



Presses & Automation
SINCE 1975



AZ1S – Single point servo press



AZ1S

Single Point GAP SERVO PRESS

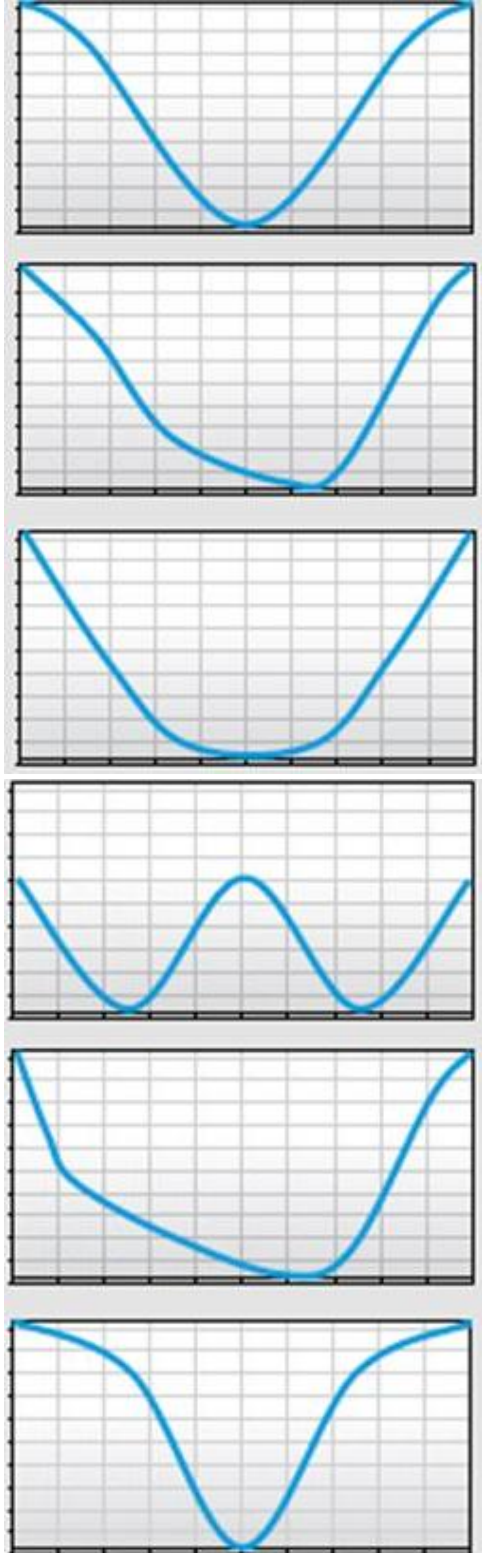


- Motorized Shut height Adjustment with digital display (AZ1-45 & higher)
- Azimuth Design Servo Motion design
- Brake & gearhead system
- Air lock-out for counterbalance
- Showa Seiki Fast acting Hydraulic Overload
- BECKHOFF Servo drive
- UL Certified control panel (MEETS OSHA & CSA Regulations)
- Automatic Greasing system (automatic oiling system optional)



AZ1S

Servo motion curve



Crank motion mode

This mode allows you to operate the press like a typical press

Slow-down for blanking mode

This mode allows to slowdown the motion while blanking process, increasing tooling life & better part quality

Coining mode

This mode is intended to slowdown motion or even stop it at bottom when forming process

Pendulum mode

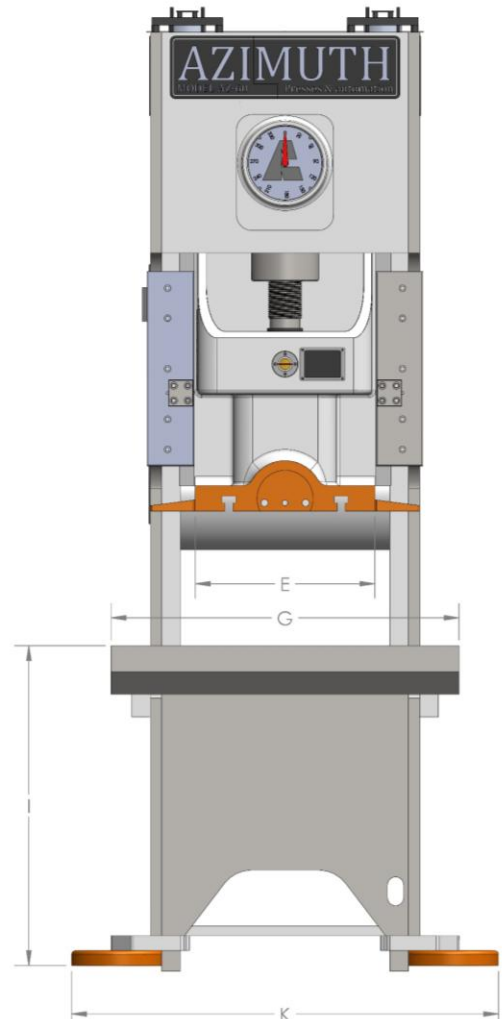
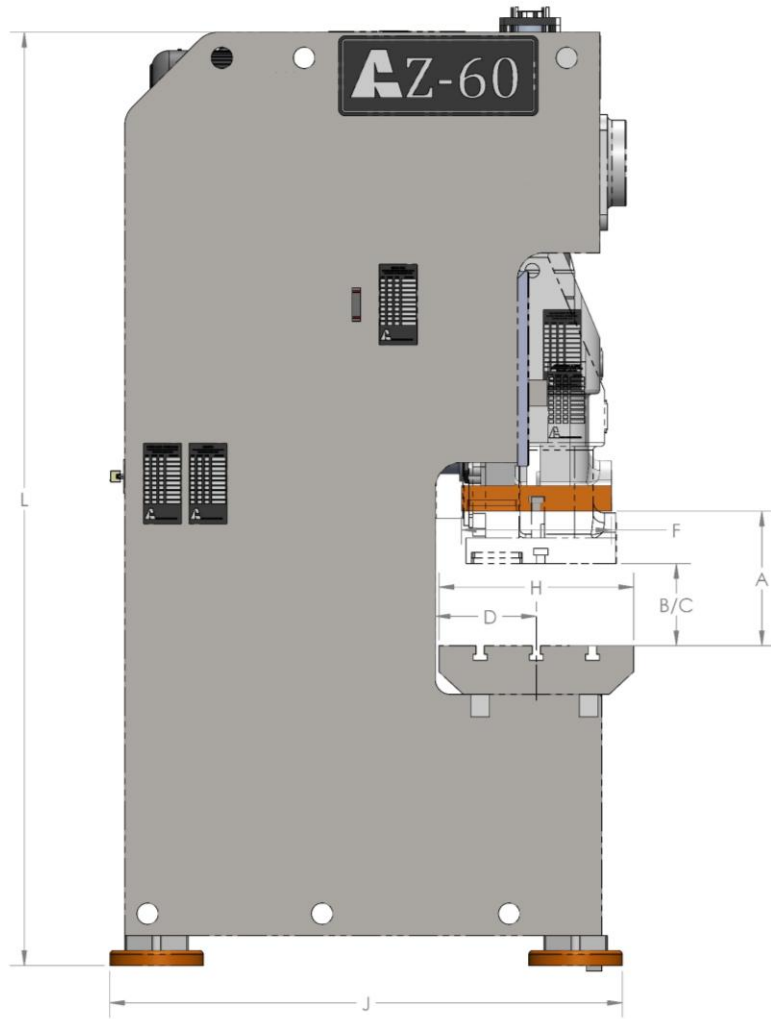
Pendulum mode allows you to run the machine at reduce stroke, therefore increasing cycling time

Slow-down drawing with Dwell

Slow-down mode slows the motion speed for drawing process

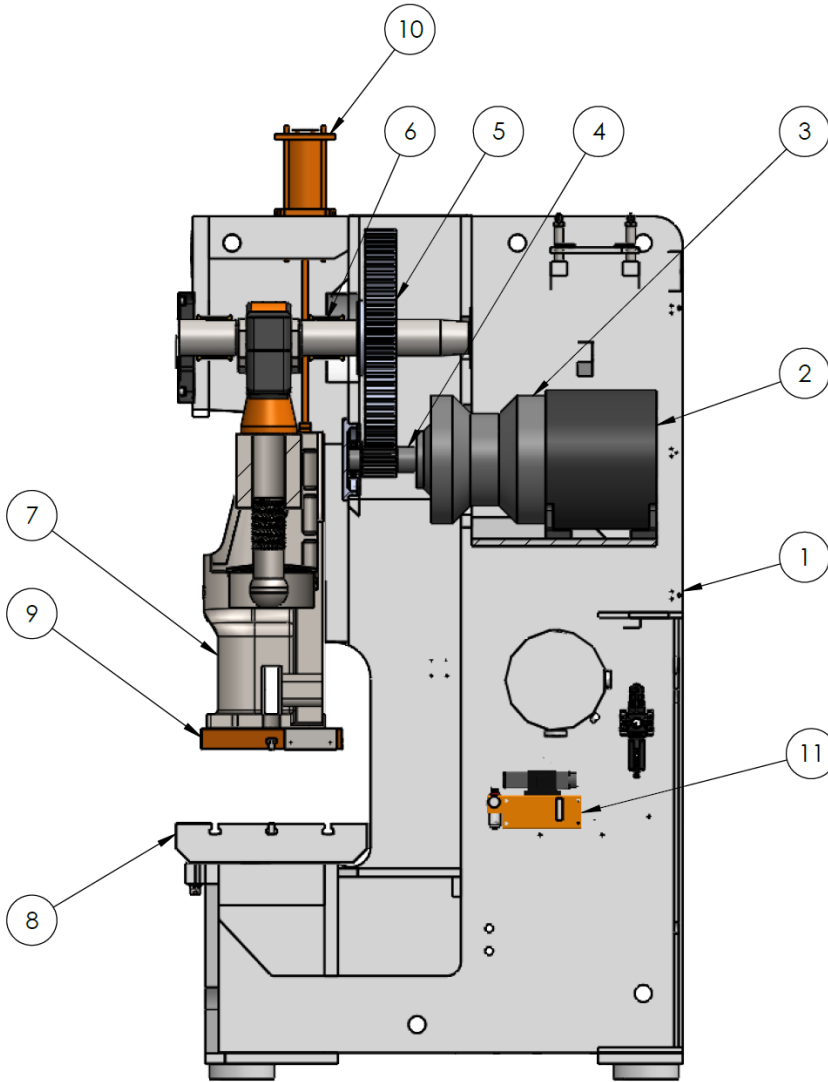
Slow down for transfer

Slow-down for transfer mode slows the motion speed on it's way up during transferring process



		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	0,315	0,315	
Slide Stroke Length		A	INCH	3,150	3,937	5,118	5,512	7,087	7,087	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

Main drive-train



No. ARTICLE	DESCRIPTION	QTY
1	FRAME	1
2	SERVO MOTOR	1
3	GEAR BOX AND BRAKE	1
4	PINION DRIVE	1
5	MAIN GEAR	1
6	CRANK SHAFT	1
7	RAM	1
8	BOLSTER PLATE	1
9	RAM PLATE	1
10	COUNTER PLATE	1
11	HYDRAULIQUE OVERLOAD PROTECTION	1

The main drive train consists of a main Innovance Servo motor with Inertia gearhead & braking system.

The servo controller built & design by Azimuth Offers the opportunity to control the motion of the slide easily.

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

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

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.

UL listed control pannel

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.



Optional safety guards

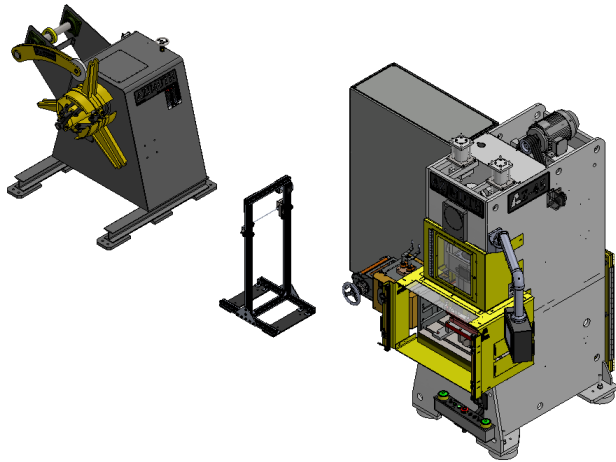


Azimuth will customize the safety guards to suit your operations and design them around your current equipment.

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

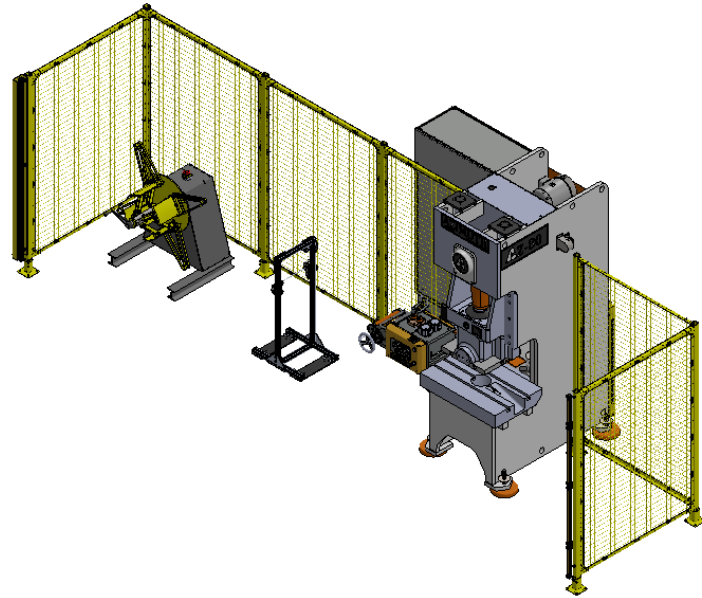
Azimuth press

Safety design type



Safety type 1

- Fix guarding around die
- Safety door in back of press
- Safety curtain in front or interlock door
- No safety around coil line

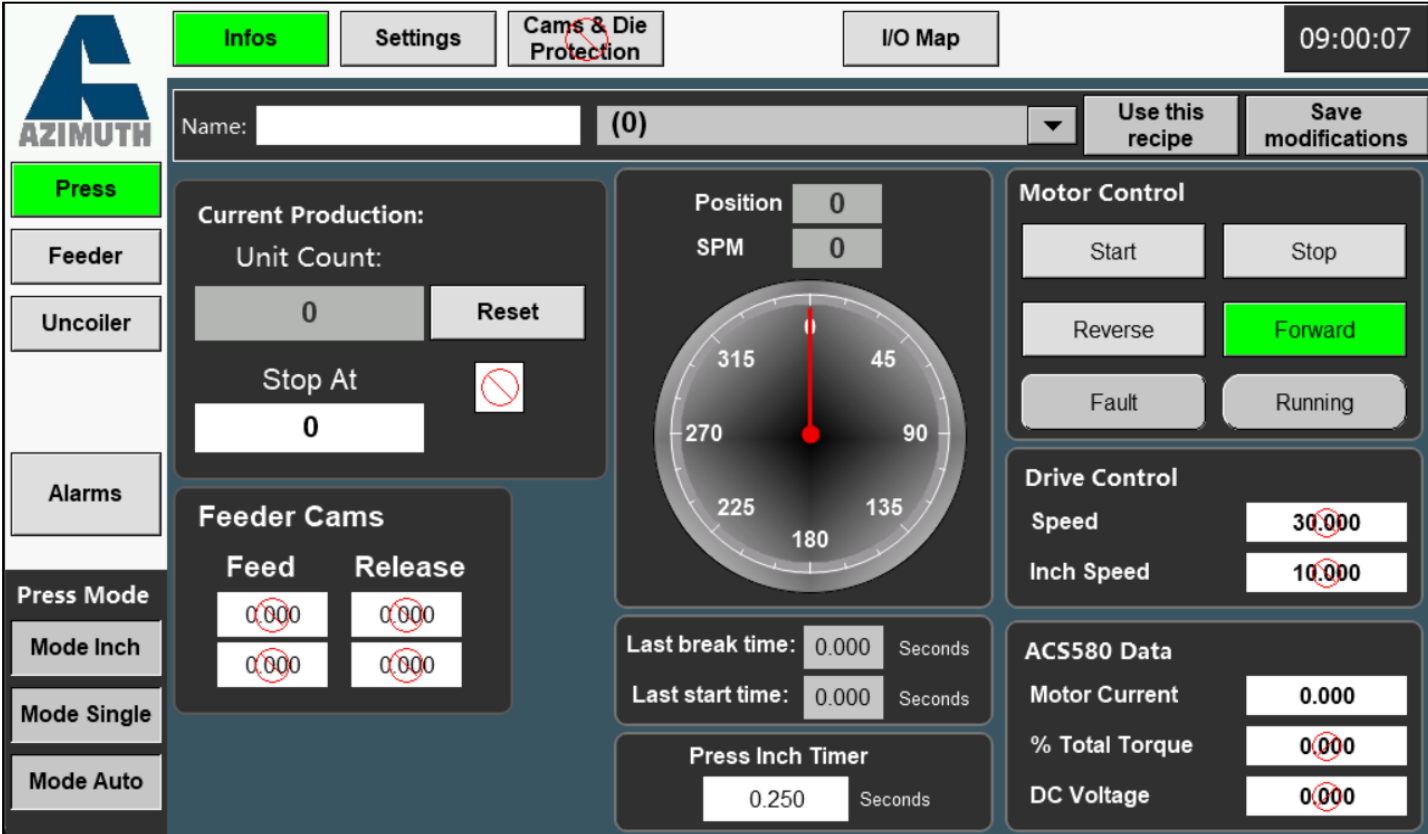


Safety type 2

- Complete fencing around cell
- Safety light curtain in front to access line
- Manual mode enable when entering cell with lower speed

AZIMUTH'S PRESS CONTROL – PLC BASED CONTROLLER

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



Our **Press Information Page** provides real-time insights into critical press operations, ensuring optimal performance and control.

Key Features:

- ✓ **Comprehensive Press Data** – Displays position, speed, previous cycle braking and start time, motor control, and more
- ✓ **Quick-Adjust Settings** – Easily modify press homing position, stop angle, CAMs, die protection, and lubrication settings
- ✓ **Recipe-Based Stroke Counter** – Automatically stops the press after a predefined number of strokes
- ✓ **Automatic VFD Speed Adjustment** – Ensures smooth and efficient operation (when provided with VFD)
- ✓ **Press recipe Builder** – Store up to 1000 jobs in the recipe builder



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.





Presses & Automation

SINCE 1975

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.