

Presses & Automation SINCE 1975



AZ-S2
Double point straight side



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AZ-S2



- Motorized Shut height Adjustment with digital display
- Several controller options
- OMPI Air-Clutch unit (wet clutch as optional features)
- Ross Dual safety Valve
- Air lock-out
- Showa Seiki Fast acting Hydraulic Overload
- ABB Variable Speed drive optional
- UL Certified control panel (MEETS OSHA & CSA Regulations)
- Automatic Greasing system (automatic oiling system optional)

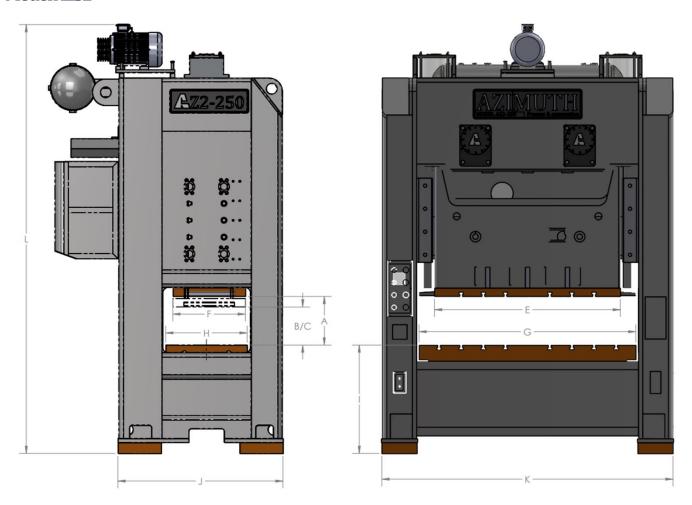


AZIMUTH MACHINERY

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Azimuth press Model AZS2



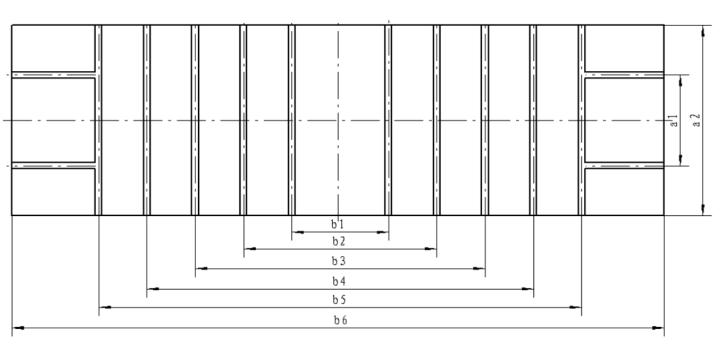
| PARAM | ETERS | DIMENSIONS | Unit | AZS2-110 | AZS2-160 | AZS2-200 | AZS2-250 | AZS2-315 | AZS2-400 | AZS2-500 |
|---------------------------|----------|------------|------|----------|----------|----------|----------|----------|----------|----------|
| Nominal (| Capacity | | Tons | 112 | 163 | 204 | 255 | 321 | 408 | 510 |
| Nominal Stroke | | | in | 0.197 | 0.236 | 0.276 | 0.315 | 0.315 | 0.394 | 0.394 |
| Slide S | Stroke | Α | in | 7.087 | 7.874 | 9.843 | 11.024 | 11.811 | 11.811 | 11.811 |
| SPM | Variable | | SPM | 30-60 | 25-50 | 25-50 | 20-40 | 20-40 | 20-30 | 20-30 |
| Max. D | ie Set | В | in | 15.748 | 17.717 | 19.685 | 21.654 | 23.622 | 23.622 | 25.591 |
| Die H | eight | | in | 3.543 | 3.937 | 4.331 | 4.724 | 4.724 | 4.724 | 4.724 |
| Min. Die | Height | C | in | 12.205 | 13.780 | 15.354 | 16.929 | 18.898 | 18.898 | 20.866 |
| Throat | Depth | D | in | | | | | | | |
| Distance between Uprights | | | in | 68.898 | 77.559 | 90.551 | 98.425 | 102.362 | 110.236 | 118.110 |
| Ram | FxB | E | in | 22.835 | 25.984 | 29.134 | 32.283 | 35.433 | 39.370 | 43.307 |
| Size | LxR | F | in | 53.543 | 62.205 | 74.803 | 82.677 | 86.614 | 98.425 | 102.362 |
| Bolster | FxB | G | in | 26.772 | 29.921 | 33.071 | 36.220 | 39.370 | 43.307 | 47.244 |
| Size | LxR | Н | in | 64.961 | 75.591 | 88.583 | 96.457 | 98.425 | 106.299 | 114.173 |
| Bolster | surface | I | in | | | | | | | |
| Overall | FxB | J | in | 80.709 | 94.488 | 104.331 | 114.173 | 118.110 | 124.016 | 133.858 |
| Size | LxR | K | in | 89.370 | 104.331 | 124.016 | 135.827 | 115.354 | 148.031 | 181.102 |
| Size | Н | L | in | 149.606 | 160.236 | 168.504 | 188.976 | 200.394 | 215.748 | 223.425 |
| Motor Power | | | hp | 14.8 | 20.1 | 24.8 | 29.5 | 40.2 | 49.6 | 60.3 |
| Weight | | | lbs | 39683 | 58202 | 77162 | 93696 | 100310 | 1322772 | 175378 |



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$\begin{array}{c} AZ\text{-}S2\\ \text{Straight side double point-Bolster plate dimensions} \end{array}$



| | AZ-S2-120 | AZ-S2-175 | AZ-S2-220 | AZ-S2-250 | AZ-S2-340 | AZ-S2-440 | AZ-S2-560 |
|----|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| A1 | 0 | 0 | 0 | 0 | 15.75 | 19.625 | 19.625 |
| A2 | 26.75 | 29.875 | 33.125 | 36.25 | 39.375 | 43.25 | 47.25 |
| A3 | 5.875 | 3.875 | 4.375 | 3.875 | 3.875 | 3.875 | 3.875 |
| A4 | 5.5 | 5.125 | 7.875 | 7.875 | 8.625 | 9.875 | 11.75 |
| B1 | 7.875 | 15.75 | 15.75 | 19.625 | 9.875 | 9.875 | 11.75 |
| B2 | 23.625 | 31.5 | 31.5 | 39.375 | 29.5 | 29.5 | 35.375 |
| В3 | 39.375 | 47.25 | 47.25 | 59 | 49.25 | 49.25 | 59 |
| B4 | 55.125 | 63 | 63 | 78.75 | 68.875 | 68.875 | 82.625 |
| B5 | 0 | 0 | 78.75 | 0 | 0 | 0 | 0 |
| В6 | 65 | 75.625 | 88.625 | 96.5 | 98.375 | 106.25 | 114.125 |





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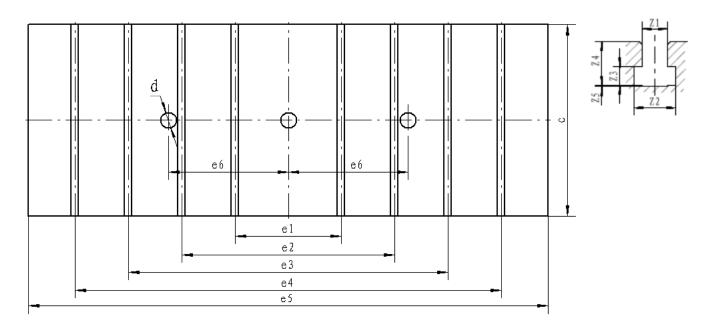
AZ-S2

Z5

$Straight side \ double \ point-RAM \ dimensions$

0.04

0.04



| | AZ-S2-120 | AZ-S2-175 | AZ-S2-220 | AZ-S2-250 | AZ-S2-340 | AZ-S2-440 | AZ-S2-560 |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| С | 22.875 | 26 | 29.125 | 32.25 | 35.375 | 39.375 | 43.25 |
| D | 2.375 | 2.375 | 2.375 | 2.375 | 2.75 | 2.75 | 3.125 |
| E1 | 7.875 | 15.75 | 15.75 | 19.625 | 9.875 | 9.875 | 11.75 |
| E2 | 23.625 | 31.5 | 31.5 | 39.375 | 29.5 | 29.5 | 35.375 |
| E3 | 39.375 | 47.25 | 47.25 | 59 | 49.25 | 49.25 | 59 |
| E4 | 0 | 0 | 63 | 0 | 68.875 | 68.875 | 82.625 |
| E5 | 53.5 | 62.25 | 74.75 | 82.625 | 86.625 | 98.375 | 102.375 |
| E6 | 13 | 14.75 | 17.75 | 17.75 | 17.75 | 19.625 | 19.625 |
| N1 | 2 | 4 | 3 | 4 | 4 | 4 | 4 |
| N2 | 3 | 5 | 4 | 7 | 7 | 7 | 7 |
| Z1 | 0.875 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 | 1.125 |
| Z2 | 1.5 | 1.875 | 1.875 | 1.875 | 1.875 | 1.875 | 1.875 |
| Z3 | 0.625 | 0.875 | 0.875 | 0.875 | 0.875 | 0.875 | 0.875 |
| Z 4 | 1.5 | 1.875 | 1.875 | 1.875 | 1.875 | 1.875 | 1.875 |
| | | | | | | | |



0.04

0.04

0.04

0.04

0.04



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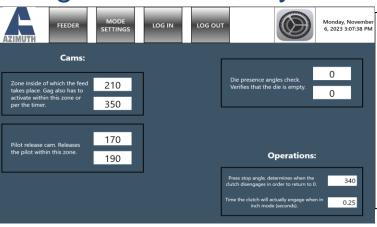
AZIMUTH'S PRESS CONTROL - PLC BASED CONTROLLER

Azimuth' <u>PLC BASED CONTROLLER</u> features a large color touch screen, advanced communications, with 4.0 capabilities.



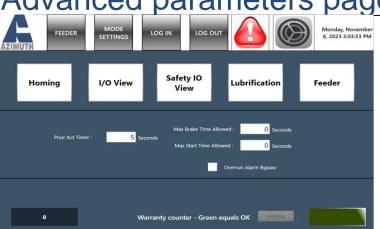
- Large vibrant touch screen gives you access to multiples job selection screen, safety inputs, die protections programmation & more
- •Multiples user inputs, 8 die protections & 8
 Programmable CAM switch with job recognition
- Automatic speed adjusment of the press to every job
- •Every traditionnal mode of operation : Inch, single, continuous & more

Programmable relay



- Channels can be turned on and off up to 4 times per stroke for applications like spray lube systems that require multiple timing signals
- Channels can be turned on with the DSV, and turned off a pre-set time after the press stops for controlling equipment like conveyors that only need to run while the press is running
- Global cams allow you to set press-related functions once for all tools

Advanced parameters page



- Lube control for greasing system
- •I/O allows you to easily troubleshoot the system
- Easily reset the resolver HOMING
- •Optional feeder page when bought with Azimuth Servo feeder



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AZIMUTH'S PRESS CONTROL – WPC2000 standard controller

Azimuth part-revolution presses interface with the Wintriss WPC2000 part-revolution controller. This controller is designed & built to comply with the CSA Z142, OSHA 29CFR 1910.217 & ANSI B11.1 & B11.19. The WPC2000 is an economic, full-featured & user-friendly dual-microprocessor system. *** The customer is aware by buying this machine without guarding, he takes full responsibility of the machine's safety***



Mode of operations

- Off
- Two hands inch
- Two-hands single
- Foot single stroke (requires light curtain)
- · Two-hand continuous
- Continuous on demand (optional)
- Automatic single stroke

Main features

- 9 Customized status codes (including 2 crosschecked pairs) installed by user
- Micro-inch capability improves set-up
- Self-diagnostics identifies control problems
- Optional 4-Output Programmable Limit Switch to control timing of ancillary equipment
- Optional Auto-compensated Top Stop (ACTS)
 adjusts the top-stop angle automatically as press
 speed changes or the brake wears.
- Forward/reverse key selector switch for motor
- Optional Auxiliary E-Stop Relay Outputs for stopping or preventing from starting up to three auxiliary devices like a feed or a transfer if any e-stop button is pressed, any light curtain is interrupted, or any cross-checked input is open





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AZIMUTH'S PRESS CONTROL - OPTIONAL SMART PAC PRO

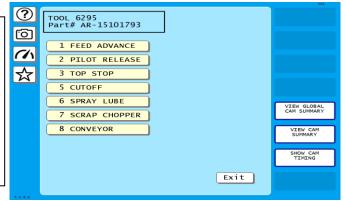
Azimuth' <u>Smart PAC PRO press control</u> features a large color touch screen, advanced communications, superior graphics and numerous performance enhancements.



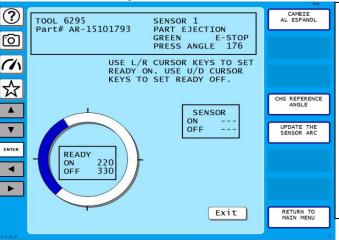
- •Large vibrant touch screen gives you access to multiples job selection screen, safety inputs, die protections programming & more
- •Multiples user inputs, 8 die protections & 8 Programmable CAM switch with job recognition
- •Up to 300 JOB storage with videos & pictures for set-up, drawings & more.
- •Scanner interface allows operators to scan die & automatically set dies parameter
- Automatic speed adjustment of the press to every job
- Tonnage monitor interface (optional)
- •Every traditional mode of operation : Inch, single, continuous & more

Programmable relay

- •Channels can be turned on and off up to 4 times per stroke for applications like spray lube systems that require multiple timing signals
- •Channels can be turned on with the DSV, and turned off a pre-set time after the press stops for controlling equipment like conveyors that only need to run while the press is running
- Global cams allow you to set press-related functions once for all tools
- Allows on-the-fly adjustment



Die protections



- •8 or 16, or 32 programmable sensor inputs
- Allows "on-the-fly" adjustments
- Sensor actuation signals shown on screen
- •Individual stop selection for each sensor (emergency or top stop)
- •LCD circle diagram represents press stroke for ease of programming
- Individual "ready" signals for each sensor
- Ability to custom-name sensors for easy identification
- Die-protection error diagnostics



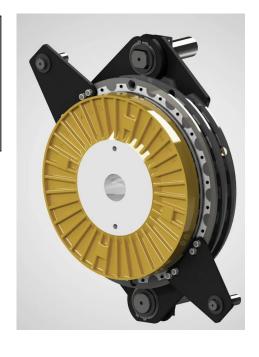
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OMPI Air-friction Clutch

Azimuth uses OMPI air-friction clutch on every AZ models.

OMPI develops, certifies and distributes press-fit and torque and power adjustment devices worldwide. Our brake/clutch units are designed for presses and drive units, equipped with flywheel and reduction gearbox, and rotary unions for clutches.



Hydraulic overload protection



Fast acting hydraulic overload pump (H.O.L.P) prevents hydraulic overload due to a bad set-up or during parts stacking. Adjusted in our facility with our precision load-cell, the hydraulic overload is tested several times prior shipment to prevent any bad application.

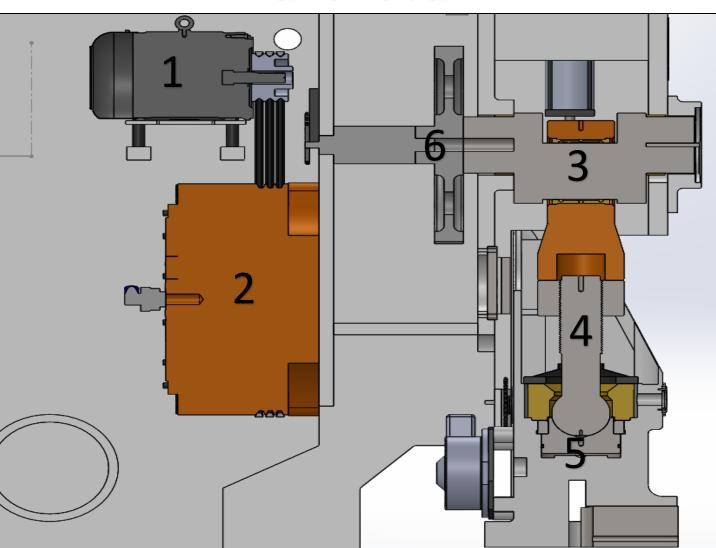




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Main drive-train



Main motor
OMPI Air-FRICTION CLUTCH
Crankshaft
Connecting rod-Ball screw
Ball-seat – Fast acting overload system
Main Gearbox

The main drive train consists of a main motor driving the flywheel inertia/wet-clutch. When actuating the main dual-safety valve (DSV) from the press control, Air is sent through the main clutch shaft & therefore, engage the lining to the rotating flywheel.

The press is equipped with a gearbox immersed in oil with grounded.

Forged crankshaft from high strength steel assures longevity of the machine.



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Azimuth turnkey solution

We specialized in complete turn key press line solution & design, which allows our customer to provide us complete contract in integrating their press solution. We supply & manufacture;

Presses

Tooling

Custom controller solution

Feed-line

Safetyintegration







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Warranty Plan on AZ models

3

Years on air-clutch & electrical components

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any major frame, crown, bed, upright or slide (machine casting or weldment), Airclutch, seals & ALL Electrical components (greaser, oiler, motor, main controller, press encoder) after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within three years or, if sooner, <u>6,000 hours</u> of running time after the original date of shipment from the AZIMUTH MACHINERY plant.

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

2

Years mechanical parts warranty

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any parts that are found defective(Ballscrew, 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 years or, if sooner, 4,000 hours of running time after the original date of shipment from the AZIMUTH MACHINERY plant.

<u>Does not include labor or diagnostic work. The original purchaser will be responsible for travel costs and expenses.</u>

1

Year on Hydraulic, pneumatic components & labour.

Azimuth machinery warrants to the original purchaser, to repair or, at AZIMUTH MACHINERY'S sole option, replace any parts that are found defective(hydraulic clampers (if furnished), hydraulic components, motors, air-counter balance & all others air components & hydraulic components) after examination by AZIMUTH MACHINERY's properly authorized representative, to be defective in material or workmanship under normal use within three years or, if sooner, 3,000 hours of running time after the original date of shipment from the AZIMUTH MACHINERY plant.

Labour time warranty shall be under Azimuth Sole discretion. If any Workmanship is required due to improper functioning of the press &/or other related equipment, Azimuth will cover the workmanship repair cost. Travelling fees, lodging & other travelling expense are not included.



