



Presses & Automation
SINCE 1975



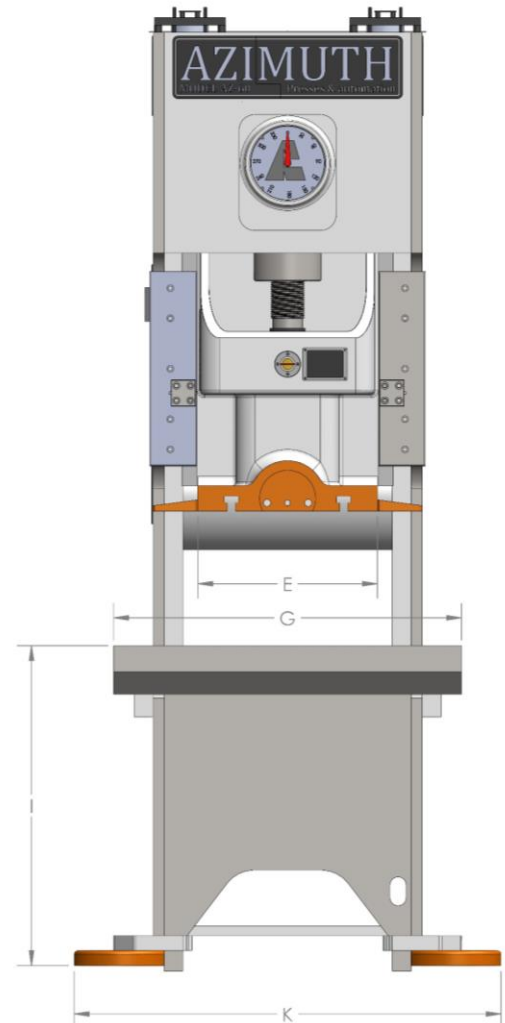
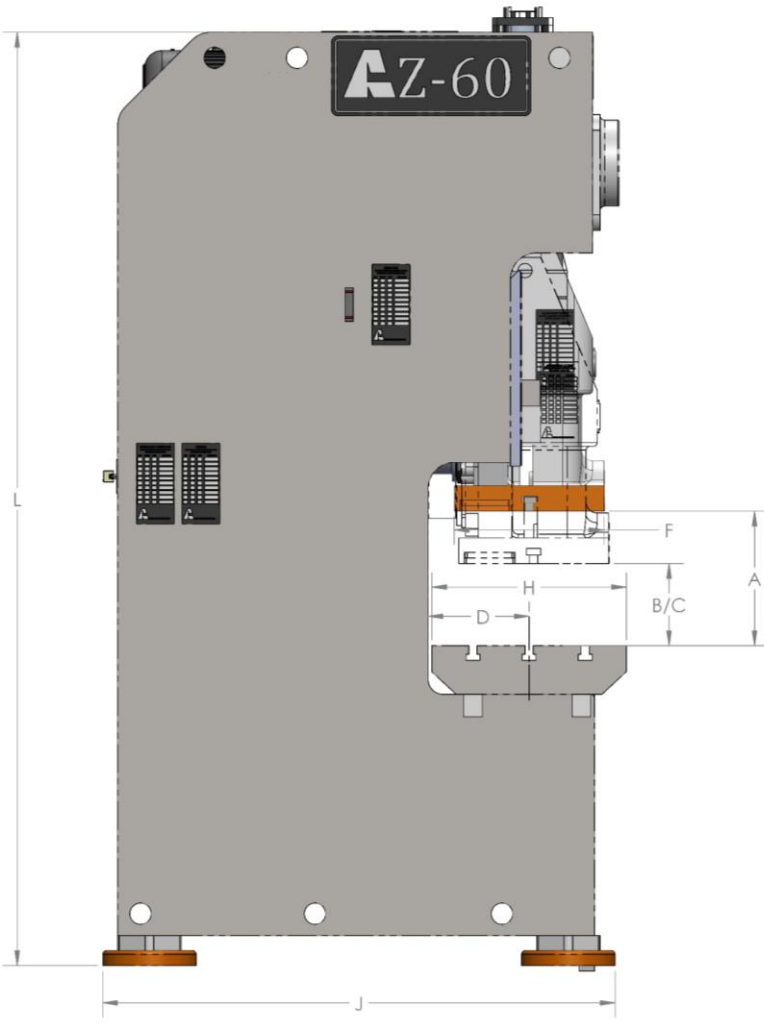
AZ1
Technical Brochure



AZ1 Single Point GAP PRESS



- Motorized Shut height Adjustment with digital display (AZ1-45 & higher)
- Several controller options (WPC2000 press control is standard)
- 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
- UL Certified control panel (MEETS OSHA & CSA Regulations)
- Automatic Greasing system (automatic oiling system optional)



		Dimension	Unit	AZ1-25	AZ1-45	AZ1-60	AZ1-80	AZ1-110	AZ1-140	AZ1-175	AZ1-220	AZ1-275	AZ1-340	
Nominal Capacity			TONS	25	45	66	88	110	140	175	220	275	340	
Rated tonnage BDC			INCH	0,118	0,157	0,157	0,197	0,197	0,236	0,236	0,236	0,315	0,315	
Slide Stroke Length		A	INCH	3,150	3,937	5,118	5,512	7,087	7,087	7,874	7,874	9,843	9,843	
SPM			SPM	80-120	45-90	35-80	55-100	55-100	50-90	35-70	35-65	30-55	30-55	
Max. Die Set Height		B	INCH	9,875	10,625	11,811	12,598	13,780	13,780	15,748	17,717	19,685	21,654	
Die Height Adjustment			INCH	2,000	2,375	3,150	3,150	3,543	3,543	3,937	4,331	4,724	4,724	
MIN. Die set height		C	INCH	7,875	8,250	8,661	9,449	10,236	10,236	11,811	13,386	14,961	16,929	
Throat Depth		D	INCH	8,250	9,000	11,750	11,750	13,750	13,750	15,000	16,500	16,500	18,125	
Ram Dimensions	L x R	E	INCH	11,750	13,375	16,500	16,500	19,625	21,250	25,625	27,500	27,500	28,375	
	F x B	F	INCH	14,125	16,125	19,625	22,000	25,625	26,750	33,500	37,375	39,375	47,250	
Shank diameter	Dia		INCH	1,575	1,575	1,969	1,969	2,362	2,362	2,559	2,559	2,756	2,756	
	Depth		INCH	2,362	2,953	2,953	2,953	2,953	2,953	3,543	3,543	3,543	3,543	
Bolster Size	F X B	H	INCH	15,750	17,375	22,875	22,875	26,750	26,750	29,125	32,250	32,250	34,625	
	L X R	G	INCH	27,500	31,875	35,375	39,375	45,250	45,250	51,125	55,125	59,000	65,000	
Frame Opening			INCH	17,750	21,625	22,000	25,250	27,500	29,125	31,125	32,250	36,220	36,220	
Bolster Thickness			INCH	3,150	3,346	5,118	5,512	5,709	6,102	6,496	7,087	7,480	7,480	
Floor to Bed Dimension		I	INCH	35,500							39,370			
Overall Size	F x B	J	INCH	55,125	49,625	60,625	69,5	78,75	80,375	90,75	102,375	104,75	107,125	
	L x R	K	INCH	43,25	41,375	47,25	47,25	51,125	52	55,875	60,625	64,625	66,125	
	Height	L	INCH	98,375	90,125	101,125	107,25	118,5	119,5	131,875	149,625	151,625	151,625	
Motor Power			HP	4,000	4,500	7,500	10,000	10,000	15,000	20,115	24,809	29,502	40,231	
Weight			lbs	4500	5500	11354	14220	19070	21054	29983	42329	51147	58643	



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 cross-checked 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





AZIMUTH'S PRESS CONTROL - OPTIONAL SMART PAC PRO

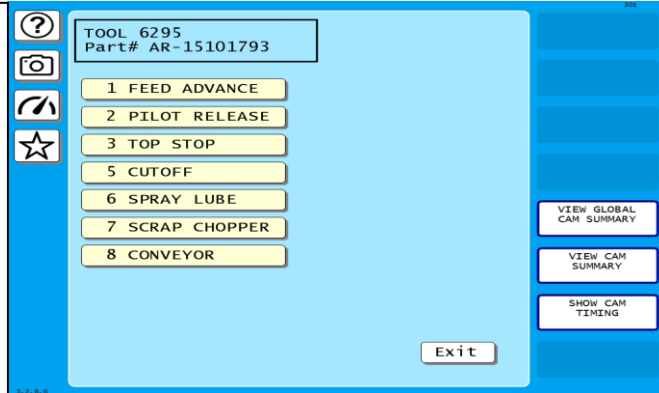
Azimuth' *Smart PAC PRO press control* features a large color touch screen, advanced communications, superior graphics and numerous performance enhancements.



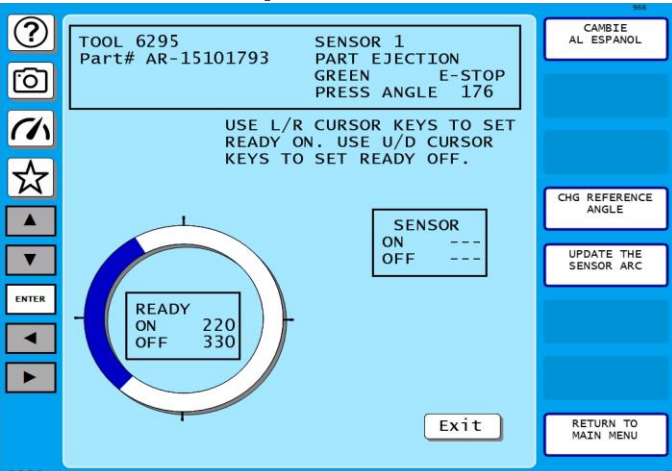
- Large vibrant touch screen gives you access to multiples job selection screen, safety inputs, die protections programmation & more
- Multiples user inputs, 8 die protections & 8 Programmable CAM switch with job recognition
- Up to 300 JOB storage with videos & pictures for set-up, drawings & more.
- Scanner interface allows operators to scan die & automaticly set dies parameter
- Automatic speed adjusment of the press to every job
- Tonnage monitor interface (optional)
- 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
- 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



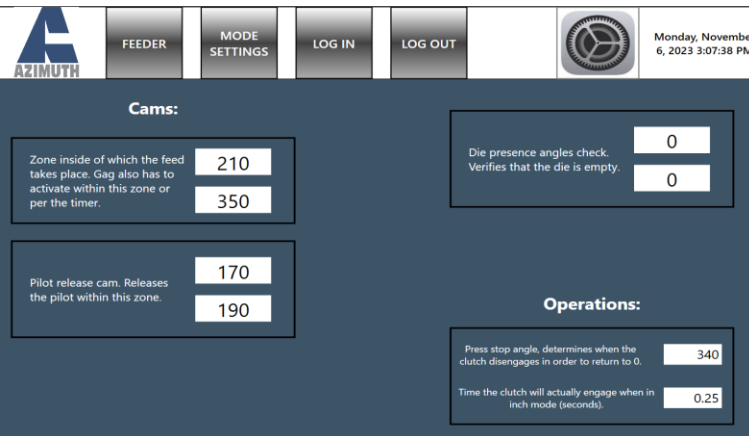
AZIMUTH'S PRESS CONTROL – PLC BASED CONTROLLER

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



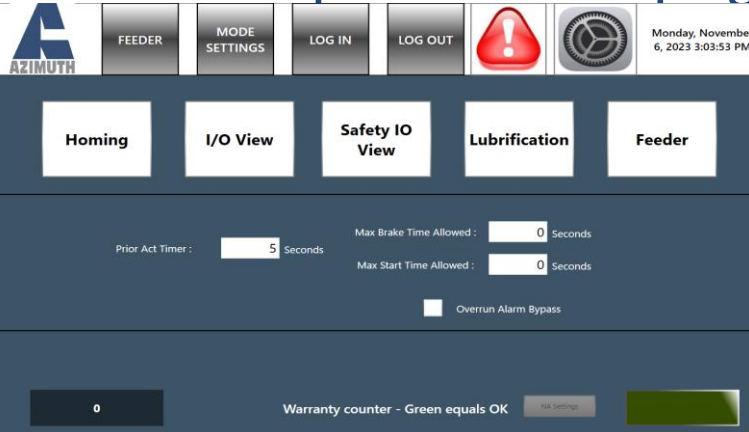
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- Multiples user inputs, 8 die protections & 8 Programmable CAM switch with job recognition
- Automatic speed adjustment of the press to every job
- Every traditional mode of operation : Inch, single, continuous & more

Programmable relay



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- Global cams allow you to set press-related functions once for all tools

Advanced parameters page



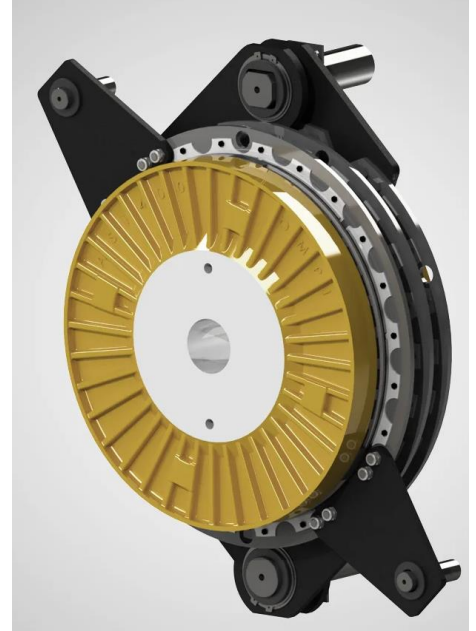
- Lube control for greasing system
- I/O allows you to easily troubleshoot the system
- Easily reset the resolver HOMING
- Optional feeder page when bought with Azimuth Servo feeder



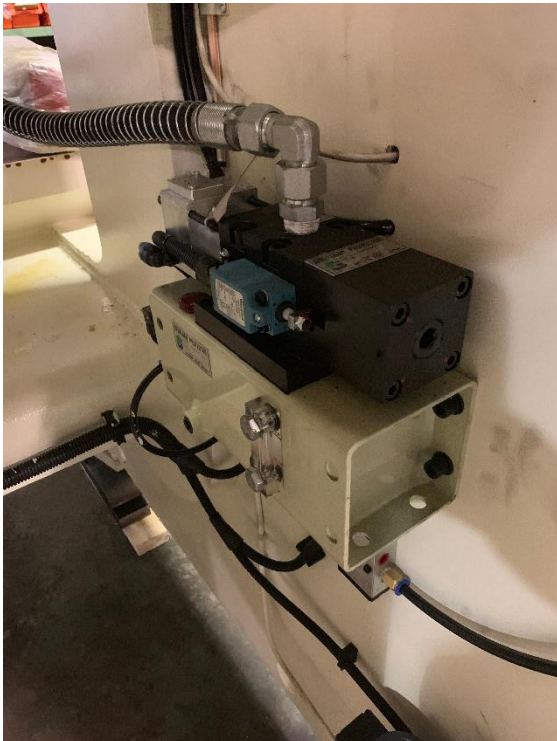
OMPI Air-friction Clutch

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.



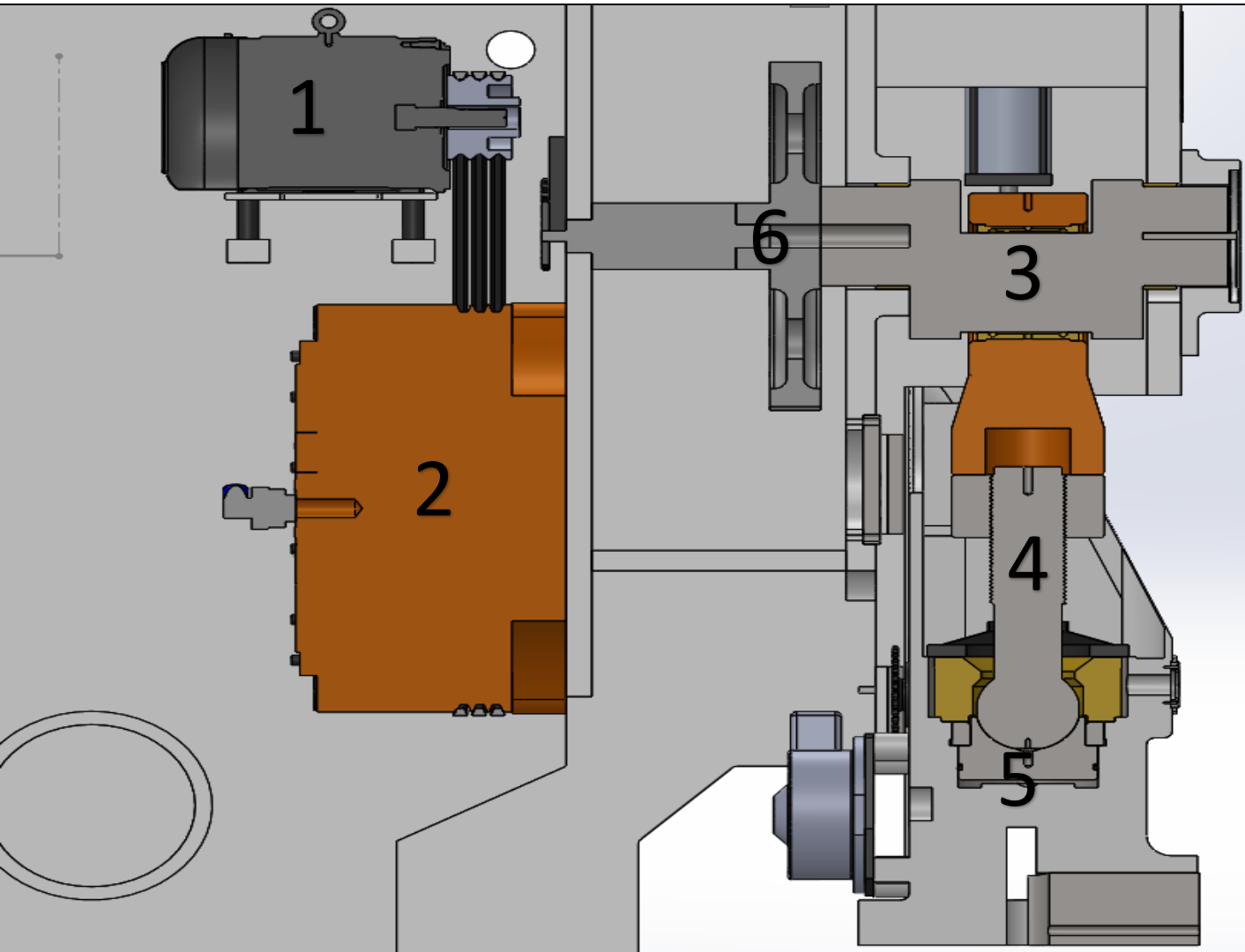
Hydraulic overload protection



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.



Main drive-train



1. Main motor
2. OMPI Air-FRICTION CLUTCH
3. Crankshaft
4. Connecting rod-Ball screw assembly
5. Ball-seat – Fast acting overload system
6. 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 gears.

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



Azimuth turnkey solution

We specialized in complete turnkey 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

Safety integration





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), Air-clutch, 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, **6,000 hours** of running time after the original date of shipment from the AZIMUTH MACHINERY plant.

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

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.

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

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.



