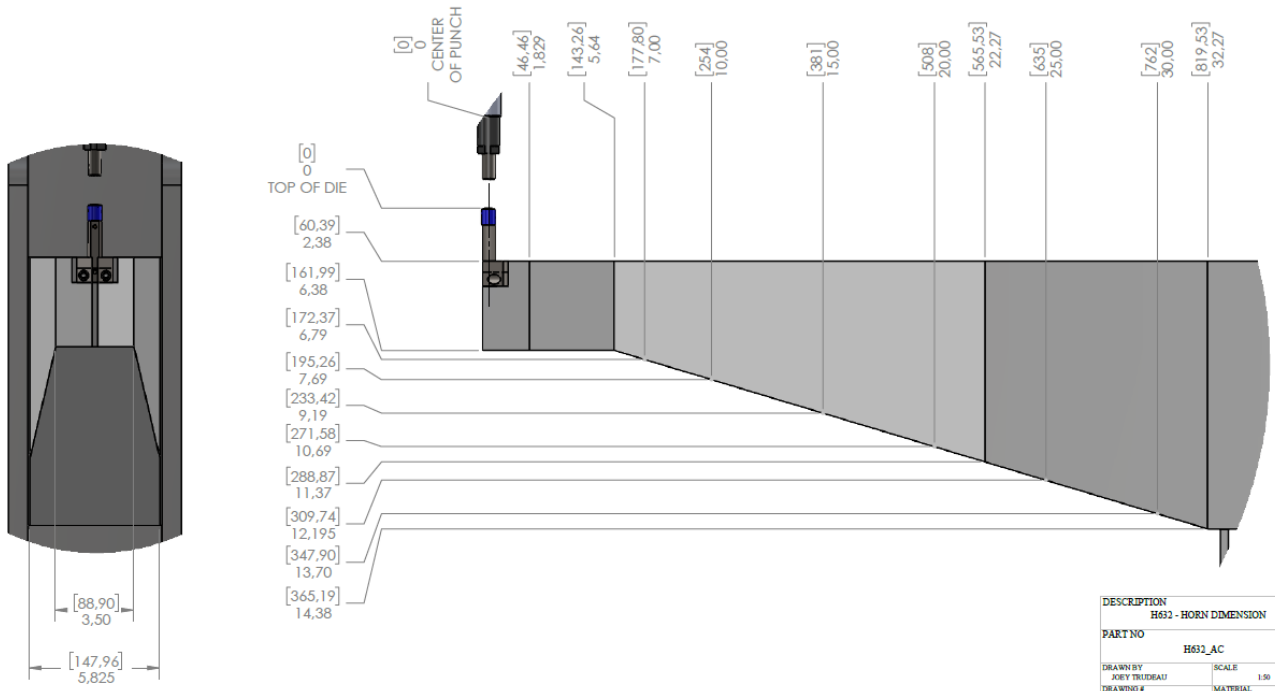
Z:\1. Ingersoll/3-Drawings/ENGINEERING DRAWINGS/ PRESS/DESIGN DE PRESS/TREDEAU/AC/624-AC-005





# Azimuth Clinching press

## H632 narrow arm



DESCRIPTION		H632 - HORN DIMENSION	
PART NO		H632_AC	
DRAWN BY	JURY TREDEGAR	SCALE	1:50
DRAWING #		MATERIAL	
COMMENTS:			

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS ARE IN INCHES  
 TOLERANCES:  
 FRACTIONAL ±1/64  
 TWO PLACE DECIMAL ±.01  
 THREE PLACE DECIMAL ±.005

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# Azimuth Clinching press

## GENE

The first fully electrical servo motorized clinching press in the industry, our GEN E now meets speed of operation, safety standards & consistency within your clinching joints.

Backed up with an outstanding 5 years warranty, you won't have to worry about your clinching unit for a very long time.



### EASY INSTALLATION

Fully electrical 120VAC



### INCREASED PRODUCTIVITY

Easily change tooling for  
different thickness



### FASTEST MACHINE IN THE INDUSTRY

up 350 strokes per minutes



### SAFETY STROKE

Safety stroke allows the  
operator to operate with  
shorter stroke



### SELF MONITORING SYSTEMS

Built-in procedure for easy  
maintenance of the machine  
& adjustment



### TROUBLE FREE

5 years warranty





# CLINCHING PROCESS

## STEP 1 : CLAMP

The stripper clamps the sheet metal parts to be joined.



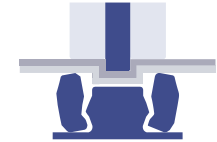
## STEP 2 : DRAW

The punch draws the sheet metal into the die and the metals expand when they hit the die anvil.



## STEP 3 : LOCK

The metals, unable to continue their downward expansion, are compressed against the anvil and are forced to expand laterally, forming an interlock below the bottom sheet. The die blades expand, allowing this interlock to occur.



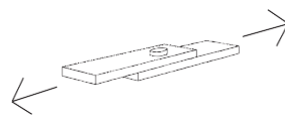
## ADVANTAGES

- Vibration-Resistant & Leak proof
- Do not destroy material coating
- Consistent & reliable joint
- May join different thicknesses together
- Long tool life of approximately 300,000 cycles

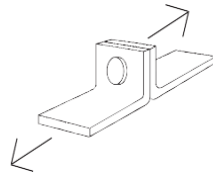
## CAN MY MATERIAL BE CLINCHED ?

Mild Steel (galvanized, pre-painted material) or Aluminum are standard materials. Stainless steel & multiple layers of material requires optional tooling.

## Joint STRENGTH



FROM 225 lbs. (thinner material)  
to 600 lbs (thicker material)



FROM 30 lbs. (thinner material)  
to 250 lbs (thicker material)

Send us your samples today  
for a free evaluation







## WARRANTY PLAN Clinching Press

5

### *Year's servo, drive & Gear-head, PLC & electrical components warranty*

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any major servo failure, servo drive & gear head & ALL Electrical components (greaser, oiler, motor, main controller, sensors or buttons) after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within three (3) years or, if sooner, **5,000,000 strokes** after the original date of shipment from the AZIMUTH MACHINERY plant.

**Does not include labor<sup>[1]</sup> or diagnostic work. The original purchaser will be responsible for travel costs and expenses.**

3

### *Years mechanical parts warranty (Frame, mechanical components)*

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any parts that are found defective (Ball-screw, pitman(s), crankshaft(s), slide, GIBS, RAM, after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within three (3) years or, if sooner, **3,000,000 strokes** after the original date of shipment from the AZIMUTH MACHINERY plant.

**Does not include labor<sup>[2]</sup> or diagnostic work. The original purchaser will be responsible for travel costs and expenses.**

∞

### *Lifetime support over phone & online videos*

Azimuth machinery offers lifetime support to all its end-users. This means free support over phone & access to online videos for technical support & maintenance tips on new machine.



