



Presses & Automation
SINCE 1975



AZ1
Single point gap press



AZ1

Single Point GAP PRESS



Standard features

- Motorized Shut height Adjustment with digital display
- Several controller options
- OMPI Air friction Clutch unit or wet clutch
- Ross Dual safety Valve
- Air lock-out
- Showa Seiki Fast acting Hydraulic Overload
- ABB Variable Speed drive optional (ACS 580)
- UL Certified control panel (MEETS OSHA & CSA Regulations)
- Automatic Greasing system (automatic oiling system optional)

Optional features

- Hydraulic clamping unit
- Tonnage monitoring
- Custom safety guarding meeting latest regulation
- Die cushion system
- Servo feed system
- Custom dimensions (stroke, bed, frame)
- Automatic recirculating oiling system





Optional safety guards

Azimuth will customize the safety guards to suit your operations and design them around your current equipment.

This approach ensures that the guards integrate seamlessly with your existing machinery, enhancing safety without disrupting your workflow. Azimuth's tailored solutions help optimize both protection and productivity in your workplace

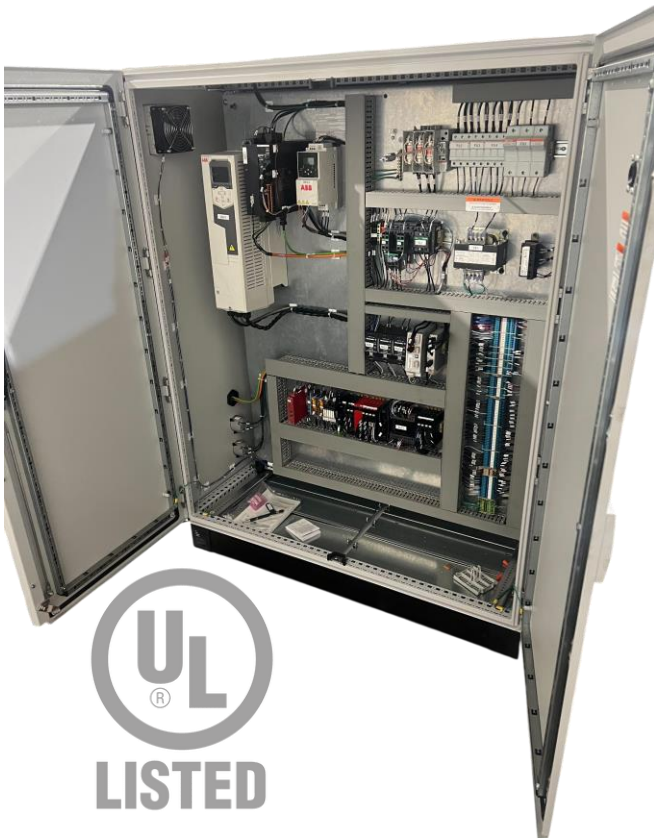


UL listed control panel

Azimuth is a UL-certified panel builder specializing in the stamping industry. This certification ensures that our control panels meet stringent safety and quality standards, providing reliable and compliant solutions for your operations.

We customize enclosures specifically for sheet metal applications, ensuring seamless integration with your existing equipment and processes.

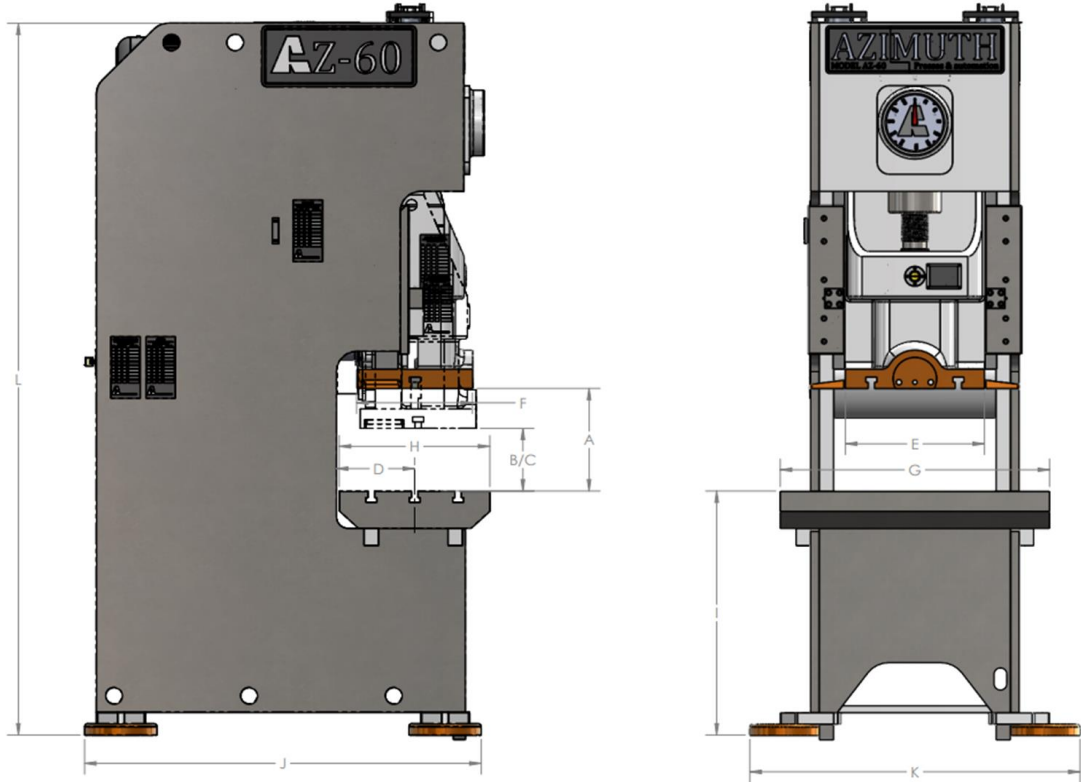
Our tailored designs enhance both safety and efficiency in your stamping operations.





Azimuth press

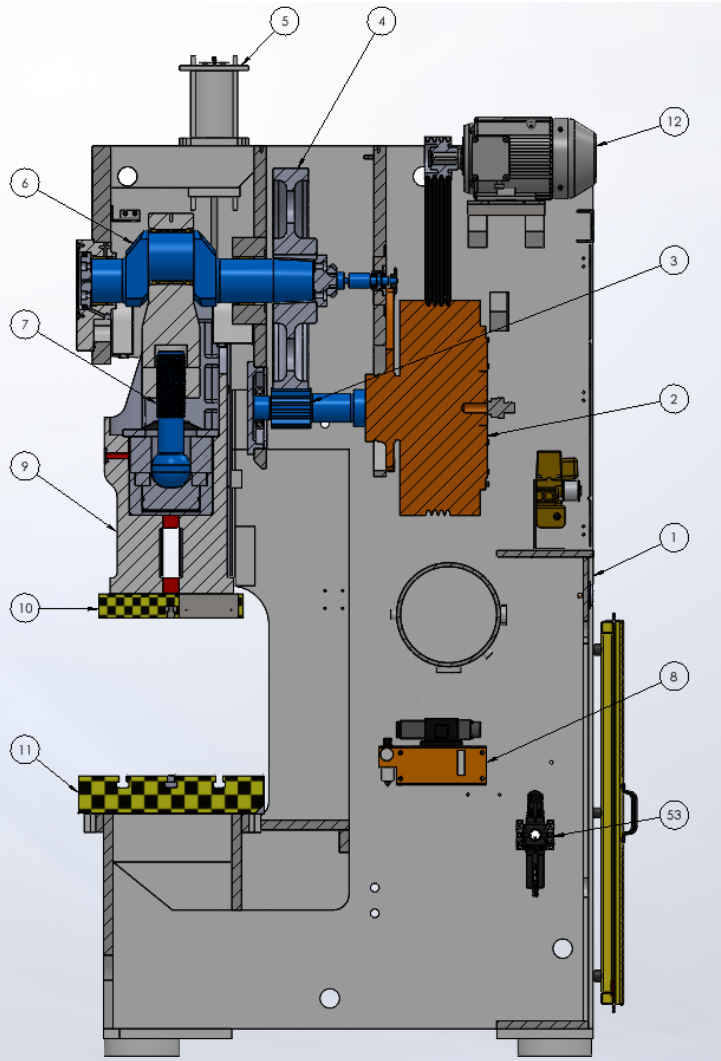
Model AZ1



PARAMETER		DIMENSIONS	AZ1-25	AZ1-45	AZ1-60	AZ1-80	AZ1-110	AZ1-140	AZ1-175	AZ1-220	AZ1-275	AZ1-340		AZ1-400	
Nominal Capacity (short tons)			28	51	71	90	124	141	180	225	281	354		450	
RATED TONNAGE BDC			0.118	0.157	0.157	0.197	0.236	0.236	0.236	0.236	0.315	0.315		0.394	
Slide Stroke Length (in)		A	3.150	3.937	5.118	5.906	7.087	7.087	7.874	7.874	9.843	7.874	9.843	7.874	9.843
SPM			80-120	40-90	35-80	50-70	30-60	30-60	25-50	25-50	20-40	25-40		20-30	
Max. Die Set Height (in)		B	9.813	10.625	11.813	12.625	13.750	13.750	13.750	17.688	19.688	16.929	21.654	16.929	21.654
Die Height Adjustment (in)			1.938	2.375	3.125	3.125	3.125	3.125	4.313	4.313	4.750	4.724		4.724	
Min. Die Height Adjustment (in)		C	7.875	8.250	8.688	9.500	10.625	10.625	9.438	13.375	14.938	12.205	21.654	12.205	21.654
Throat Depth (in)		D	8.268	9.055	11.811	11.811	13.780	13.780	14.961	15.354	16.535	16.535	18.110	16.535	19.291
Distance Between Uprights (in)			17.717	21.654	22.835	25.197	29.921	29.921	33.465	34.252	37.795	36.220		37.795	
Ram Size (in)	F x B	E	11.811	13.386	15.748	16.535	19.685	21.260	22.835	23.622	25.591	25.591	27.559	27.165	28.346
	L x R	F	14.173	16.142	18.898	22.047	25.591	26.772	30.315	31.496	33.465	33.465	39.370	35.433	47.244
Shank hole size (in)	Dia		1.575	1.575	1.969	1.969	2.362	2.362	2.559	2.559	2.756	2.756		2.756	
	Depth		2.362	2.362	3.150	3.150	3.150	3.150	3.543	3.543	3.543	3.543		3.543	
Bolster Size (in)	F x B	H	15.750	17.313	22.813	22.813	26.750	26.750	29.125	29.938	31.500	31.500	34.625	31.500	37.000
	L x R	G	27.563	31.875	35.438	39.375	45.250	45.250	51.188	55.125	55.125	55.125	64.938	59.063	70.875
Bolster surface height (in)		I	30.709	31.496	35.433	35.433	35.433	35.433	35.433	39.370	39.370	39.370	39.370	43.307	43.307
Overall Size (in)	F x B	J	51.181	54.724	62.205	64.567	72.835	72.835	87.795	87.795	110.236	110.236	114.961	123.622	124.803
	L x R	K	40.354	44.291	47.441	50.787	57.087	58.661	64.173	64.961	68.110	68.110	70.472	70.866	74.016
	H	L	84.646	89.567	101.575	110.236	120.472	120.472	126.378	138.583	162.008	146.063	179.134	156.299	183.071
Motor Power (hp)			4.0	7.4	7.4	10.1	14.8	14.8	20.1	24.8	29.5	40.2		49.6	
Weight (lbs)			6614	7716	11354	14220	19070	21054	29983	42329	51147	58643		62832	
Voltage			480VAC-3PH												



Main drive-train



1	Frame
2	Flywheel, Clutch & Brake
3	Pinion drive shaft
4	Main gear
5	Counter balance
6	Crankshaft
7	Ram adjustment screw
8	Hydraulic overload
9	Ram
10	Ram plate
11	Bolster plate
12	AC Motor

Azimuth's main drive train is engineered for durability and precision. It includes a primary motor that powers the flywheel, incorporating an inertia clutch for efficient energy transfer.

Activating the main Dual-Safety Valve (DSV) from the press control sends air through the main clutch shaft, engaging the lining with the rotating flywheel for smooth operation.

The press is equipped with a robust oil-immersed gearbox with precision-grounded gears, which enhances performance and minimizes wear.

Additionally, the forged crankshaft, made from high-strength steel, is designed for extended durability, ensuring long-term reliability of the machine.



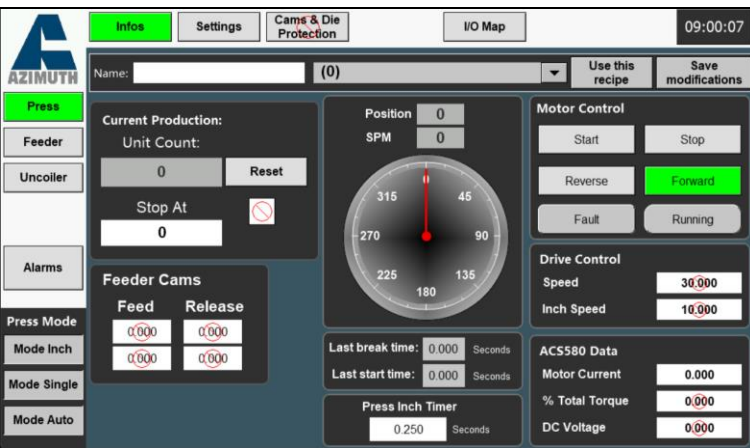


AZIMUTH'S PRESS CONTROL – PLC BASED CONTROLLER

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



- The large, vibrant touch screen displays an overview of the equipment or complete line, allowing you easy access to individual equipment setting pages by clicking on their respective representations.
- The home page can also display production statistics ; press operation mode, cycle counter, alarm counter, grease cycle & more.
- Home page can be customized to client's preferences and specific requirements.



- Press information page display key information related to the press operation : position, speed, previous cycle braking and start time, motor control, etc.
- Press settings pages allow for quick modifications in press homing position, stop angle, CAMS and die protections and lubrication settings.



- Press recipe builder allows you to save settings (normally used for different tooling preset)
- Up to 16 recipes (each with 16 local programmable CAMS outputs)
- Up to 16 global programmable CAMS outputs
- I/O lists allows you to easily troubleshoot the system
- Lube control for greasing system

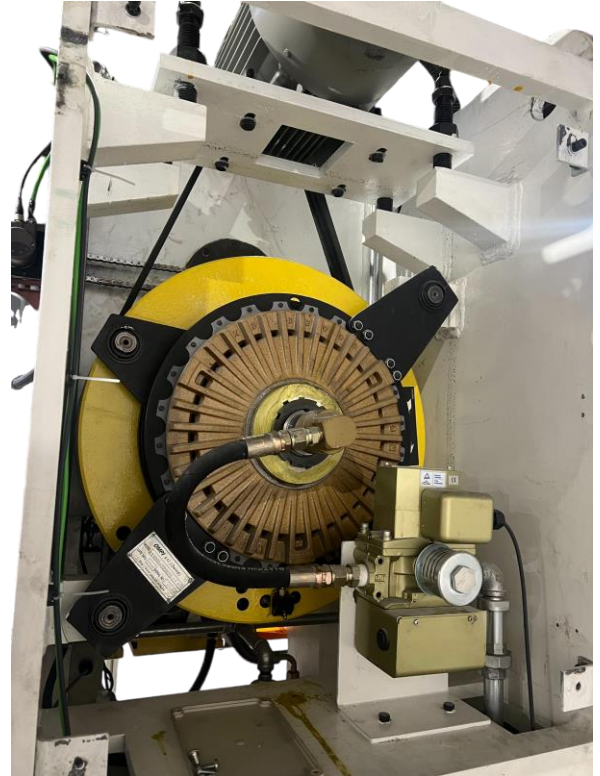


OMPI Air-friction Clutch

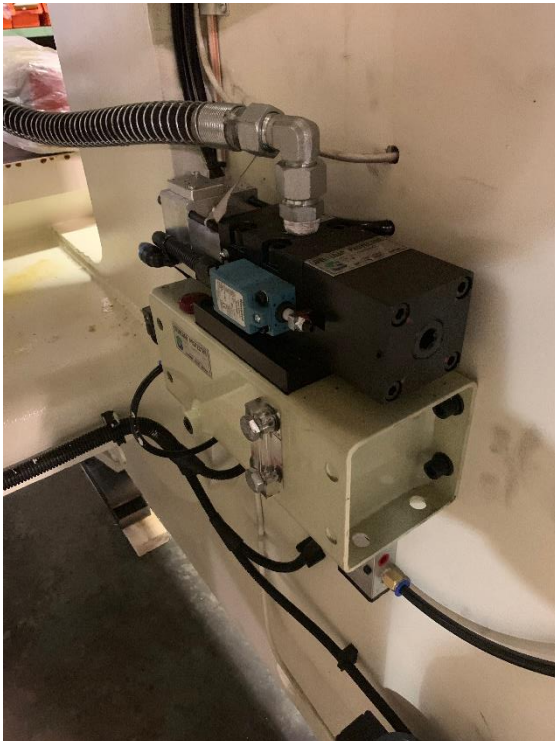
Azimuth integrates OMPI air-friction clutches into all its AZ models, ensuring reliable and efficient performance. OMPI specializes in the development, certification, and global distribution of press-fit devices, torque and power adjustment mechanisms, and clutch/brake units.

Their products are designed for presses and drive assemblies, often featuring flywheels, reduction gearboxes, and rotary unions. [Ompi Srl](#)

This collaboration between Azimuth and OMPI enhances the operational efficiency and safety of the AZ models.



Hydraulic overload protection



The fast-acting Hydraulic Overload Pump (H.O.L.P) in Azimuth's systems is designed to prevent hydraulic overloads caused by incorrect setups or part stacking.

Each unit undergoes precise adjustments at our facility using advanced load-cell technology, ensuring accuracy and reliability.

This hydraulic overload system is rigorously tested multiple times before shipment, effectively reducing the risk of misapplication and enhancing equipment protection.



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.





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www.azimuthpress.com



Feed-line

We excel in providing turnkey solutions with our custom servo feeding systems, designed to accommodate a wide range of materials—from thin sheets to automotive-grade thicknesses. Our dedicated approach ensures that each system is tailored to meet your specific production requirements, enhancing efficiency and performance.

Turn-key solution

At Azimuth, we specialize in creating customized production lines tailored to your exact specifications. Simply send us your part drawings, and our experienced team will develop a solution designed to maximize efficiency and elevate performance across your operations. As part of our commitment to quality, we'll rigorously test and run your production setup before shipment, ensuring flawless installation and seamless integration when it reaches you.



We are committed to delivering high-quality, innovative automation solutions tailored specifically for the stamping industry. Our UL certification underscores our dedication to safety and excellence, ensuring that our custom-built systems meet the highest industry standards.