

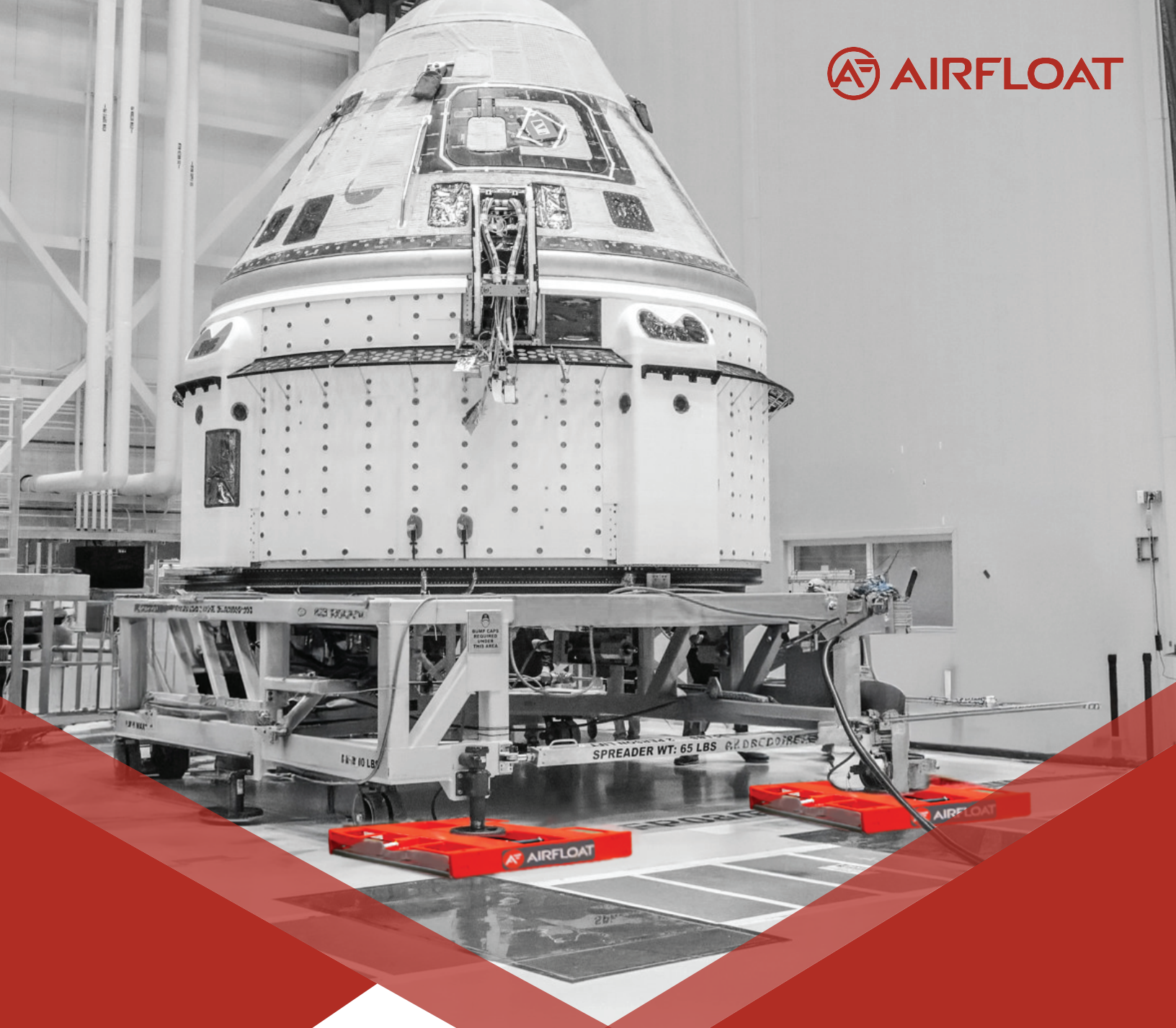
ALIGN PRODUCTION SYSTEMS

 **AIRFLOAT**  **HEDIN USA**



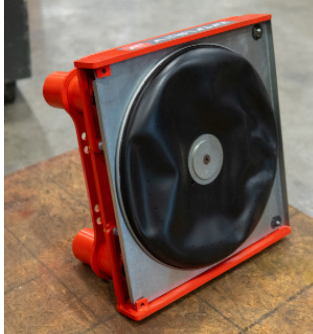

SINCE 1967

MATERIAL HANDLING SOLUTIONS CATALOG



AIR-POWERED MATERIAL HANDLING
CATALOG

AIRFLOAT PRODUCTS



SKIDS

- 8-9 AIR SKID
- 10-11 AIR SKID: RIGGING KIT
- 12-13 AIR SKID: LIFT GLIDE



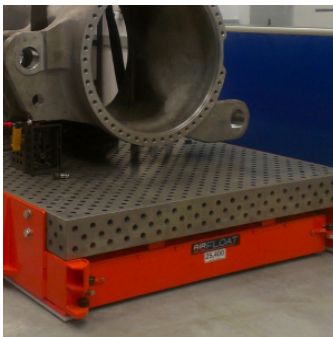
PLANKS

- 14-15 AIR PLANK: ALUMINUM
- 14-15 AIR PLANK: STEEL



PLATFORMS

- 16-17 UTILITY PLATFORM
- 16-17 UTILITY ROLL PLATFORM
- 18-19 AIR PLATFORM



TRANSPORTERS

- 20-21 AIR TRANSPORTER
- 22-23 AIR ROLL MOVER



LOCATED IN THE
MIDWEST



SCALE OF MANUFACTURING
65,000 SQ. FT.



FOUNDED IN 1967
55+ YEARS



INVENTOR OF
AIR CASTERS

FULL SERVICE SOLUTION

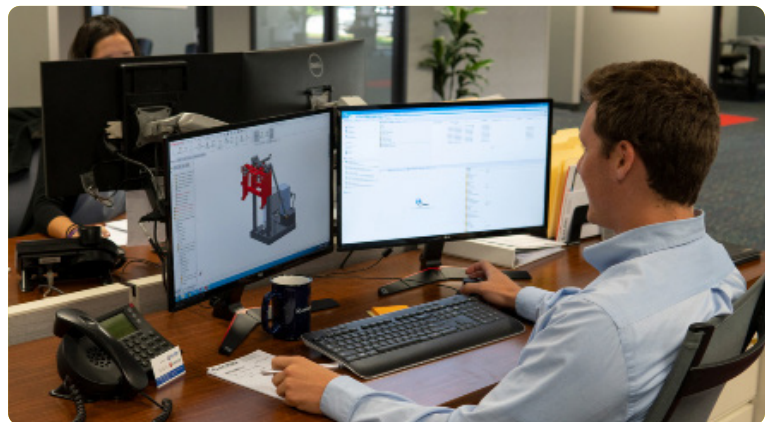
Airfloat, established in 1967, pioneered air caster technology, enabling the efficient movement of heavy loads with minimal friction. Over the years, we have expanded our product line to serve diverse industries such as automotive, aerospace, manufacturing, and assembly lines. We continue to focus on engineering air caster solutions, emphasizing quality, safety, and performance to meet the demands of our global clientele.

- ***Diverse Product Line- Long Lasting Air Casters***
- ***Custom Engineering Solutions***
- ***Experienced Team***
- ***Commitment to Quality & Product Longevity***
- ***Support and Training Services***



AIR CASTER TECHNOLOGY

Air caster technology utilizes a thin, pressurized film of air to lift and move heavy loads, distributing weight evenly and reducing friction, allowing for smooth, precise, and omnidirectional movement in a variety of applications.



ENGINEERING SUPPORT

Airfloat's engineering team leverages decades of expertise to design innovative, high-performance air caster systems tailored to meet specific operational needs.

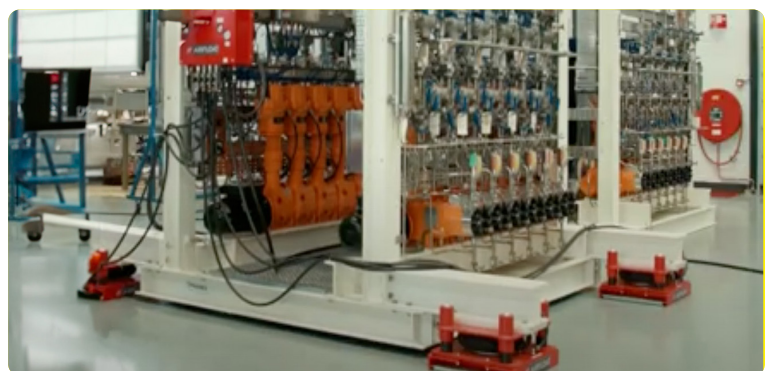


OUR PRODUCTS IN THE FIELD



AIR SKIDS MOVE 55,000 LBS

An airplane engine rebuild facility needed to relocate their coordinate measuring machine (CMM) to a new bay. They are extremely heavy (over 20,000 lbs.) and require careful handling. Airfloat Air Skids prove to be the quick ideal solution.



MANIFOLD ASSEMBLY LIFT GLIDES

A customer required a flexible method to move their subsea fluid power system of 10,000 pounds through their production line. Airfloat Lift Glides lift the frame off the ground and allows omnidirectional movement throughout the process.



AIR SKIDS AT CUSTOMER SITE

A work stand manufacturer sought an alternative to wheels for moving newly-built aerospace work stands. The stands measured approximately 14'x14' and weighed 10,000 lbs., and Airfloat Air Skids provide a seamless solution.



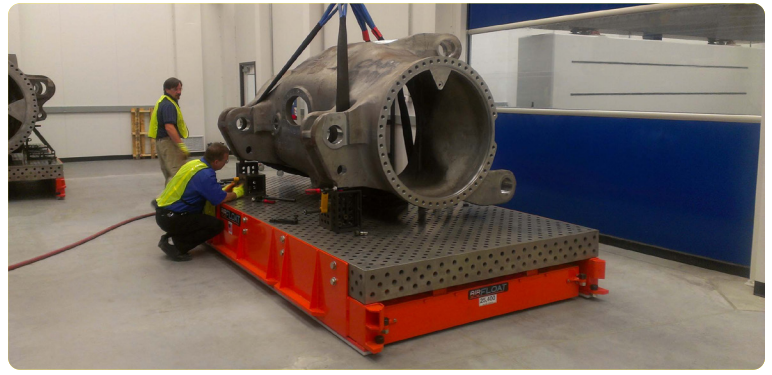
AIR SKIDS AT CUSTOMER SITE

A customer with a large open assembly area needed a way to move forestry vehicles through their production line. Airfloat Air Skids were chosen for their omnidirectional movement and to maintain a monument-free floor.



QUICK CHANGE BLEACHER MOVER

The United Center, needed a way to quickly relocate bleacher sections. Using a custom Air Bearing Platform with lift, operators are able to move 30,000 lb. bleachers by hand, allowing the arena to reconfigure for ice hockey, basketball, or other entertainment events.



VALVE CASTING CMM TRANSPORTER

A precision machining center required a system to move large castings to their coordinate measuring machine (CMM) quickly and easily. With the use of an Air Caster Transporter with integrated drives, our customer is able to move castings in excess of 25,000 lbs. with a single operator.



AIR SKIDS MOVING AIRPORT BOILER

At one of the busiest international airports in the world, an industrial boiler needed to be replaced. By installing a set of high capacity Airfloat Air Skids underneath the 80,000 lb. boiler stand, operators were able to manually move the boiler out of commission to the maintenance area safely and effectively.



LOCOMOTIVE CAB ASSEMBLY

A locomotive company needs to work on rail cars in an assembly line. Using an Air Bearing Transporter with drives and hydraulic lift, operators are able to drive the 20,000 lb. unit down the line and raise to working heights for better access.

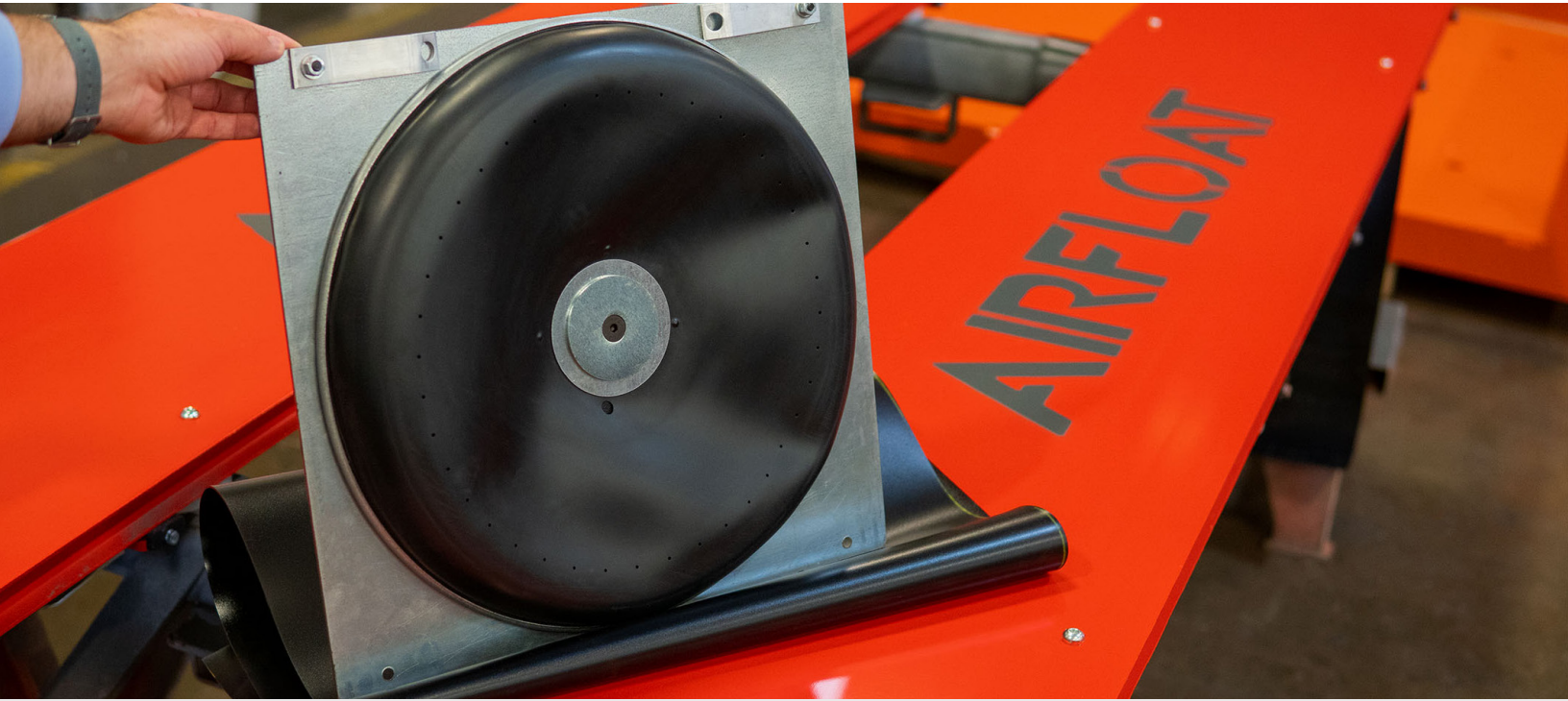


NUCLEAR REACTOR CONSTRUCTION

A nuclear power manufacturer needs to move and assemble superconductor modules for heat treatment. Using a custom Air Caster Transporter equipped with drives and electromechanical lift, the 250,000 lb. modules are easily positioned and raised.



AIRFLOAT AIR CASTER



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
305,000 LBS+



HEIGHT AS LOW AS
2.5 INCHES



OMNI-DIRECTIONAL
MOVEMENT

Air Casters, also known as Air Bearings, are a pneumatic component that provide an easy way to lift and move heavy loads by creating a cushion of air between the load and the floor. This allows for smooth, omni-directional movement, making it simple to position challenging loads. We use high-quality urethane diaphragms that are durable and resistant to wear, offering a cost-effective alternative to traditional wheeled systems.

- *Air Bearings Last for Decades in Ideal Environments*
- *Push Loads with a Single Operator, Compliant with Plant Standards*
- *Low Entry Cost*
- *Flexible For Changing Environments*
- *Safe and Stable When Deactivated*



6 AIR SKIDS FLOATING 80,000 LBS



AIR CASTER SLIDE-OUT TRAY

FLEXIBILITY WITH OMNI-DIRECTIONAL MOVEMENT

Omni-directional movement allows the load to be moved in any direction – forward, backward, sideways, or even diagonally – without needing to rotate or reposition the equipment. This allows you to move and position your load with precision.

EASY MAINTENANCE WITH SLIDE-OUT TRAYS

We've designed our Air Caster products for easy repair with slide-out trays to replace the Air Caster without removing the load - leading to minimal downtime and a quick turnaround to get back to moving heavy loads.



AIR CASTER FLOORING CONDITIONS

Ideal floor conditions for Air Caster use include smooth, level surfaces with minimal texture, as rough or uneven flooring requires higher airflow and can impact performance. Floors should be flat, with transitions smoothed for continuous operation. Protrusions like bolts should be flush to avoid damage, and slight slopes can affect maneuverability.



**LEARN MORE
ABOUT FLOOR
CONDITIONS**

AIR CASTERS AIR QUALITY

Air Casters perform at the highest level with clean dry air. The air doesn't need to be the highest quality of standards but moderately clean air. Moisture in the air supply can obstruct airflow causing wear on the caster system.

REDUCED POINT LOADING BY 90%¹

Air Casters distribute the load over a much larger area compared to wheels, dramatically reducing wear and tear on floors. They are an excellent solution for floors with lower load ratings.

66% LOWER DOWN HEIGHT¹

Air Caster products have a much lower height compared to wheels, keeping the load close to the ground and reducing the risk of tipping.

SAFE, SECURE LOAD CONTROL

The load can only be moved when the Air Casters are inflated. In an emergency, cutting the air supply causes the load to quickly and gently settle back down, ensuring it won't move.



1. Compared to standard wheeled systems with the same weight capacity



EXPANDABLE SYSTEM

Our Air Caster systems offer customizable, expandable configurations, available in different sized sets to tailor load-handling capacity and positioning flexibility. This modular design allows facilities to adjust to varying load requirements.



AIR PRESSURE

Air Casters generally operate at a standard pressure of 35 PSI with ideal floor conditions. However, as floor quality deteriorates (with roughness or unevenness), more air pressure is required to maintain lift and maneuverability.



AIRFLOAT AIR SKIDS



6 AIR SKIDS FLOATING 80,000 LBS AT O'HARE AIRPORT

**POWERED BY
COMPRESSED AIR**

**STANDARD CAPACITIES
315,000 LBS+**

**HEIGHT AS LOW AS
3 INCHES**

**OMNI-DIRECTIONAL
MOVEMENT**

Air Skids, also known as Air Skates, are designed to be placed under, or mounted to the bottom of a load. When the Air Casters are inflated, they create a cushion of air that lifts the load, allowing for smooth, near-frictionless movement. Based on the load size and capacity, they can be arranged in standard sets of four or six. Custom arrangements can be used for various applications. Standard sets are available in a portable box with everything needed for the job.

- *Add Skids for greater load flexibility*
- *Easy maintenance with slide-out trays*
- *Optional Rigging Kit, portable box with everything needed for the job*
- *Distribute the load over a larger area, reducing the risk of floor damage*



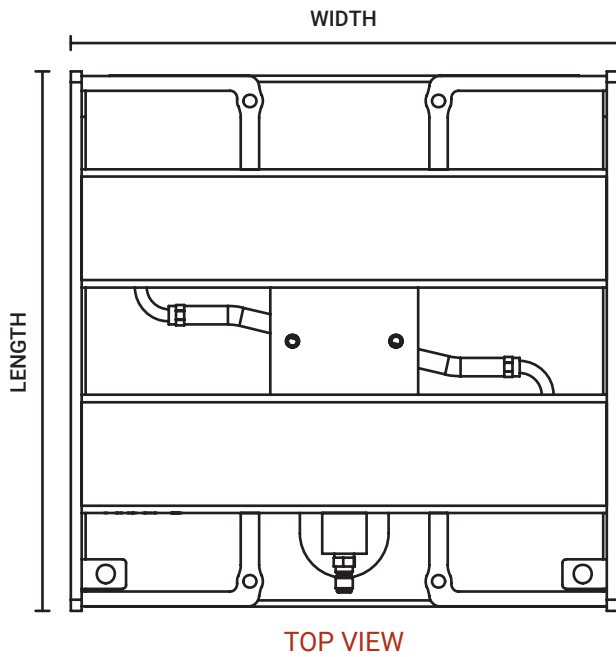
FLEXIBLE WITH A RANGE OF LOAD SIZES

Air Skids can be added or removed based on the load size, providing flexibility for higher capacities, complex shapes, and additional support. Talk with an Airfloat sales engineer to learn more.

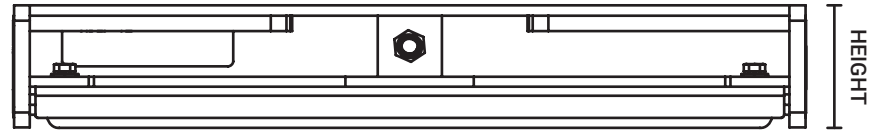
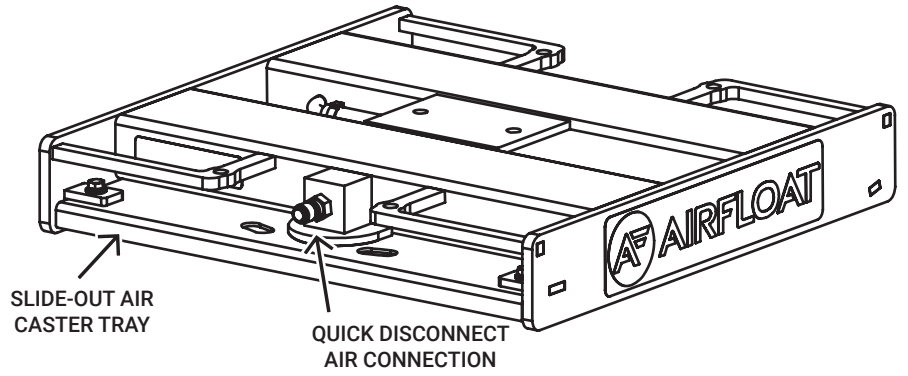


ALL-IN-ONE RIGGING KIT

Containing everything needed for the job, it secures the Air Skids and equipment in a portable box. It fits in most truck beds and includes custom inserts and forklift pockets for easy relocation. For more detail, see page 10.



ISOMETRIC VIEW



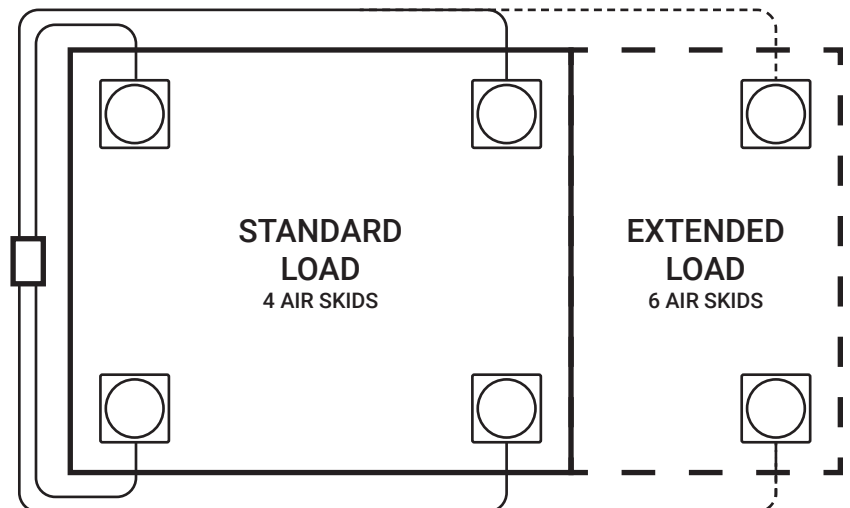
SET OF 4 & 6 AIR SKID SPECIFICATIONS

MODELS	SET OF 4 SKIDS		SET OF 6 SKIDS		HEIGHT DEFLATED ¹	SKID SIZE L x W	WEIGHT 1x SKID
	CAPACITY	AIR FLOW	CAPACITY	AIR FLOW			
AF01012 12" CASTER	12,000 lbs 5,443 kg	44 SCFM 1,246 L/m	18,000 lbs 8,165 kg	66 SCFM 1,869 L/m	3 in 76 mm	13.25 x 13.25 in 337 x 337 mm	26 lbs 12 kg
AF01017 17" CASTER	25,000 lbs 11,340 kg	64 SCFM 1,812 L/m	37,500 lbs 17,010 kg	96 SCFM 2,718 L/m	3 in 76 mm	18.25 x 18.25 in 470 x 464 mm	44 lbs 20 kg
AF01020 20" CASTER	33,000 lbs 14,969 kg	72 SCFM 2,039 L/m	49,500 lbs 22,453 kg	108 SCFM 3,058 L/m	3 in 76 mm	21.5 x 21.5 in 546 x 540 mm	58 lbs 26 kg
AF01024 24" CASTER	50,000 lbs 22,680 kg	88 SCFM 2,492 L/m	75,000 lbs 34,019 kg	132 SCFM 3,738 L/m	3.5 in 89 mm	25.75 x 25.25 in 654 x 641 mm	98 lbs 44 kg
AF01030 30" CASTER	85,000 lbs 38,555 kg	112 SCFM 3,171 L/m	127,500 lbs 57,833 kg	168 SCFM 4,757 L/m	3.5 in 89 mm	31.75 x 31.5 in 806 x 800 mm	138 lbs 63 kg
AF01036 36" CASTER	125,000 lbs 56,699 kg	140 SCFM 3,964 L/m	187,500 lbs 85,049 kg	210 SCFM 5,947 L/m	4 in 102 mm	37.75 x 37.5 in 959 x 953 mm	235 lbs 107 kg
AF01048 48" CASTER	210,000 lbs 95,254 kg	188 SCFM 5,324 L/m	315,000 lbs 142,882 kg	282 SCFM 7,985 L/m	5 in 127 mm	50 x 49.5 in 1,270 x 1257 mm	430 lbs 195 kg

1. Inflated height adds approximately 1/16th in (1.6mm) to 1.875 in (47.6mm), depending on model, load weight, and air flow.

INCLUDED WITH AIR SKID SET

PRODUCT	QUANTITY
AIR SKIDS	4 or 6
AIR SKID CONTROLLER	1
DEADMAN PENDANT	1
32FT SINGLE HOSE	4 or 6
SPARE AIR CASTER	1





AIR SKID: RIGGING KIT



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
75,000 LBS+



HEIGHT AS LOW AS
3 INCHES



OMNI-DIRECTIONAL
MOVEMENT

The Air Skid Rigging Kit includes everything needed to operate Air Skids, all neatly packed in a heavy duty box. This kit is perfect for quick, easy deployment at job sites and fits comfortably in most pickup truck beds. It features custom inserts for organization and forklift pockets for hassle-free loading and unloading. The kit also includes two spare air casters, allowing for quick replacement in case of damage.

- **Heavy-duty locking box**
- **Everything in one box needed for Air Skid moves**
- **Easily moved from job to job**
- **Space saving storage when not in use**
- **Provides entire Air Skid system, instead of individual skids**

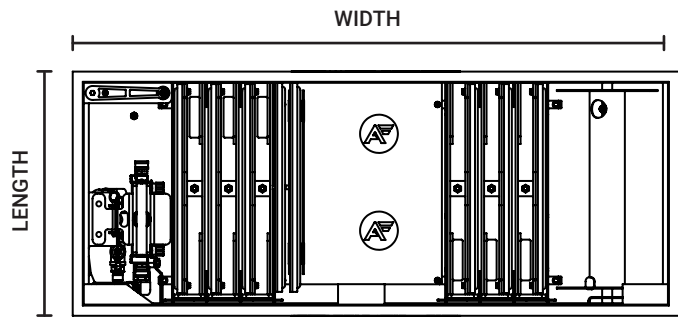


WHAT'S IN THE BOX?

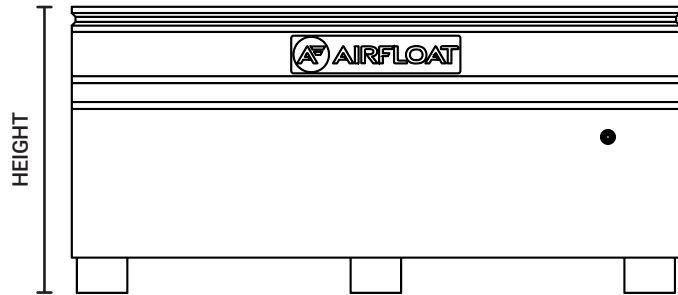
The Air Skid Rigging Kit includes 6 Air Skids, 2 spare Air Casters, a 6-port Air Skid controller with Deadman pendant, 1 supply hose for the controller, and 6 individual hoses for each Air Skid. All components are safely secured in a heavy-duty locking box.

STORAGE & TRANSPORTATION MADE EASY

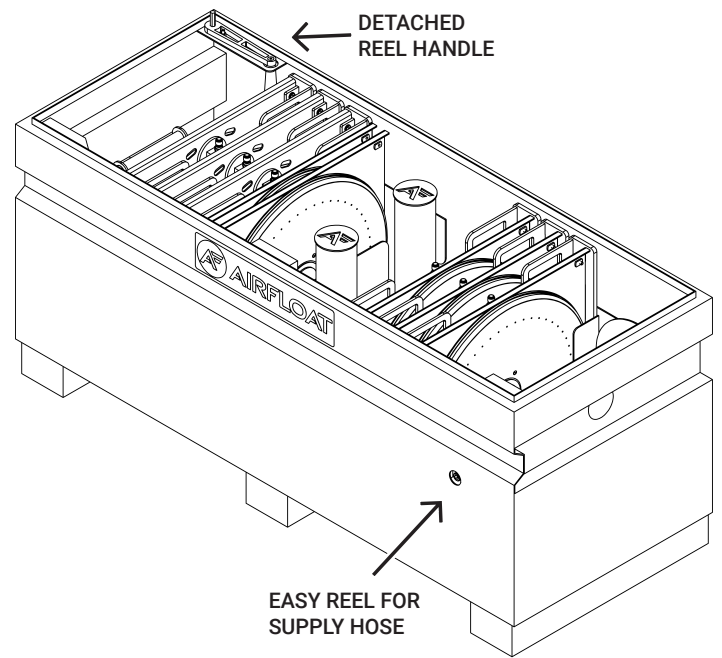
Everything needed for the job and more, the Rigging Kit makes Air Skid storage and transportation easy. The portable kit fits in most pickup truck beds and can be unloaded using its heavy-duty recessed side handles or a forklift.



TOP VIEW (WITHOUT LID)



FRONT VIEW



ISOMETRIC VIEW (WITHOUT LID)

SEE PAGES 11-12 FOR AIR SKID SPECIFICATIONS AND DRAWINGS

AIR SKID RIGGING KIT SPECIFICATIONS

MODELS	SET OF 4 SKIDS			SET OF 6 SKIDS			BOX SIZE L x W x H
	CAPACITY	AIR FLOW	WEIGHT	CAPACITY	AIR FLOW	WEIGHT	
STANDARD							
AF01112 12" CASTER	12,000 lbs 5,443 kg	44 SCFM 1,246 L/m	756 lbs 342 kg	18,000 lbs 8,165 kg	66 SCFM 1,869 L/m	826.5 lbs 374 kg	60 x 24 x 28.25 in 1,524 x 610 x 718 mm
AF01117 17" CASTER	25,000 lbs 11,340 kg	64 SCFM 1,812 L/m	855 lbs 387 kg	37,500 lbs 17,010 kg	96 SCFM 2,718 L/m	975 lbs 442 kg	60 x 24 x 28.25 in 1,524 x 610 x 718 mm
AF01120 20" CASTER	33,000 lbs 14,969 kg	72 SCFM 2,039 L/m	912 lbs 413 kg	49,500 lbs 22,453 kg	108 SCFM 3,058 L/m	1060.5 lbs 481 kg	60 x 24 x 28.25 in 1,524 x 610 x 718 mm
AF01124 24" CASTER	50,000 lbs 22,680 kg	88 SCFM 2,492 L/m	1200 lbs 544 kg	75,000 lbs 34,019 kg	132 SCFM 3,738 L/m	1420 lbs 644 kg	66 x 30 x 36 in 1,676 x 762 x 914 mm

1. Inflated height adds approximately 1/16th in (1.6mm) to 1.875 in (47.6mm), depending on model.

INCLUDED IN AIR SKID RIGGING KIT

PRODUCT	QUANTITY
AIR SKIDS	4 or 6
AIR SKID CONTROLLER	1
DEADMAN PENDANT	1
32FT SINGLE HOSE	4 or 6
SPARE AIR CASTER	2
85FT SUPPLY HOSE	1





AIR SKID: LIFT GLIDES



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
125,000 LBS+



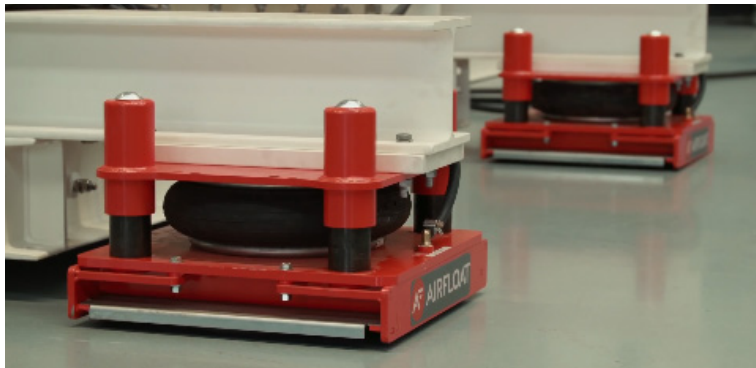
HEIGHT AS LOW AS
5.75 INCHES



OMNI-DIRECTIONAL
MOVEMENT

Air Skid Lift Glides are mounted onto a load or cart, keeping it slightly elevated off the floor. This provides flexibility for the load to rest on the floor or be moved on wheels. When the load needs to be moved or is too heavy for the wheels, lower the Lift Glides to the floor. This action inflates the Lift Glides and lifts the load and wheels off the ground. Then air bearings are inflated creating a cushion of air, allowing for easy, near-frictionless movement.

- *Fitted to new & existing tooling*
- *Easy maintenance with slide-out trays*
- *Flexibility to use wheeled cart for distance when unloaded, switch to Lift Glides when loaded for precise movement*
- *Distribute the load over a larger area, reducing the risk of floor damage*



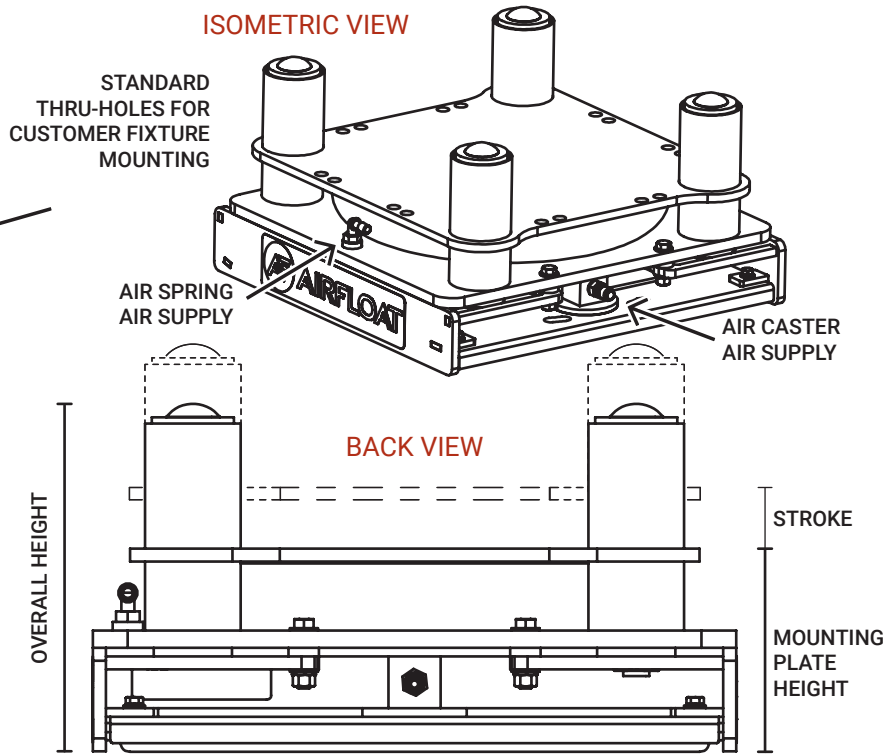
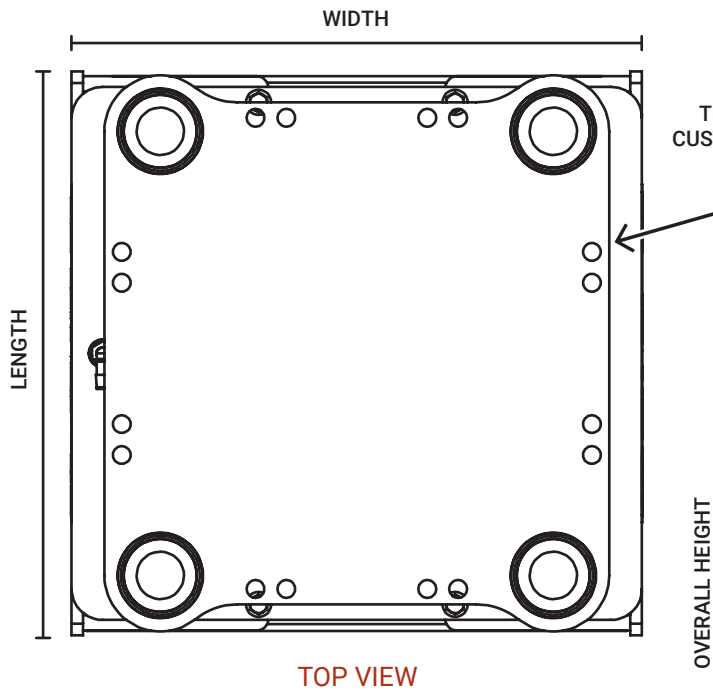
FITTED TO A LOAD OR FIXTURE

When fitted to a load or fixture, the Lift Glides can remain in the up position, keeping the load safe and secure on the floor. When needed, they lift and inflate for easy movement, then deflate to secure the load again.



FITTED TO A WHEELED CART

When fitted to a wheeled cart, they allow the cart to roll on its wheels when it's light or unloaded, which is useful when an air supply is unavailable or on rough flooring. When the load is too heavy, the Lift Glides can lift and inflate for easy movement.



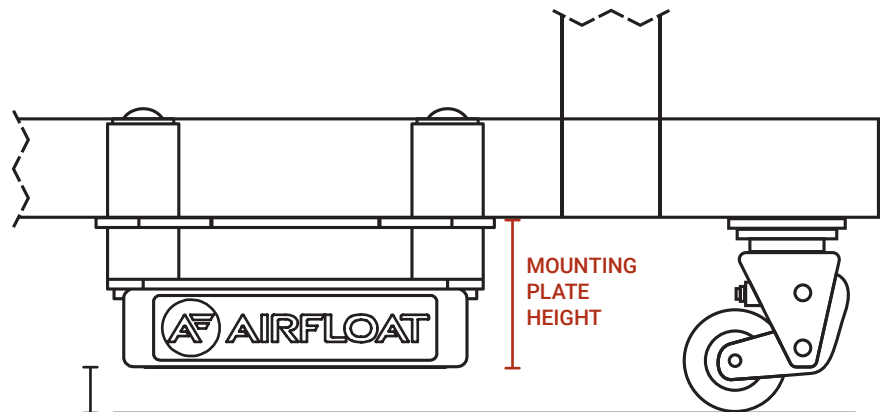
SET OF 4 AIR SKID LIFT GLIDES SPECIFICATIONS

MODELS	SET OF 4 GLIDES		STROKE LIFT	MOUNTING PLATE HEIGHT	SKID SIZE L x W x OVERALL HEIGHT ¹
	CAPACITY	AIR FLOW		DEFLATED ¹	
STANDARD					
AF06012-4 12" CASTER	10,000 lbs 4,536 kg	44 SCFM 1,246 L/m	2.88 in 73 mm	5.75 in 146 mm	15.28 x 14.3 x 9.94 in 388 x 363 x 252 mm
AF06017-4 17" CASTER	18,000 lbs 8,165 kg	64 SCFM 1,812 L/m	2.88 in 73 mm	5.88 in 149 mm	18.5 x 18.3 x 10.06 in 470 x 465 x 256 mm
AF06020-4 20" CASTER	32,000 lbs 14,515 kg	72 SCFM 2,039 L/m	2.88 in 73 mm	6 in 152 mm	21.5 x 21.3 x 12.06 in 546 x 541 x 306 mm
AF06024-4 24" CASTER	48,000 lbs 21,772 kg	88 SCFM 2,492 L/m	2.88 in 73 mm	7.13 in 181 mm	25.75 x 25.3 x 15.06 in 654 x 643 x 383 mm
AF06030-4 30" CASTER	85,000 lbs 38,555 kg	112 SCFM 3,172 L/m	2.88 in 73 mm	8.63 in 219 mm	31.75 x 31.5 x 15.9 in 806 x 800 x 404 mm
AF06036-4 36" CASTER	125,000 lbs 56,699 kg	140 SCFM 3,964 L/m	2.375 in 60 mm	9.13 in 232 mm	37.75 x 37.5 x 15.9 in 959 x 953 x 404 mm

1. Deflated height, inflated height adds approximately 1/16th in (1.6mm) to 1.5 in (38mm), depending on model.

INCLUDED WITH LIFT GLIDE SET

PRODUCT	QUANTITY
AIR SKIDS LIFT GLIDE	4
LIFT GLIDE CONTROLLER	1
100FT HOSE & CLAMPS	1
SPARE AIR CASTER	1
EXTRA 100FT HOSE	OPTIONAL
CONTROLLER WITH DEADMAN	OPTIONAL



INSTALL WITH 1/2" MINIMUM
CLEARANCE WITH FLOOR



AIRFLOAT PLANKS



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
306,000 LBS+



HEIGHT AS LOW AS
2.5 INCHES



OMNI-DIRECTIONAL
MOVEMENT

Air Planks are long, low-profile rectangular platforms placed under the load. When the Air Casters are inflated, they create a cushion of air that lifts the load, allowing for smooth, near-frictionless movement. Depending on the load's capacity and size, planks are used in sets of two or three to support and distribute the load evenly. They are available in lightweight aluminum or heavy-duty steel, with customizable lengths.

- **Lightweight aluminum or heavy-duty steel**
- **Add Planks for greater load flexibility**
- **Structural platform for load support**
- **Easy maintenance with slide-out trays**
- **Distribute the load over a larger area, reducing the risk of floor damage**
- **UHMW rest pads protect floor when deflated**



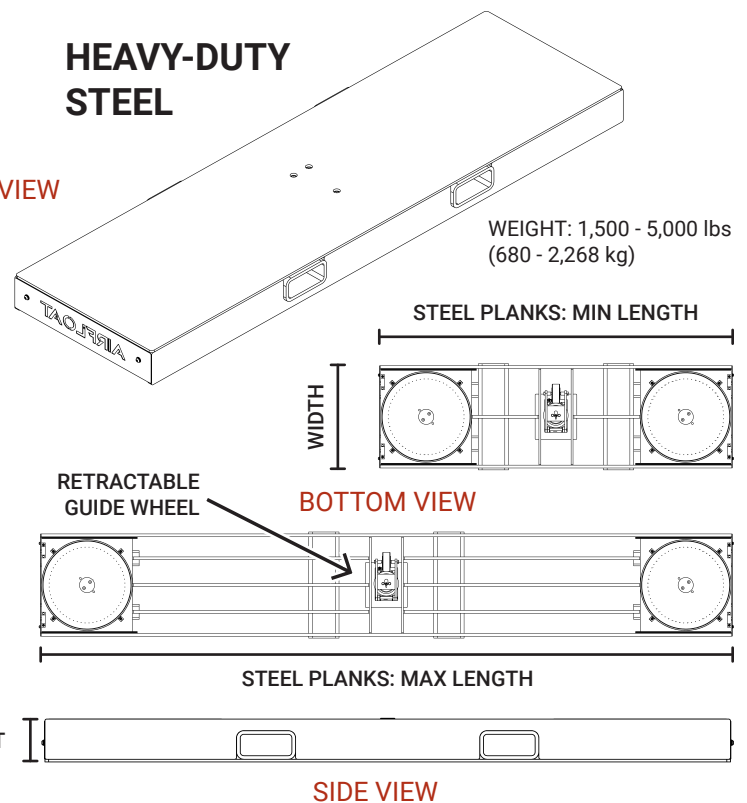
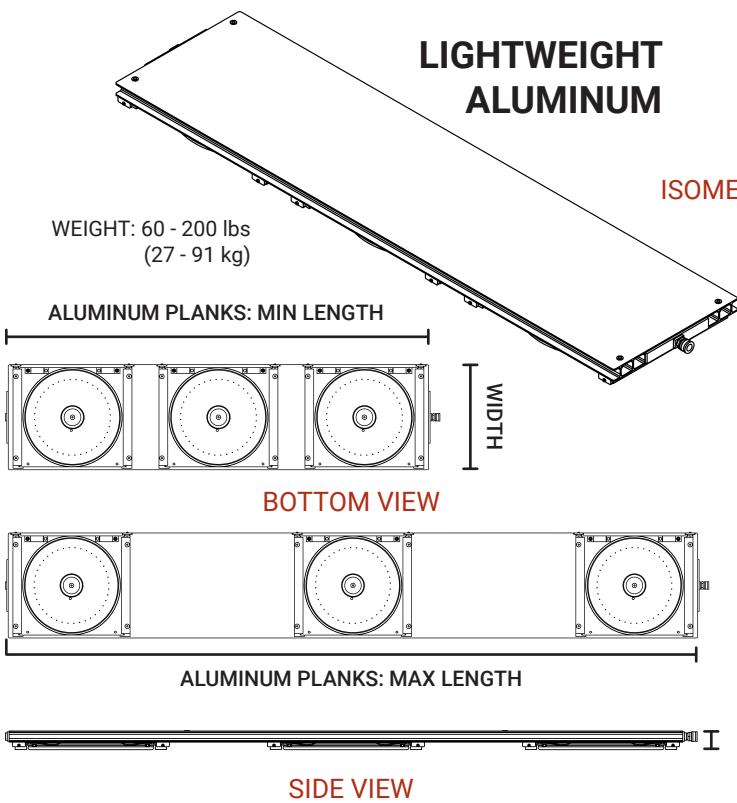
LIGHTWEIGHT ALUMINUM PLANKS

Constructed from extruded aluminum, our Aluminum Planks are a lightweight alternative to Steel Planks. Both are stackable for efficient storage, with the Aluminum Planks offering greater portability, as they can be carried by two people. (60 - 200 lbs)



HEAVY-DUTY STEEL PLANKS

Constructed from structural steel, these heavy-duty Steel Planks are highly durable and provide sturdy support for even the heaviest of loads. They are stackable for efficient storage and include fork pockets and a retractable guide wheel.



SET OF 2 & 3 AIR PLANKS SPECIFICATIONS

	MODELS	SET OF 2 PLANKS		SET OF 3 PLANKS		PLANK SIZES		
		STANDARD	CAPACITY	AIR FLOW	CAPACITY	AIR FLOW	LENGTH	WIDTH
ALUMINUM PLANKS	AF04012 12" CASTER	18,000 lbs 8,165 kg	66 SCFM 1,869 L/m	27,000 lbs 12,247 kg	99 SCFM 2,803 L/m	60 - 144 in 1,524 - 3,658 mm	13 in 330 mm	2.5 in 64 mm
	AF04017 17" CASTER	37,500 lbs 17,010 kg	96 SCFM 2,718 L/m	56,250 lbs 25,515 kg	144 SCFM 4,078 L/m	60 - 144 in 1,524 - 3,658 mm	18 in 457 mm	2.5 in 64 mm
	AF04020 20" CASTER	49,500 lbs 22,453 kg	108 SCFM 3,058 L/m	74,250 lbs 33,679 kg	162 SCFM 4,587 L/m	72 - 144 in 1,829 - 3,658 mm	21 in 533 mm	2.5 in 64 mm
	AF04024 24" CASTER	75,000 lbs 34,019 kg	164 SCFM 4,644 L/m	112,500 lbs 51,029 kg	246 SCFM 6,966 L/m	84 - 144 in 2,134 - 3,658 mm	24.75 in 629 mm	2.5 in 64 mm
STEEL PLANKS	AF04124 24" CASTER	47,000 lbs 21,319 kg	110 SCFM 3,115 L/m	70,500 lbs 31,978 kg	165 SCFM 4,672 L/m	96 - 156 in 2,438 - 3,962 mm	27 in 686 mm	6 in 152 mm
	AF04130 30" CASTER	81,500 lbs 36,968 kg	142 SCFM 4,021 L/m	122,250 lbs 55,452 kg	213 SCFM 6,031 L/m	108 - 156 in 2,743 - 3,962 mm	33 in 838 mm	6 in 152 mm
	AF04136 36" CASTER	121,000 lbs 54,885 kg	172 SCFM 4,870 L/m	181,500 lbs 82,327 kg	258 SCFM 7,306 L/m	120 - 168 in 3,048 - 4,267 mm	39 in 991 mm	6 in 152 mm
	AF04148 48" CASTER	204,000 lbs 92,533 kg	236 SCFM 6,683 L/m	306,000 lbs 138,799 kg	354 SCFM 10,024 L/m	144 - 180 in 3,658 - 4,572 mm	51 in 1,295 mm	6.5 in 165 mm

1. Deflated height, inflated height adds approximately 1/16th in (1.6mm) to 1.875 in (47.6mm), depending on model.

INCLUDED WITH AIR PLANK SET

PRODUCT	QUANTITY	PRODUCT	QUANTITY
AIR PLANKS	2 or 3	32FT SINGLE HOSE	2 or 3
AIR PLANK CONTROLLER	1	SPARE AIR CASTER	1
DEADMAN PENDANT	1		



AIRFLOAT UTILITY PLATFORM



 **POWERED BY
COMPRESSED AIR**

 **CAPACITIES UP TO
12,000 LBS**

 **HEIGHT AS LOW AS
3 INCHES**

 **CUSTOMIZABLE
PLATFORM**

Utility Platforms are customizable, low-profile platforms operated by a single operator. These walk-behind platforms use Air Casters that, when inflated, create a cushion of air, lifting the load and allowing for smooth, near-frictionless movement. Utility Platforms provide structural support and can be tailored to meet specific load requirements. They can also be paired with lift tables for height variations and equipped with chocks for securing rolls.

- **Structural platform for load support**
- **Optional chocks for securing rolls**
- **Retractable guide wheel for straight line movement**
- **UHMW rest pads protect floor when deflated**
- **Distribute the load over a larger area, reducing the risk of floor damage**



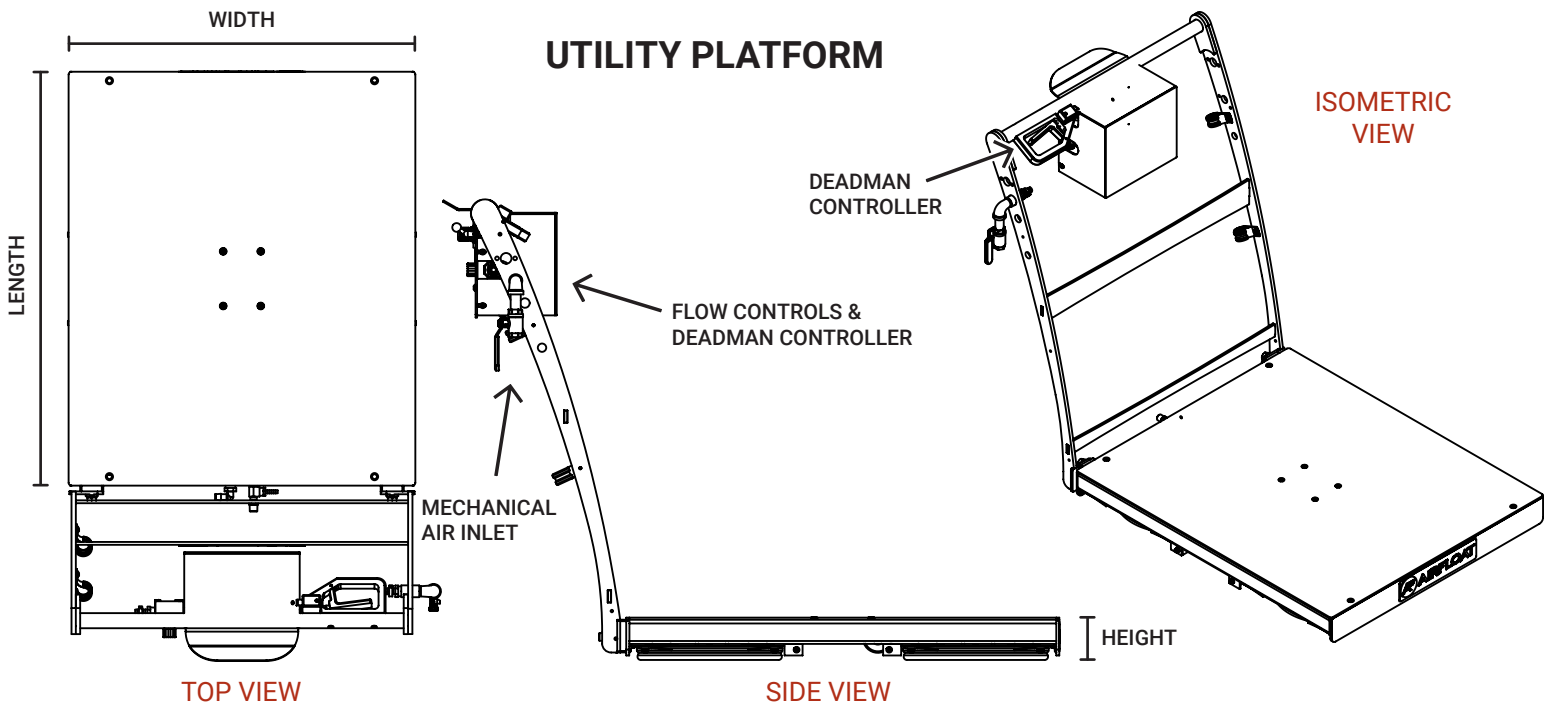
INTEGRATE ERGONOMIC EQUIPMENT

Utility Platforms can be combined with other ergonomic equipment, such as lift tables. Lift tables can be adjusted to the optimal height for loading and unloading, while the Utility Platform makes it easy to move and position the load.



MOVE ROLLS WITH UTILITY PLATFORMS

Utility Platforms offer excellent structural support, making them ideal for rolls, with chocks for secure placement and an extended handle to accommodate larger rolls. Additionally, they can be paired with lift tables for added versatility.

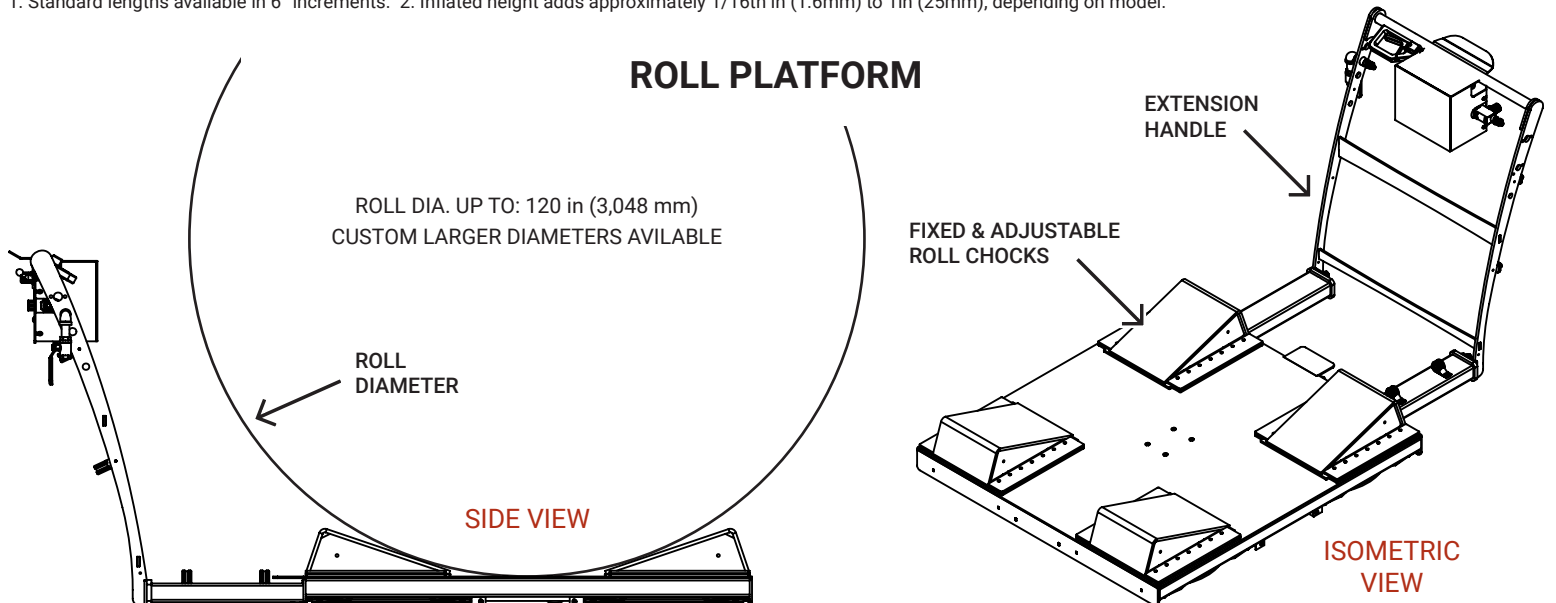


UTILITY PLATFORM SPECIFICATIONS

MODELS	CAPACITY	AIR FLOW	LENGTH	WIDTH	HEIGHT
STANDARD	TOTAL	AIR FLOW	MIN - MAX ¹		DEFLATED ²
AF020-30 12" CASTER	8,000 lbs 3,629 kg	44 SCFM 1,246 L/m	30 - 60 in 762 - 1,524 mm	30 in 762 mm	3 in 76 mm
AF020-36 12" CASTER	8,000 lbs 3,629 kg	44 SCFM 1,246 L/m	36 - 72 in 914 - 1,829 mm	36 in 914 mm	3 in 76 mm
AF020-42 17" CASTER	12,000 lbs 5,443 kg	64 SCFM 1,812 L/m	42 - 84 in 1,067 - 2,134 mm	42 in 1,067 mm	3 in 76 mm
AF020-48 17" CASTER	12,000 lbs 5,443 kg	64 SCFM 1,812 L/m	48 - 96 in 1,219 - 2,438 mm	48 in 1,219 mm	3 in 76 mm
AF020-60 17" CASTER	12,000 lbs 5,443 kg	64 SCFM 1,812 L/m	60 - 120 in 1,524 - 3,048 mm	60 in 1,524 mm	3 in 76 mm

CUSTOM PLATFORM SIZES, CAPACITIES, AND CONFIGURATIONS AVAILABLE

1. Standard lengths available in 6" increments. 2. Inflated height adds approximately 1/16th in (1.6mm) to 1 in (25mm), depending on model.





AIRFLOAT PLATFORM



AIR CASTER PLATFORM WITH INTEGRATED LIFT



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
120,000 LBS+



HEIGHT AS LOW AS
5 INCHES



CUSTOMIZABLE
PLATFORM

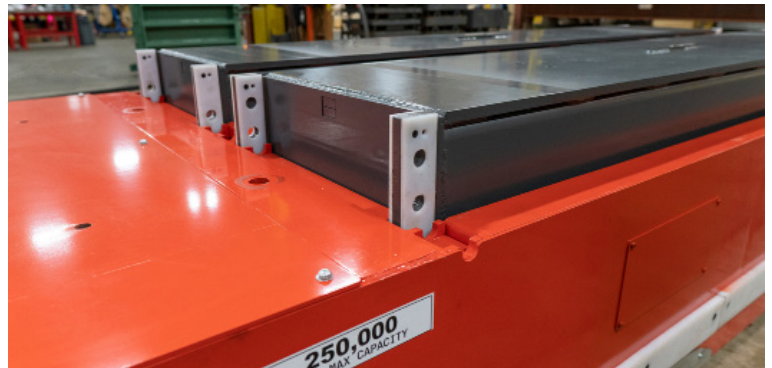
Air Platforms are a two-part system consisting of a load-carrying platform and a push-pull tugger, allowing a single operator to move heavy loads with ease. The platform provides structural support and can be customized to meet specific load requirements. Loads can be placed directly on the platform or, with a secondary lift, the Air Platform can slide under the load or pallet, lifting it off the floor for transport.

- **Walk-behind pneumatic push-pull tugger**
- **Structural platform for load support**
- **Retractable guide wheel offered for straight line movement**
- **Easy maintenance with slide-out trays**
- **Optional lift deck for pallet raising**



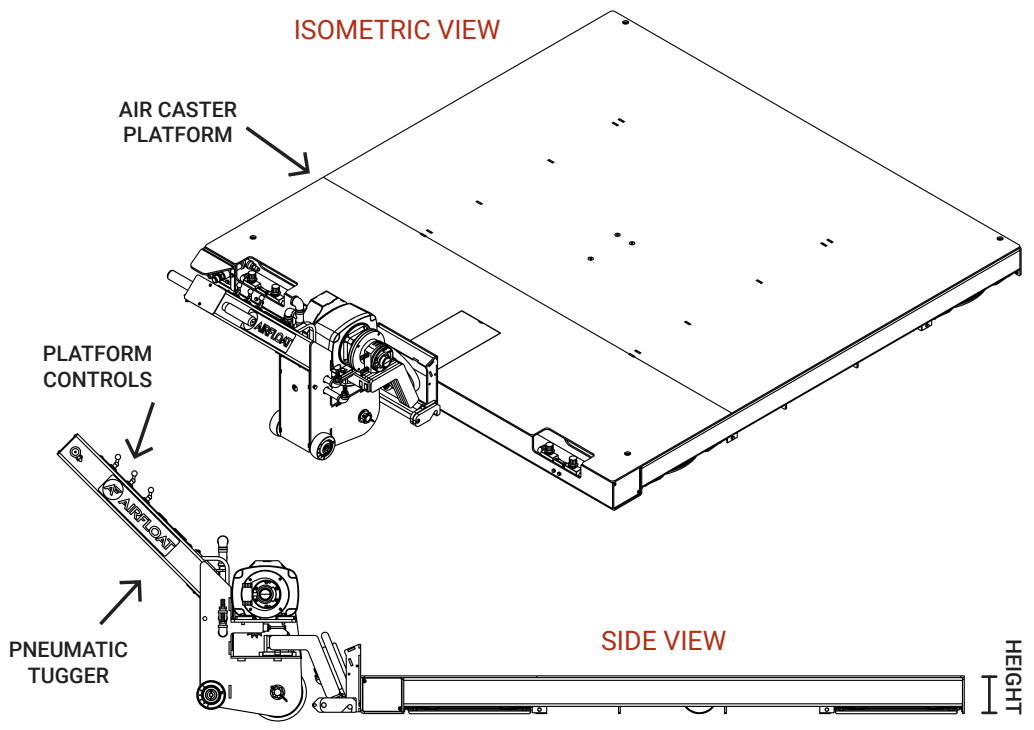
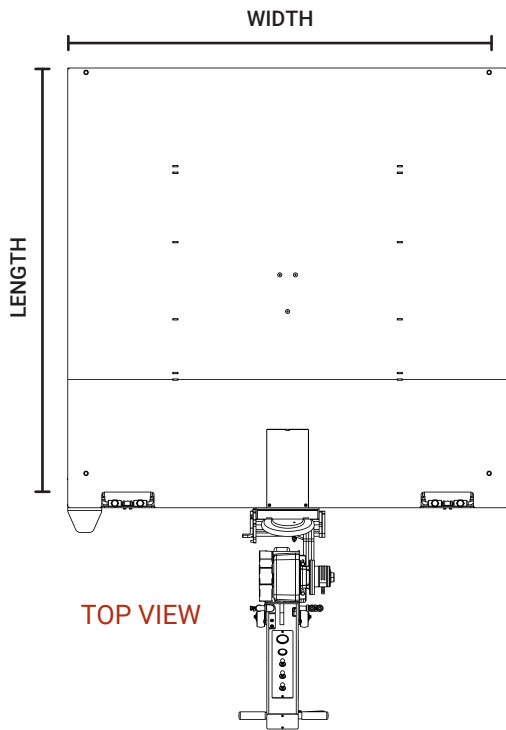
PNEUMATIC PUSH-PULL TUGGER

The pneumatic tugger hitches onto the platform and, using quick connects, supplies air to the platform, with all controls located on the tugger. It can push and pull loads, offering variable control for precise movements.



EFFICIENT LOADING WITH INTEGRATED LIFT

Placing the load directly onto the platform is possible, but a secondary lift is often used. Loads are placed on large pallets, allowing the Air Platform to be driven underneath, lifted off the floor, and moved with the tugger.

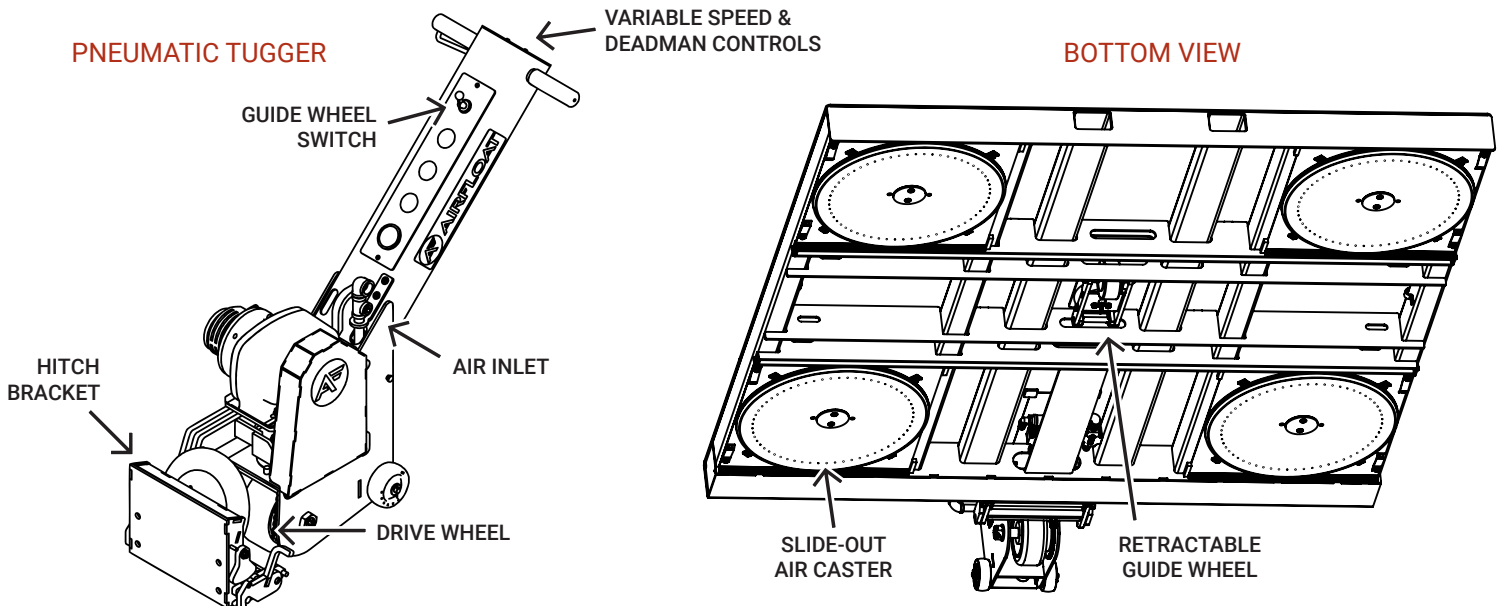


AIR CASTER PLATFORM SPECIFICATIONS

MODELS	CAPACITY	AIR FLOW	LENGTH	WIDTH	HEIGHT
STANDARD	TOTAL	AIR FLOW	MIN - MAX ¹	MIN - MAX ¹	DEFLATED ²
AF030 17" CASTER	22,000 lbs 9,979 kg	48 SCFM 1,359 L/m	48 - 144 in 1,219 - 3,658 mm	48 - 84 in 1,219 - 2,134 mm	5 in 127 mm
AF031 24" CASTER	45,000 lbs 20,412 kg	66 SCFM 1,869 L/m	60 - 144 in 1,524 - 3,658 mm	60 - 96 in 1,524 - 2,438 mm	5 in 127 mm
AF032 30" CASTER	80,000 lbs 36,287 kg	85 SCFM 2,407 L/m	76 - 156 in 1,930 - 3,962 mm	76 - 108 in 1,930 - 2,743 mm	7 in 178 mm
AF033 36" CASTER	120,000 lbs 54,431 kg	100 SCFM 2,832 L/m	86 - 210 in 2,184 - 5,334 mm	86 - 132 in 2,184 - 3,353 mm	7 in 178 mm

CUSTOM PLATFORM SIZES, CAPACITIES, AND CONFIGURATIONS AVAILABLE

1. Standard lengths available in 6" increments. 2. Inflated height adds approximately 1/16th in (1.6mm) to 1.5 in (38mm), depending on model.





AIRFLOAT TRANSPORTER



POWERED BY COMPRESSED AIR

STANDARD CAPACITIES 200,000 LBS+

HEIGHT AS LOW AS 10 INCHES

CUSTOMIZABLE PLATFORM

Air Transporters are an all-in-one system consisting of a load-carrying platform with an integrated drive system. Unlike the Air Platform, which requires a tugger, the Air Transporter uses a tethered hand pendant. The platform provides structural support to the load and can be customized to specific load requirements. The load can be placed directly on the platform or secondary lift, can slide under the load or pallet, lifting it off the floor for transport.

- *Integrated drive with pendant controller*
- *Structural platform for load support*
- *Easy maintenance with slide-out trays*
- *Distribute the load over a larger area, reducing the risk of floor damage*



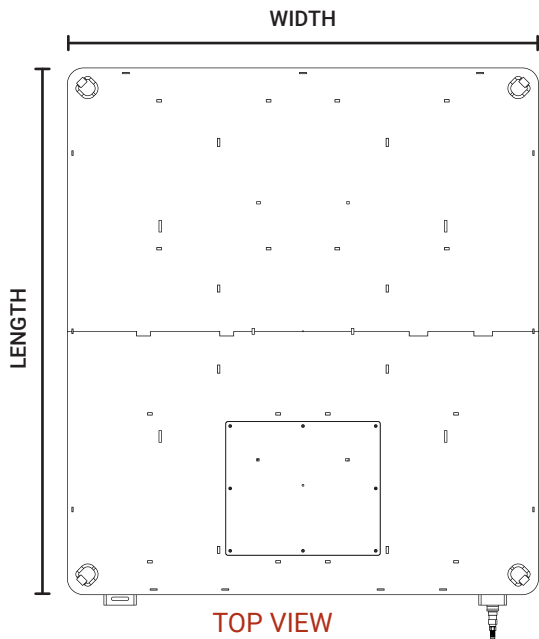
INTEGRATED DRIVES AND HAND PENDANT

Depending on the setup, one or more pneumatic drives are integrated into the platform and controlled by a tethered hand pendant, providing the operator with greater flexibility in positioning. If included, it also controls the secondary lift.

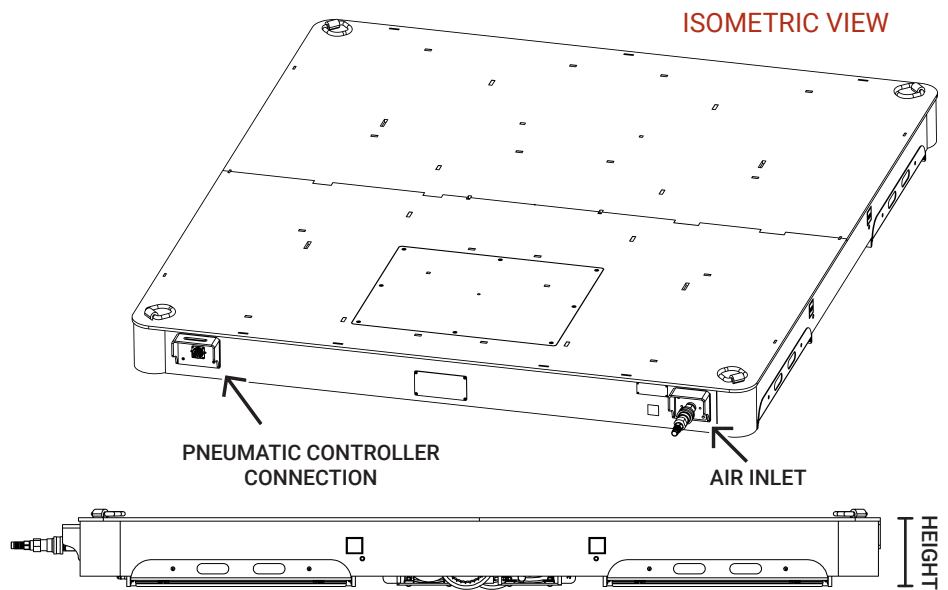


EFFICIENT LOADING WITH SECONDARY LIFT

Placing the load directly onto the platform is possible, but a secondary lift is often included. Loads are placed on large pallets, allowing the Air Platform to be driven underneath, lifted off the floor, and moved with the controller.



TOP VIEW



SIDE VIEW

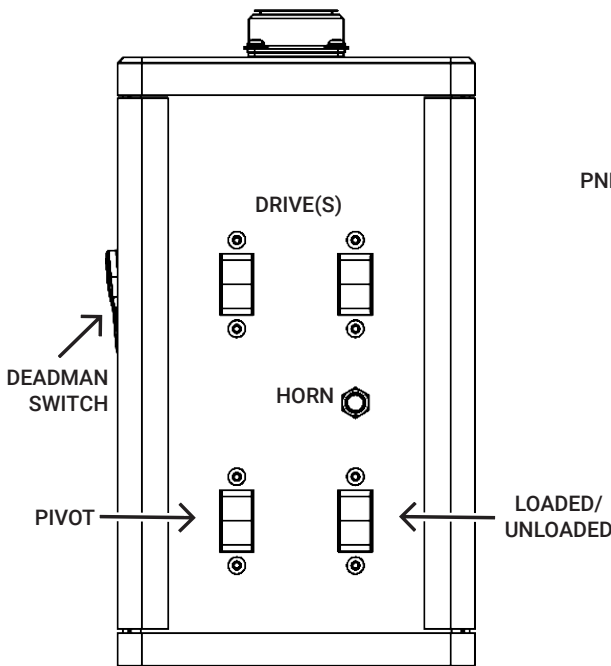
AIR CASTER TRANSPORTER SPECIFICATIONS

MODELS	CAPACITY	AIR FLOW	LENGTH	WIDTH	HEIGHT
STANDARD	TOTAL	AIR FLOW	MIN - MAX ¹	MIN - MAX ¹	DEFLATED ²
AF070 24" CASTER	45,000 lbs 20,412 kg	66 SCFM 1,869 L/m	96 - 196 in 2,438 - 4,978 mm	96 - 144 in 2,438 - 3,658 mm	10 in 254 mm
AF071 30" CASTER	80,000 lbs 36,287 kg	85 SCFM 2,407 L/m	96 - 196 in 2,438 - 4,978 mm	96 - 144 in 2,438 - 3,658 mm	10 in 254 mm
AF072 36" CASTER	120,000 lbs 54,431 kg	100 SCFM 2,832 L/m	144 - 196 in 3,658 - 4,978 mm	120 - 196 in 3,048 - 4,978 mm	10 in 254 mm
AF073 48" CASTER	200,000 lbs 90,718 kg	140 SCFM 3,964 L/m	144 - 196 in 3,658 - 4,978 mm	144 - 196 in 3,658 - 4,978 mm	10 in 254 mm

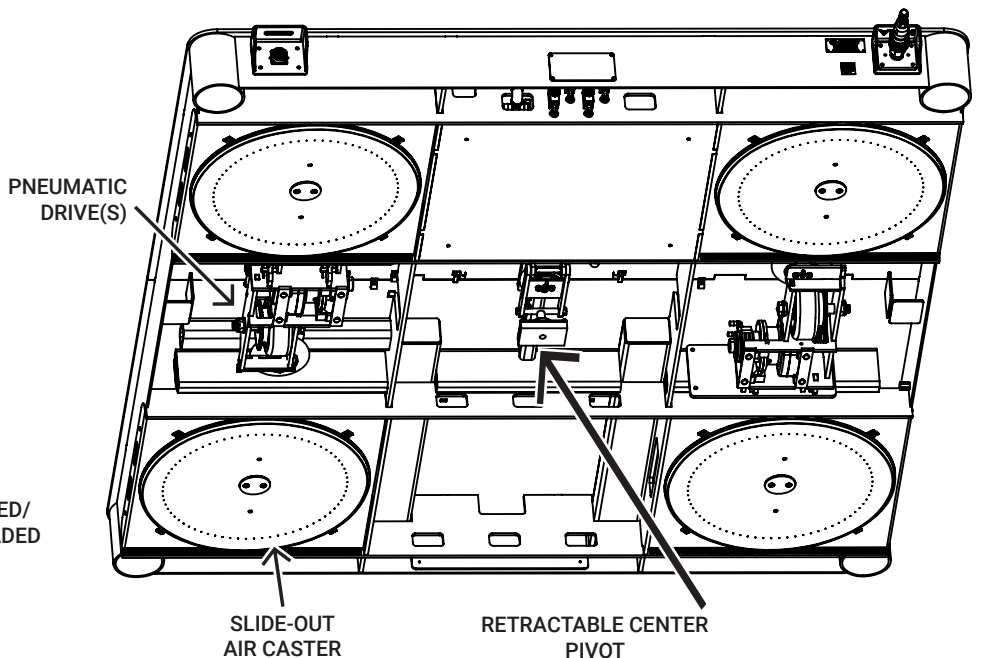
CUSTOM PLATFORM SIZES, CAPACITIES, AND CONFIGURATIONS AVAILABLE

1. Standard lengths available in 6" increments. 2. Inflated height adds approximately 0.6875 in (17.5mm) to 1.875 in (47.6mm), depending on model.

PNEUMATIC TUGGER



BOTTOM VIEW





AIRFLOAT ROLL MOVER



POWERED BY
COMPRESSED AIR



STANDARD CAPACITIES
12,000 LBS



CUSTOMIZABLE
FORKS



OMNI-DIRECTIONAL
MOVEMENT

Roll Movers are U-shaped platforms designed to lift and transport heavy rolls. They slide under the roll from both sides, cradling it securely. A secondary lift raises the roll directly from the floor, allowing it to be moved. The roll is lifted by Air Casters that, when inflated, create a cushion of air for smooth, near-frictionless movement. Available in both fixed and adjustable models, they accommodate a variety of roll sizes.

- *Roll diameters up to 96 inches*
- *Quickly lift roll right off the floor*
- *Fixed and adjustable roll options*
- *Easy maintenance with slide-out trays*
- *Distribute the load over a larger area, reducing the risk of floor damage*



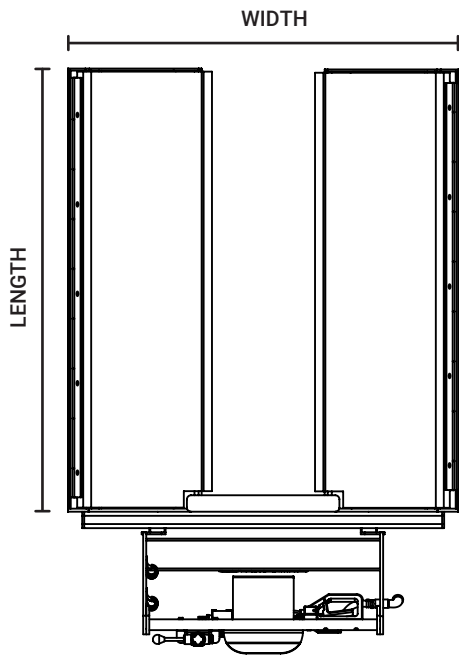
FIXED AIR CASTER ROLL MOVER

The Fixed Air Caster Roll Mover has a “fixed” design meaning the cradle remains stationary without adjustable positioning or rotation, ensuring even the heaviest rolls are securely moved and positioned.

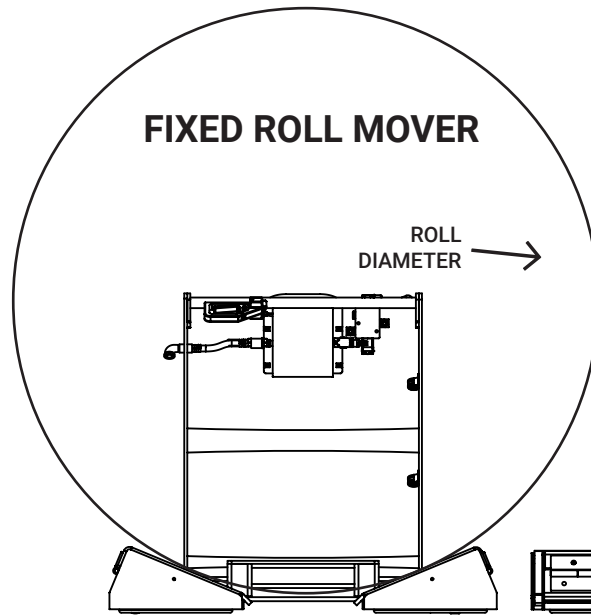


ADJUSTABLE AIR CASTER ROLL MOVER

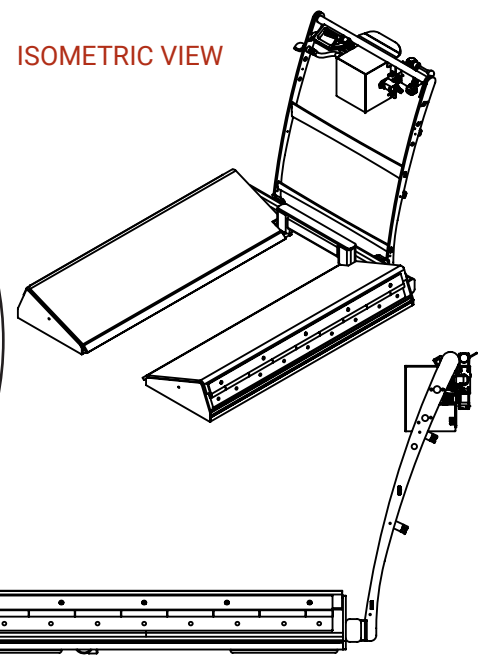
The Adjustable Air Caster Roll Mover is designed for flexible handling, featuring a cradle that can be tilted, rotated, or adjusted to move rolls of varying sizes for roll positioning and transport.



TOP VIEW



FRONT VIEW



ISOMETRIC VIEW



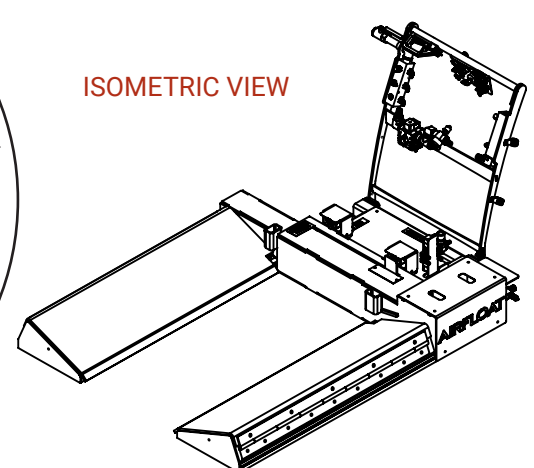
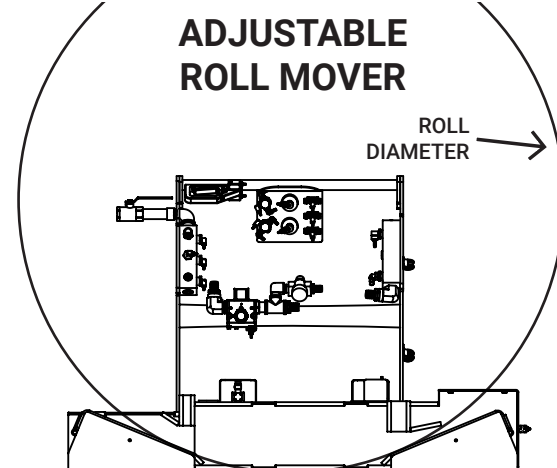
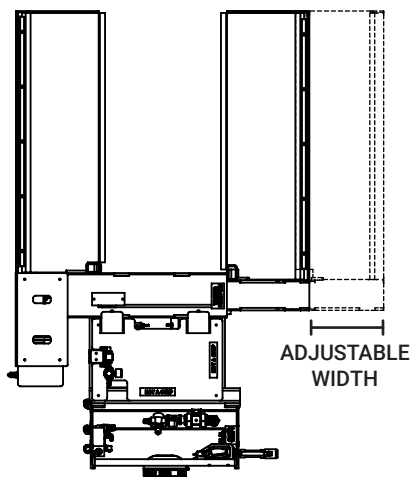
SIDE VIEW

AIR ROLL MOVER SPECIFICATIONS

MODELS	CAPACITY	FIXED CRADLE		ADJ. CRADLE		CRADLE SIZE		STROKE
		DIAMETER	AIR FLOW	DIAMETER	AIR FLOW	LENGTH	WIDTH	
STANDARD	TOTAL							LIFT ¹
AF08X-3642 10" CASTER	5,000 lbs 2,268 kg	36 in 914 mm	48 SCFM 1,359 L/m	24 - 36 in 610 - 914 mm	80 SCFM 2,265 L/m	36 in 914 mm	36 in 914 mm	1 in 25 mm
AF08X-4854 12" CASTER	5,000 lbs 2,268 kg	48 in 1,219 mm	54 SCFM 1,529 L/m	36 - 48 in 914 - 1,219 mm	100 SCFM 2,832 L/m	48 in 1,219 mm	48 in 1,219 mm	1 in 25 mm
AF08X-6054 12" CASTER	5,000 lbs 2,268 kg	60 in 1,524 mm	54 SCFM 1,529 L/m	48 - 60 in 1,219 - 1,524 mm	100 SCFM 2,832 L/m	48 in 1,219 mm	48 in 1,219 mm	1.5 in 38 mm
AF08X-7272 14" CASTER	5,000 lbs 2,268 kg	72 in 1,829 mm	62 SCFM 1,756 L/m	60 - 72 in 1,524 - 1,829 mm	120 SCFM 3,398 L/m	60 in 1,524 mm	60 in 1,524 mm	1.5 in 38 mm
AF08X-8472 14" CASTER	5,000 lbs 2,268 kg	84 in 2,134 mm	62 SCFM 1,756 L/m	72 - 84 in 1,829 - 2,134 mm	120 SCFM 3,398 L/m	60 in 1,524 mm	60 in 1,524 mm	2 in 51 mm
AF08X-9696 14" CASTER	5,000 lbs 2,268 kg	96 in 2,438 mm	62 SCFM 1,756 L/m	84 - 96 in 2,134 - 2,438 mm	120 SCFM 3,398 L/m	72 in 1,829 mm	72 in 1,829 mm	2 in 51 mm

CUSTOM PLATFORM SIZES, CAPACITIES, AND CONFIGURATIONS AVAILABLE

1. Standard lengths available in 6" increments. 2. Inflated height adds approximately 0.6875 in (17.5mm) to 1.875 in (47.6mm), depending on model.



ISOMETRIC VIEW

Full Service Solution

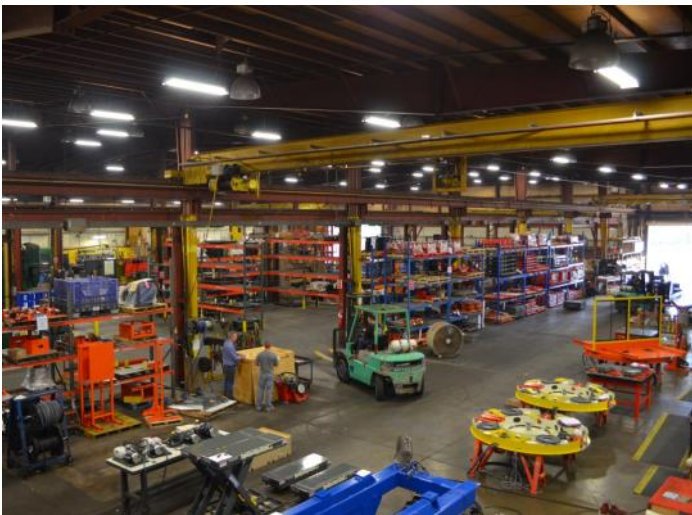


65,000 sq. ft. Manufacturing facility in Decatur, Illinois

State of the Art Facility

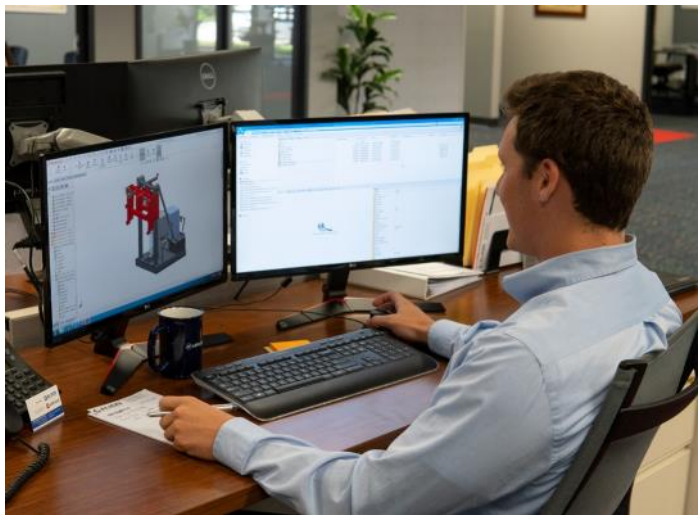
Our equipment is built in our state of the art facility in Decatur, IL. with 65,000 sq. ft. of manufacturing space, we have heavily invested into having excellent equipment and processes to meet our lead times for our customers.

- **SolidWorks Design Software and Product Data Management System**
- **FEA Validation**
- **92.3% 5 Year Average On-Time-Delivery**
- **In-House Design, Reduction, Fabrication, Assembly, Machining and Painting**



65,000 Sq. Ft. Facility

Scale of manufacturing gives us the flexibility to work on multiple projects concurrently.

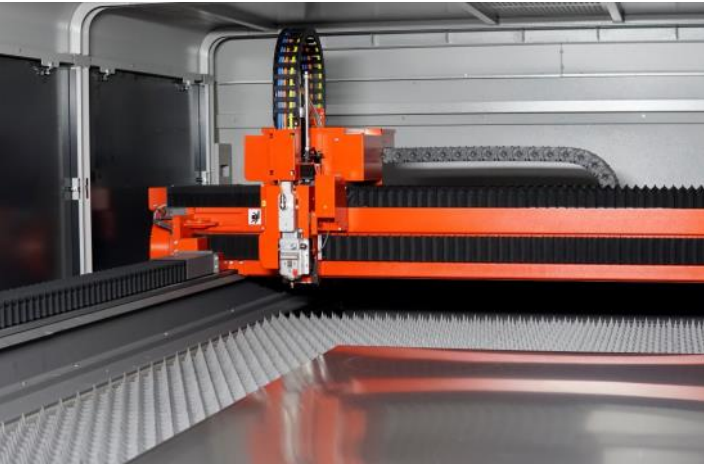


Solidworks & PDM

Our Engineering team designs all of our products in SolidWorks PDM, and test them using FEA analysis before fabrication.

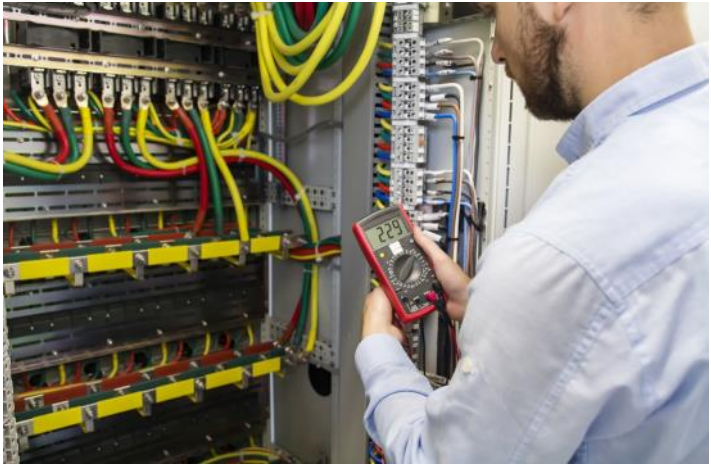


Bystronic BySprint Fiber Laser



Fiber Laser

State of the art fiber laser system allows us to precisely cut parts in our facility.



Panel Building

In-house controls division allows us to reduce lead times with in house programming.



Fabrication

All of our steel frame fabrication is done in house with notched & tabbed construction.



Machining

In house machining reduces lead times as we don't need to outsource specialty parts.

Custom Engineering



Automated Guided Vehicle with Retractable Air Casters for Aerospace Manufacturer.

Align Production Systems offers a whole suite of custom engineering & robotics integrations solutions. Our engineering & manufacturing teams will work from start to finish to create the perfect solution to your manufacturing or material handling need.

- **End-to-End Solution Provider**
- **In-House Engineering Team**
- **State of the Art Facility**



Locomotive Air Caster Shuttle

Air Caster Manufacturing Bay Shuttle System with deck rails for Locomotive Manufacturer.



CMM Air Caster Transporter

Guided Air Caster Transporter with CMM Pallet System designed for Mining Truck Manufacturer.



Robotic Workcell Turntable System for Automotive Components Manufacturer.



Two-Axis Positioning Cart

Battery Powered Vehicle with Two-Axis Positioning System for Con-Ag Equipment Manufacturer.



Quick Mold & Die Changer

Custom engineered Mold & Die Changers are designed to maximize safety and efficiency.



Battery Transporter

All-electric battery powered transporters are built to your capacity, size, and stroke requirements.



Air Caster Transporter

Air Caster Transporter with RF Controls, Integrated Hose Reels and 200 Ton Capacity.



Air Caster Transporter with a three stage hydraulic telescoping lift.



Platform with Radioactive Shield

Air Caster Platform built with radioactive shielding for transporting hazardous materials.



Starliner Space Capsule

NASA capsule weighing 30,000 lbs. being moved on Airfloat Air Skids.



Mining Truck Assembly

Mining Truck OEM transformed their single rail to a multi-rail assembly line with a Flush Floor Turntable.

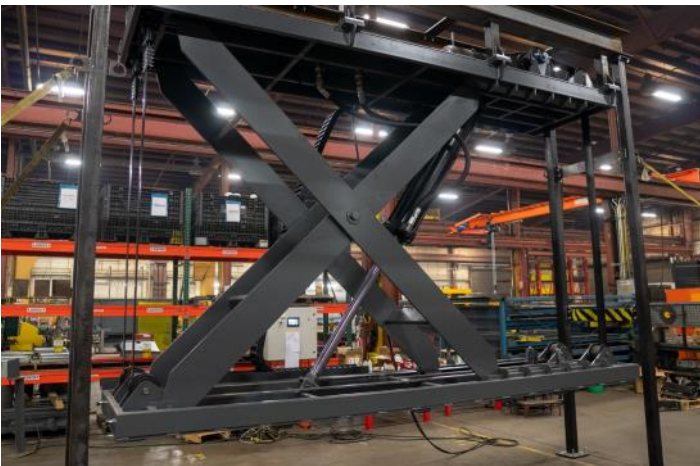


Glass Rack Handling

Robotic Turntables interface with glass handling robots to increase production efficiency.



Locomotive Assembly Line using a custom Air Caster Transporter with a 300,000 lbs. capacity.



Inverted Belt Lift

10,000 lbs. capacity Inverted ceiling belt lift with a secondary safety hydraulic lock.



Chain Conveyor System

Custom system with integrated lifts, roll-overs, over head lifting, and automated sorting.



Wheeled Cart with Lift Glides

Custom wheeled cart that utilizes Lift Glides for heavier loads and uses Hedin Battery Tugger.



Hydraulic Upender with Tooling

Hydraulic Upender with custom fixture for Con-Ag equipment manufacturer.

Battery Powered Tugger



Move up to 100,000 lbs. using a single operator with The Ox Power Tugger. The Power Tugger enables a single operator to move and position heavy weight pallets and loads on wheels, and can comfortably move up to 120 feet-per-minute. Designed to lift the front end of non-motorized trailers or pallets, distributing the load to the wheels on the trailer.

- Capacities up to 100,000 lbs.
- Low hitch point of 6"
- Charge with 120v wall outlet
- On board battery recharge system
- Optional 100,000 lbs. Tugger Cart

Available Models



30,000 lbs. Capacity

APS030-1200 features a hitch point capacity of 6,750 lbs, 45 minute battery life, 5,500 ft-lbs. of torque, and movement speeds of 120 fpm.



100,000 lbs. Capacity

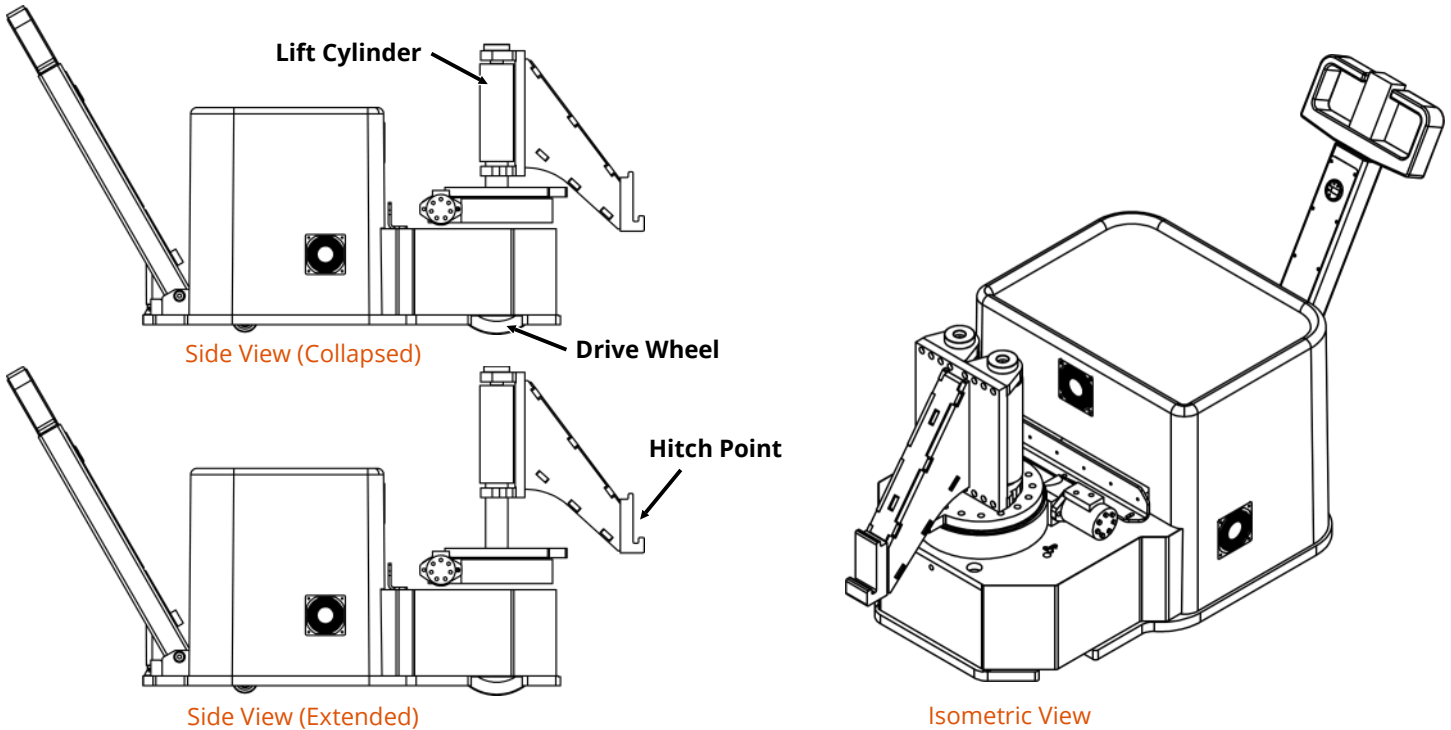
APS030-2200 features a hitch point capacity of 12,000 lbs, with a 105 minute battery life, 23,500 ft-lbs. of torque, and movement speeds of 100 fpm.



Custom Cart

We offer custom designed carts that work in tandem with our Battery Powered Tuggers, allowing for our Tuggers to be used for a wide variety of solutions.

Battery Powered Tugger



Battery Powered Tugger

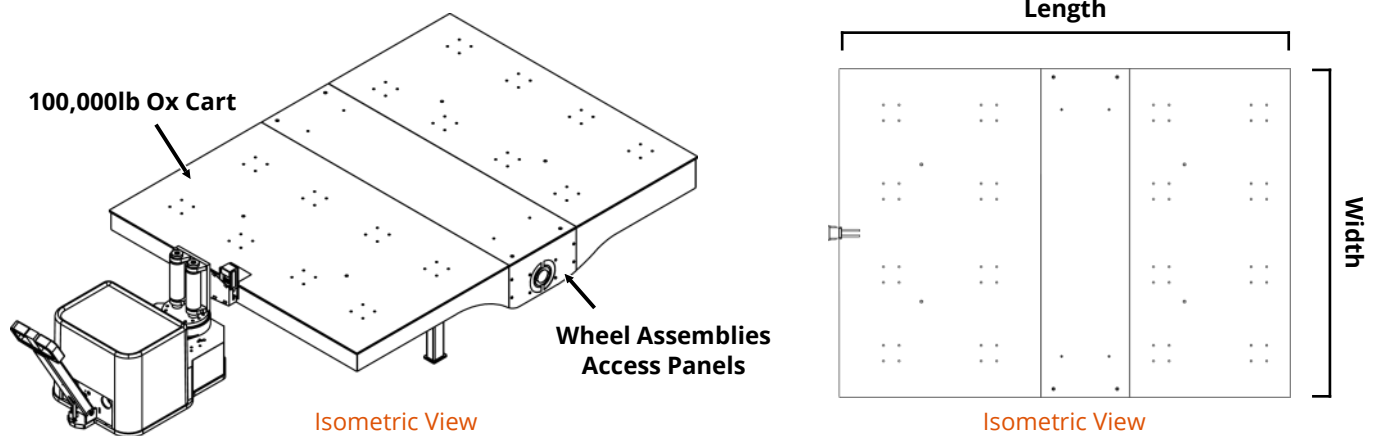
Model No.	Capacity	Drawbar Force	Hitch Point		Range	Speed
			Stroke	Capacity		
APS030	Total ¹	Total			Distance ²	Max
APS030-1200	30,000lb 13,600kg	1,686lb 7500N	6" 150mm	6,750lb 3,000kg	6,500ft 2,000m	120fpm 37mpm
APS030-2200	100,000lb 45,360kg	7,193lb 32,000N	6" 150mm	12,000lb 5,500kg	9,600ft 2,900m	100fpm 30mpm

1. Based on proper load positioning, quality floor surface, and 92A durometer wheels. 2. Battery capacity is an estimation based upon a full charge, under full load, with continuous operation in a linear path.

Optional Ox Tugger Cart

Model No.	Capacity	Minimum Cart Size at Max Capacity ¹		Bed Height	Wheel Size	Wheel Tread
		Width	Length			
APS031	Total				Diameter	
APS031	100,000lb 45,360kg	96" 2,438mm	126" 3,200mm	18.44" 468mm	12" 305mm	Polyurethane 90A Durometer

1. Custom sizes based on load available. Sizes smaller than minimum are available with lower capacities.



Ride-On Tugger



The Ride-On Tug is designed to distribute loads up to 132,500 lbs. to the wheels, allowing an operator to ride on board and confidently steer the load. Featuring a rechargeable battery and speeds up to 150 fpm, the Ride-On tug is ideal for moving loads around your facility in a quick, safe, and controllable manner.

- **Move loads up to 132,500 lbs.**
- **Speeds up to 150 fpm**
- **On board battery recharge system**
- **Pin or hook hitch options available**

Features & Benefits



Perfect With Pallet System

Tuggers are designed to interface best with our application designed steel pallets, making the movement of heavy palletized loads easy.

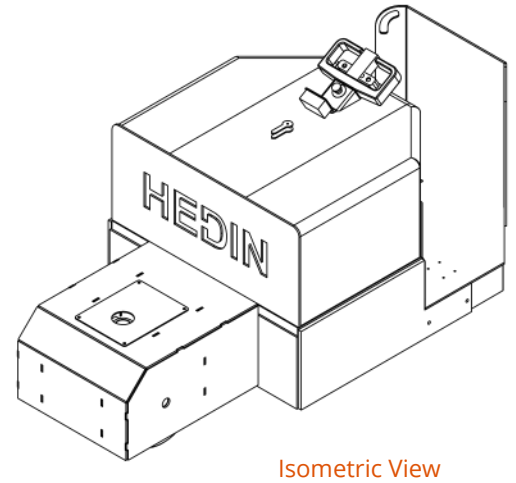
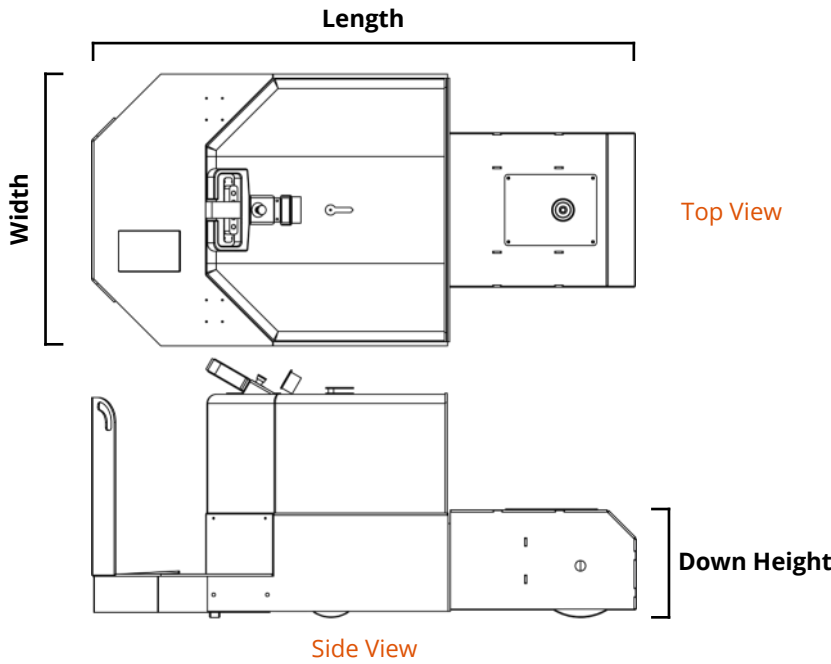
Optional Remote Control

Optional RF Remote Control empowers operators to control Tugger either on the platform or from a more safe distance.

Competitive

With load movement speed of up to 150 fpm the Ride-On Tugger offers fast & flexible movement for heavy and difficult to move equipment.

Ride-On Tugger



Ride-On Tugger Specifications

Model No.	Tow Capacity	Lifting Capacity	Stroke	Range	Speed	Transporter Size		
	Total ¹	Total ¹				Length	Width	Down Height
ROT				Distance ²	Max			
ROT-20	44,000lb 20,000kg	33,100lb 15,000kg	5.87" 150mm	8,800ft 2,700m	150fpm 45mpm	104.33" 2,650mm	51.97" 1,320mm	14.76" 375mm
ROT-40	88,000lb 40,000kg	48,500lb 22,000kg	5.87" 150mm	8,800ft 2,700m	100fpm 30mpm	108.27" 2,750mm	62.6" 1,590mm	18.7" 475mm
ROT-60	132,500lb 60,000kg	48,500lb 22,000kg	7.87" 200mm	6,600ft 2,000m	85fpm 26mpm	112.2" 2,850mm	62.6" 1,590mm	22.64" 575mm

1. Based on centrally located load. 2. Battery capacity is an estimation based upon a full charge, under full load, with continuous operation in a linear path. Lithium Battery option available, extend run time by 2.5x. (plan for longer lead time)



GT Tugger



GT Tuggers give operators the ability to move materials around a plant via Remote Control, allowing for maximum control over the load. GT Tuggers can also be equipped with AGV guidance systems, enabling them to operate without the need for an operator to input movement. Our tuggers are built to lift up the front end of wheeled carts and trailers, distributing the heavy load evenly - making it effortless to move up to 220,000 lbs.

- **Move loads up to 220,000 lbs.**
- **Speeds up to 150 fpm**
- **On board battery recharge system**
- **Multiple control options like RF Controller or Automated Guided Vehicle (AGV)**

Features & Benefits



Multiple Control Options

GT Tuggers are controlled by an RF controller, or can be programmed with optional AGV technology.



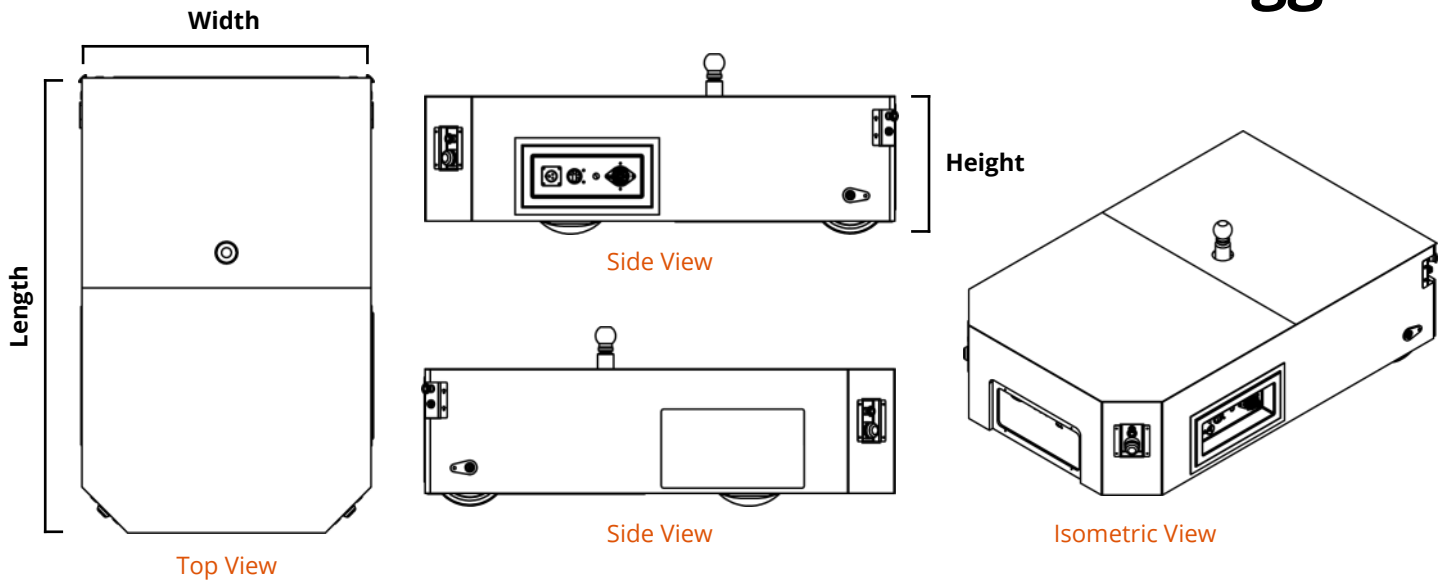
High Capacity

GT Tuggers have capacities that can move loads up to 220,000 lbs., making even the heaviest moves possible.



Safety First

The operator is kept at a safe distance from the moving load, ensuring that there is no possibility of the operator being injured during load transport.



GT Tugger Specifications

Model No.	Tow Capacity	Lifting Capacity	Stroke	Range	Speed	Transporter Size		
	Total ¹	Total ¹				Length	Width	Height
GTT				Distance ²	Max			
GTT-30	66,000lb 30,000kg	33,000lb 15,000kg	5.87" 150mm	13,100ft 4,000m	150fpm 45mpm	74.76" 1,900mm	47.24" 1,200mm	21.61" 550mm
GTT-50	110,000lb 50,000kg	44,000lb 20,000kg	5.87" 150mm	13,100ft 4,000m	100fpm 30mpm	84.60" 2,150mm	53.11" 1,350mm	25.63" 650mm
GTT-100	220,000lb 100,000kg	66,000lb 30,000kg	7.87" 200mm	13,100ft 4,000m	85fpm 26mpm	98.39" 2,500mm	63" 1,600mm	29.5" 750mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Coil Car with Spike



Coil Car with Spike offers an easy solution to the transportation of coils, with capacities up to 55,000 lbs. and custom larger options available. Ultimately eliminating the need for an overhead crane or rail-based systems. As an all-electric battery powered unit, the Coil Car operates independently from the rest of your production line—allowing the operator to use it whenever and wherever necessary.

- Capacities up to 55,000 lbs.
- Speeds up to 150 fpm
- Coil Spike stroke up to 72"
- On board battery recharge system

Features & Benefits



The Coil Handling Solution

Coil Cars are designed to move and position heavy coils in warehouse and manufacturing operations, eliminating the need for invasive rail-based and overhead cranes systems.



Multiple Control Options

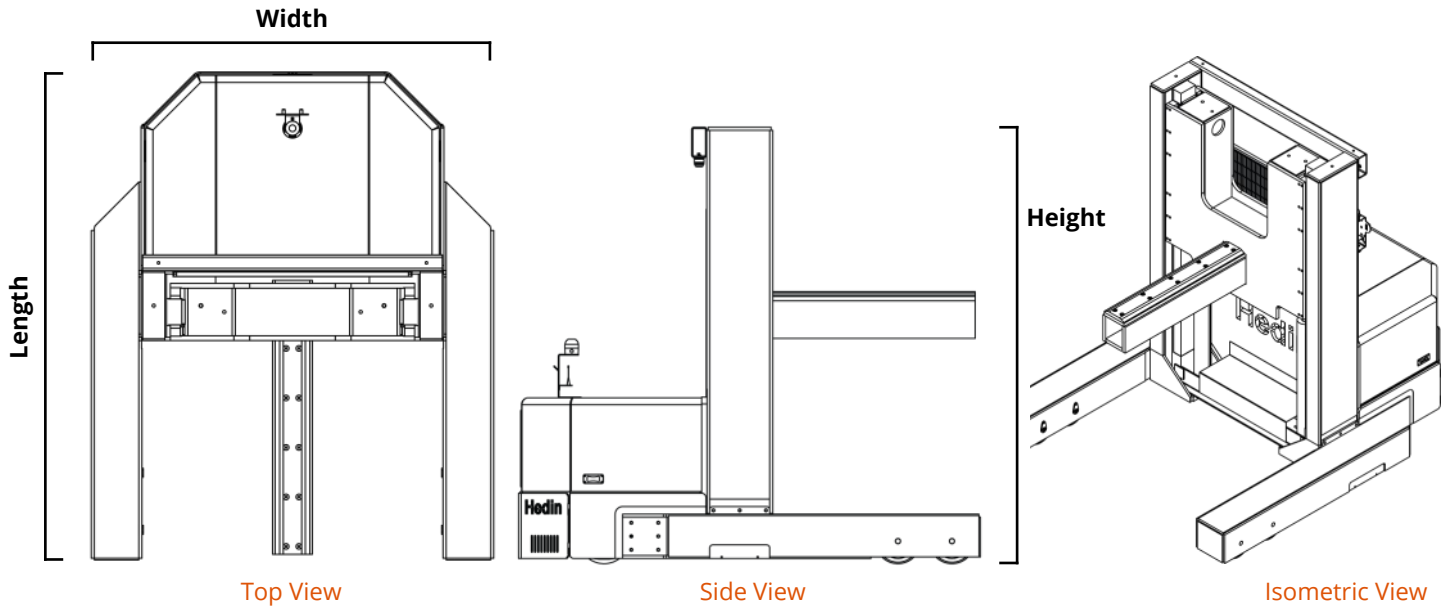
Coil Cars are available with a steering handle, RF remote controller, as a ride-along model or automated guided vehicle (AGV).



Adjustable Coil Height

The adjustable stroke allows for variable height changes, giving operators the freedom to easily and efficiently position coils.

Coil Car with Spike



Coil Car with Spike Specifications

Model No.	Capacity	Stroke	Range	Speed	Transporter Size		
					Length	Width	Height
HED060	Total ¹		Distance ²	Max			
HED060-0006	13,000lb 6,000kg	64.96" 1,650mm	16,400ft 5,000m	150fpm 45mpm	110.24" 2,800mm	72.83" 1,850mm	100.39" 2,550mm
HED060-0012	26,500lb 12,000kg	72.83" 1,850mm	13,100ft 4,000m	150fpm 45mpm	114.17" 2,900mm	86.61" 2,200mm	108.27" 2,750mm
HED060-0055	55,000lb 25,000kg	39.37" 1,000mm	13,100ft 4,000m	100fpm 30mpm	122.05" 3,100mm	100.39" 2,550mm	114.17" 2,900mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Coil Car with Cradle



Coil Car with Cradle offers an easy solution to the transportation of coils, with capacities up to 55,000 lbs. and custom larger options available. Ultimately eliminating the need for an overhead crane or rail-based systems. As an all-electric battery powered unit, the Coil Car operates independently from the rest of your production line—allowing the operator to use it whenever and wherever necessary.

- **Capacities up to 55,000 lbs.**
- **Speeds up to 150 fpm**
- **Coil Spike stroke up to 72"**
- **On board battery recharge system**

Features & Benefits



Perfect Coil Handling Solution

Coil Cars are designed to move and position heavy coils in warehouse and manufacturing operations, eliminating the need for invasive rail-based and overhead cranes systems.

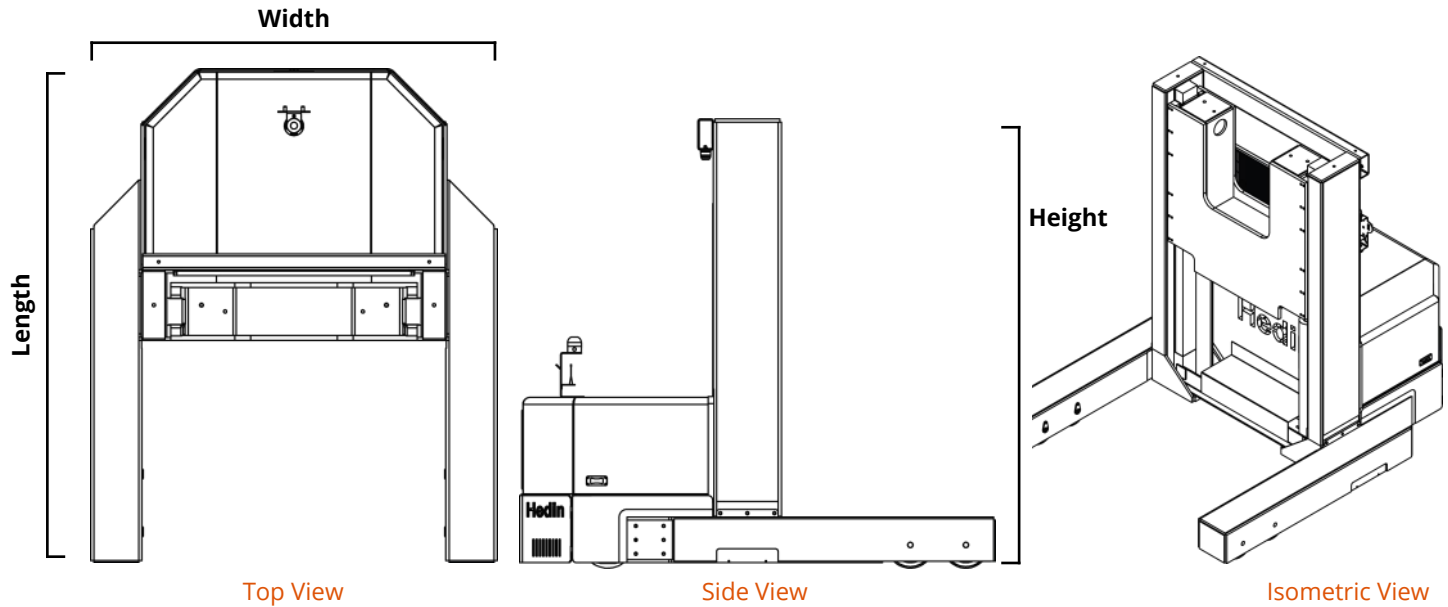
Multiple Control Options

Coil Cars are available with a steering handle, RF remote controller, as a ride-along model or automated guided vehicle (AGV).

Adjustable Coil Height

The adjustable stroke allows for variable height changes, giving operators the freedom to easily and efficiently position coils.

Coil Car with Cradle



Coil Car with Cradle Specifications

Model No.	Capacity	Stroke	Range	Speed	Transporter Size		
					Length	Width	Height
HED050	Total ¹		Distance ²	Max			
HED050-0006	13,000lb 6,000kg	64.96" 1,650mm	16,400ft 5,000m	150fpm 45mpm	110.24" 2,800mm	72.83" 1,850mm	100.39" 2,550mm
HED050-0012	26,500lb 12,000kg	72.83" 1,850mm	13,100ft 4,000m	150fpm 45mpm	114.17" 2,900mm	86.61" 2,200mm	108.27" 2,750mm
HED050-0025	55,000lb 25,000kg	39.37" 1,000mm	13,100ft 4,000m	100fpm 30mpm	122.05" 3,100mm	100.39" 2,550mm	114.17" 2,900mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Coil Tipper



Coil Tippers are an all in one solution for the positioning of coils. We offer the ability to tilt 90° horizontally and vertically, and an added function of 180° rotation. With capacities up to 100,000 lbs., our Coil Car offers an easy solution to the transportation of coils, ultimately eliminating the need for an overhead crane or rail-based systems.

- **Capacities up to 44,000 lbs.**
- **Optional 180° rotation**
- **90° rotation times of 30 seconds**
- **All electric unit with no hydraulic mess**

Features & Benefits



Positioning

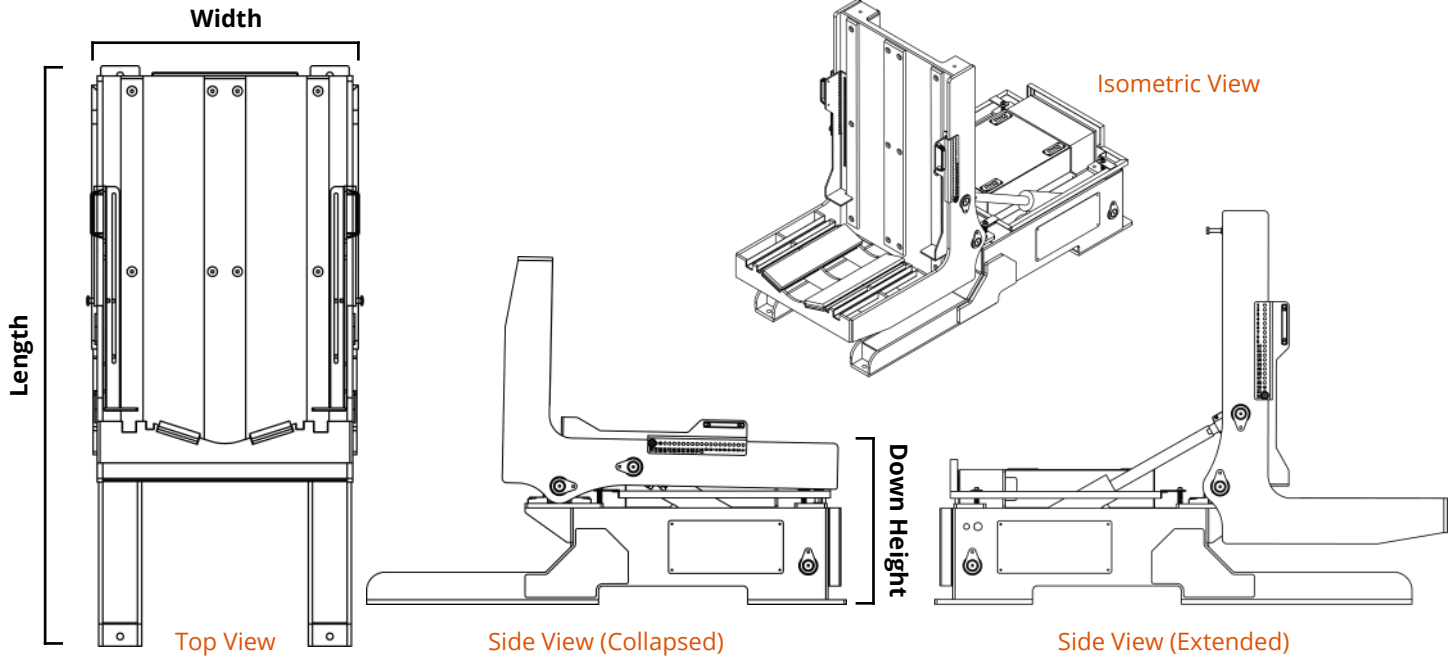
Not only do our Coil Tippers offer 90° tilting of coils horizontally and vertically, but they can also turn coils by 180°. We've got all the positions covered.

Accessibility

The Coil Tipper is designed to take up less space in your facility, all while maintaining ideal accessibility for coils to be picked up and transported by coil cars or cranes.

Compatible

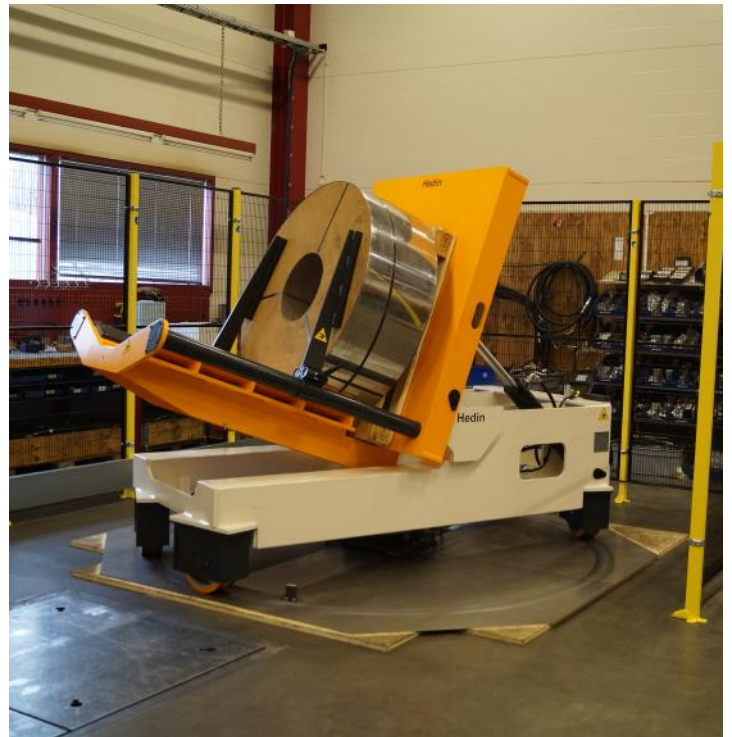
The Coil Tipper can be directly used with our Coil Cars. Rotate and tilt the coils with the Coil Tipper, and pick them up with the Coil Car to complete your positioning needs.



Coil Car Tipper Specifications

Model No.	Capacity	Max Coil Size			Unit Size		90° Tilt Time
		Max Diameter	Max Depth	Length	Width	Down Height	
HED080	Total ¹						
HED080-005	11,000lb 5,000kg	55.12" 1,400mm	23.62" 600mm	90.55" 2,300mm	39.37" 1,000mm	23.62" 600mm	30 Seconds
HED080-010	22,000lb 10,000kg	62.99" 1,600mm	31.49" 800mm	98.43" 2,500mm	47.24" 1,200mm	23.62" 600mm	30 Seconds

1. Based on centrally located load.



Pallet Transporter



The Pallet Transporter is the ideal solution for easily moving heavy loads on steel pallets, with capacity of up to 132,500 lbs. The Pallet Transporter is available with a number of options including safety scanners, enhanced batteries, and AGV drive systems.

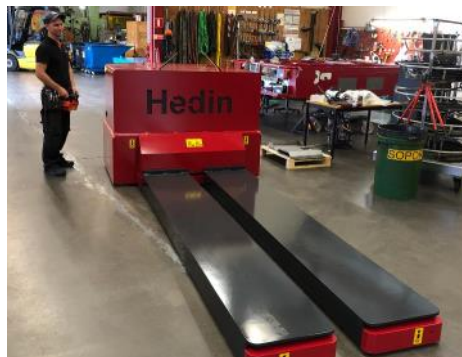
- **Capacities up to 132,500 lbs.**
- **Adjustable fork widths**
- **On board battery recharge system**
- **RF Controller standard with optional manual steering**

Features & Benefits



Variable Solutions

Along with setting the load on top of the Pallet Transporter, operators can use the transporter's auxiliary lift with a pallet system featuring a center support or directly with the product.



Multiple Control Options

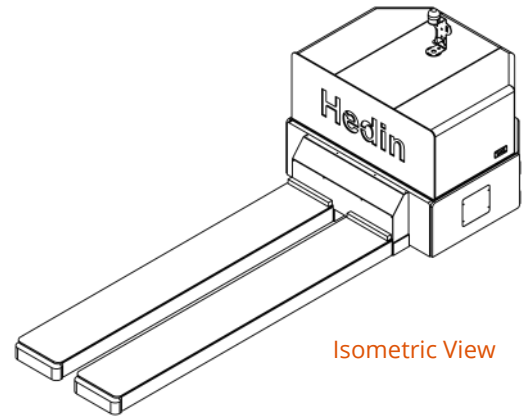
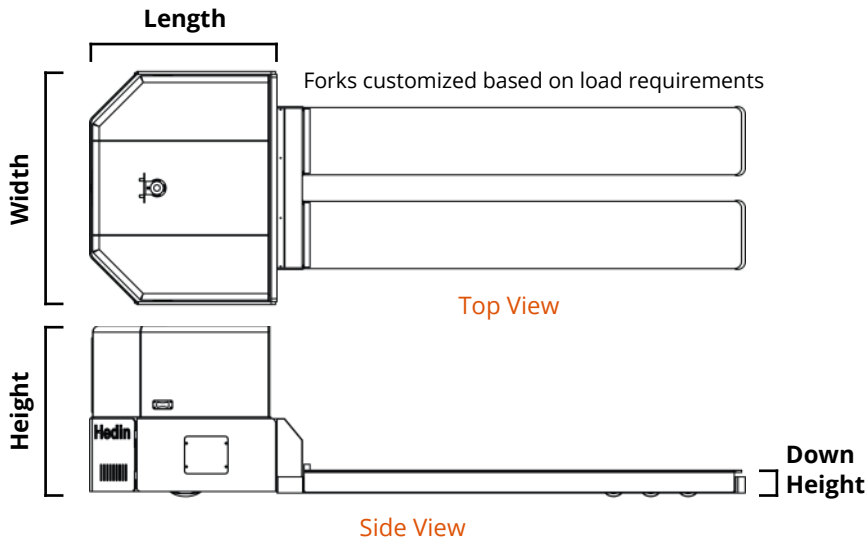
Pallet Transporters are available with a steering handle, RF remote controller, as a ride-along model or automated guided vehicle (AGV).



Optional Auxiliary Lift

The Pallet Transporter can be kitted with an optional auxiliary lift, granting operators the ability to lift and transport pallets - removing the need for overhead cranes.

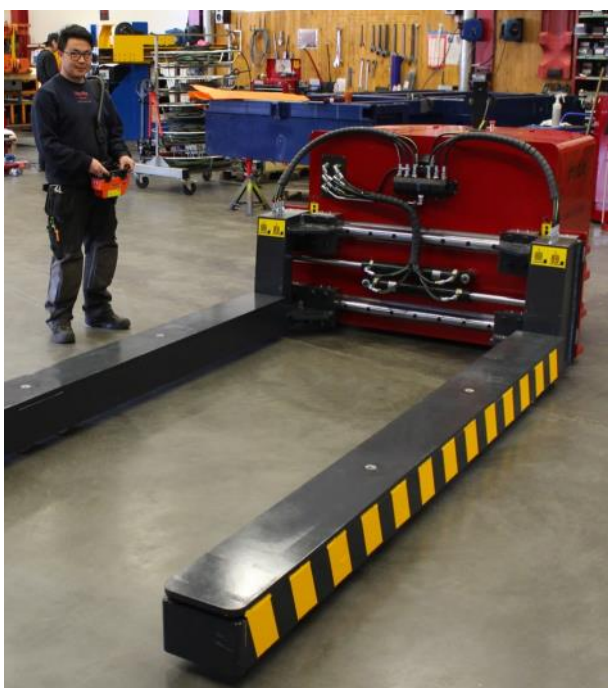
Pallet Transporter



Pallet Transporter Specifications

Model No.	Capacity	Range	Speed	Header Size			Typical	
				Length	Width	Height	Stroke	Down Height
HED030	Total ¹	Distance ²	Max					
HED030-0012	26,500lb 12,000kg	13,100ft 4,000m	180fpm 55mpm	49.21" 1,250mm	30.71" 780mm	43.31" 1,100mm	2.36" 60mm	7.09" 180mm
HED030-0020	44,000lb 20,000kg	13,100ft 4,000m	150fpm 45mpm	49.21" 1,250mm	37.40" 950mm	43.31" 1,100mm	2.36" 60mm	8.66" 220mm
HED030-0030	66,000lb 30,000kg	13,100ft 4,000m	100fpm 30mpm	49.21" 1,250mm	41.34" 1,050mm	46.46" 1,180mm	3.15" 80mm	9.45" 240mm
HED030-0040	88,000lb 40,000kg	13,100ft 4,000m	100fpm 30mpm	49.21" 1,250mm	57.09" 1,450mm	46.46" 1,180mm	3.15" 80mm	11.81" 300mm
HED030-0060	132,500lb 60,000kg	9,850ft 3,000m	100fpm 30mpm	49.21" 1,250mm	57.09" 1,450mm	46.46" 1,180mm	3.94" 100mm	13.78" 350mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Customized Forks

Pallet Transporters are custom engineered to your capacity, size, and stroke requirements. No matter how big or small your request is, we're here to exceed your needs.

Adjustable Width

Our Pallet Transporter can feature adjustable width, giving operators the option to change the width between forks based on the size of the pallet.

Why Split Forks?

Split Forks allow the transporter to flex, keeping a lower down height and ensuring traction and stability while on uneven floors.

Platform Transporter



The Platform Transporter is the ideal solution for easily moving heavy loads on steel pallets, with capacity of up to 264,500 lbs. The platform Transporter is available with a number of options including safety scanners, enhanced batteries, and AGV drive systems.

- Capacities up to 132,500 lbs.
- Speed up to 150 fpm
- On board battery recharge system
- RF controller standard with optional manual steering

Features & Benefits



Variable Solutions

Along with setting the load on top of the Platform Transporter, operators can use the transporter's auxiliary lift with a pallet system or directly with the product.



Multiple Control Options

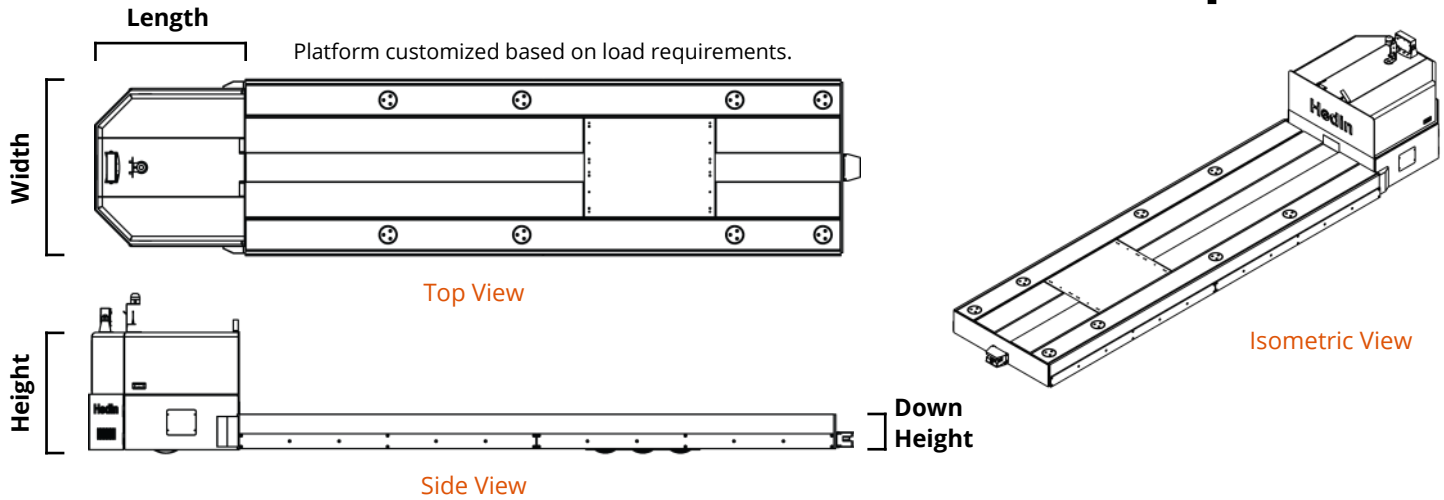
Platform Transporters are available with a steering handle, RF remote controller, as a ride-along model or automated guided vehicle (AGV).



Optional Auxiliary Lift

The Platform Transporter can be kitted with an optional auxiliary lift, granting operators the ability to lift and transport pallets - removing the need for overhead cranes.

Platform Transporter



Platform Transporter Specifications

Model No.	Capacity	Range	Speed	Header Size			Typical	
				Length	Width	Height	Stroke	Down Height
HED031	Total ¹	Distance ²	Max					
HED031-0020	44,000lb 20,000kg	16,400ft 5,000m	150fpm 45mpm	49.21" 1,250mm	50.39" 1,280mm	43.31" 1,100mm	3.11" 80mm	11" 280mm
HED031-0030	66,000lb 30,000kg	14,750ft 4,500m	100fpm 30mpm	49.21" 1,250mm	61" 1,550mm	46.46" 1,180mm	3.94" 100mm	13" 330mm
HED031-0040	88,000lb 40,000kg	13,100ft 4,000m	100fpm 30mpm	49.21" 1,250mm	61" 1,550mm	46.46" 1,180mm	3.94" 100mm	13" 330mm
HED031-0060	132,500lb 60,000kg	11,500ft 3,500m	100fpm 30mpm	49.21" 1,250mm	61" 1,550mm	46.46" 1,180mm	3.94" 100mm	14.96" 380mm
HED031-0080	176,500lb 80,000kg	9,850ft 3,000m	100fpm 30mpm	61.02" 1,550mm	66.54" 1,690mm	51.18" 1,300mm	3.94" 100mm	14.96" 380mm
HED031-0120	264,500lb 120,000kg	6,550ft 2,000m	70fpm 21mpm	61.02" 1,550mm	86.61" 2,200mm	51.18" 1,300mm	3.94" 100mm	15.7" 400mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Customized Platform

Platform Transporters are custom engineered to your capacity, size, and stroke requirements. No matter how big or small your request is, we're here to exceed your needs.

Range of Bed Height

Our engineering team will work with you to find the best solution for your bed height requirements.

Customizable Pallets

The need for overhead cranes is eliminated with the use of the optional auxiliary lift, working in tandem with custom pallets made for your specific needs.

Mold & Die Transporter



The Mold & Die Transporter is designed to maximize safety and efficiency, creating the easiest way to transport and change dies. With capacities up to 200,000 lbs., the Mold & Die Transporter allows operators to move heavy dies via remote control from a safe distance - improving efficiency and reducing time lost between die changes.

- **Capacities up to 200,000 lbs.**
- **Push/Pull mechanisms for die movements**
- **On board battery recharge system**
- **Improved efficiency when transporting and changing dies**

Features & Benefits



Increased Efficiency

In addition to increased safety, our Quick Mold Die Changers offer increased efficiency over traditional die movements involving overhead cranes, fork trucks, and rail systems.



Multiple Control Options

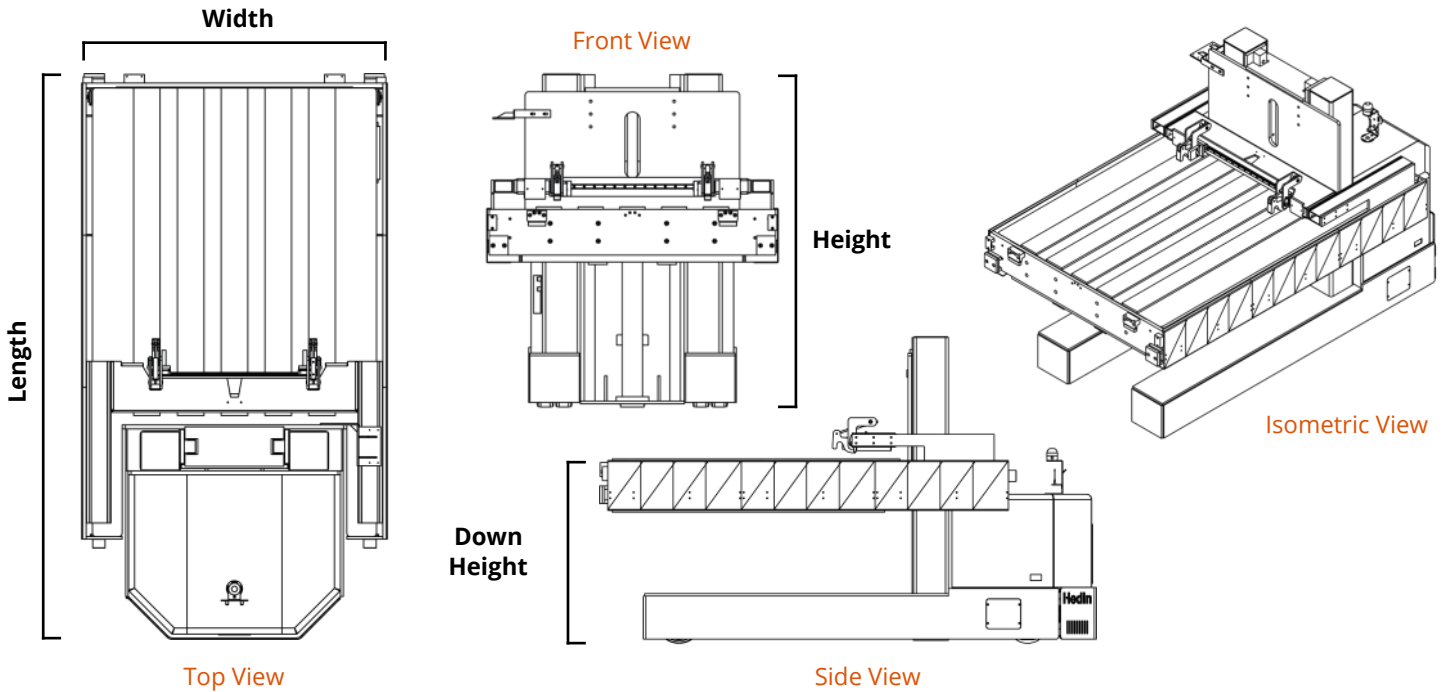
Quick-Change Mold and Die Transporters are available with a steering handle, RF remote controller, as a ride-along model or automated guided vehicle (AGV).



Adjustable Bed Height

The adjustable stroke allows for variable height changes, giving operators the freedom to easily and efficiently change the transporter bed height for a quick change over.

Mold & Die Transporter



Quick-Change Mold & Die Transporter Specifications

Model No.	Capacity	Range	Speed	Transporter Size			Typical	
				Length	Width	Height	Stroke	Down Height
HED040-0006	13,000lb 6,000kg	13,100ft 4,000m	150fpm 45mpm	165.35" 4,200mm	90.55" 2,300mm	104.33" 2,650mm	41.73" 1,060mm	21.65" 550mm
HED040-0012	26,500lb 12,000kg	13,100ft 4,000m	100fpm 30mpm	165.35" 4,200mm	90.55" 2,300mm	104.33" 2,650mm	41.73" 1,060mm	21.65" 550mm
HED040-0020	44,000lb 20,000kg	9,800ft 3,000m	100fpm 30mpm	177.16" 4,500mm	98.43" 2,500mm	114.17" 2,900mm	41.73" 1,060mm	21.65" 550mm
HED040-0010	22,000lb 10,000kg	13,100ft 4,000m	150fpm 45mpm	141.73" 3,600mm	55.12" 1,400mm	82.68" 2,100mm	31.89" 810mm	21.65" 550mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.

Higher Capacity Custom Die Changers Available



Flatbed Transporter Single-Drive



Designed to move loads up to 220,000 lbs. with a battery propelled drive unit, the Flatbed Transporter makes moving heavy loads on a facility floor easy. The Flatbed Transporter offers controls via radio controller or an optional automated guidance system.

- **Capacities up to 220,00 lbs.**
- **Optional auxiliary lift**
- **Multiple control options**
- **On board battery recharge system**

Features & Benefits



Range of Capacity Solutions

Hedin USA Flatbed Transporters offer the capability to move loads with capacities ranging from a few thousand pounds to a few hundred thousand pounds.



Optional Auxiliary Lift

The Flatbed Transporter can be kitted with an optional auxiliary lift, granting operators the ability to lift and transport pallets - removing the need for overhead cranes.



Automated Guided Vehicle

Improve facility efficiency with the optional AGV package, allowing the Flatbed Transporter to navigate your facility without a rail system. (Available on Multi-Drive model)

Flatbed Transporter Multi-Drive



Multi-Drive Flatbed Transporters makes moving heavy loads easy, with operating capacity up to 1,000,000lbs. The Flatbed Transporter multi-drive offers a zero-degree turn radius and is controllable via radio controller or an optional automated guidance system for precise automated movement. Our Multi-Drive Flatbed Transporters can also be configured to operate in tandem, enabling the movement of loads up to 2,000,000lbs.

- Capacities up to 1,000,000 lbs.
- Optional Auxiliary Lift
- Onboard Recharging System
- Zero-Turn Drive System Optional
- Tandem Unit Operation Available

Features & Benefits



Multi-directional Drives

Multi-directional drives enable the Flatbed Transporter to perform zero degree turn, crab steer, and other complex movements.



Optional Auxiliary Lift

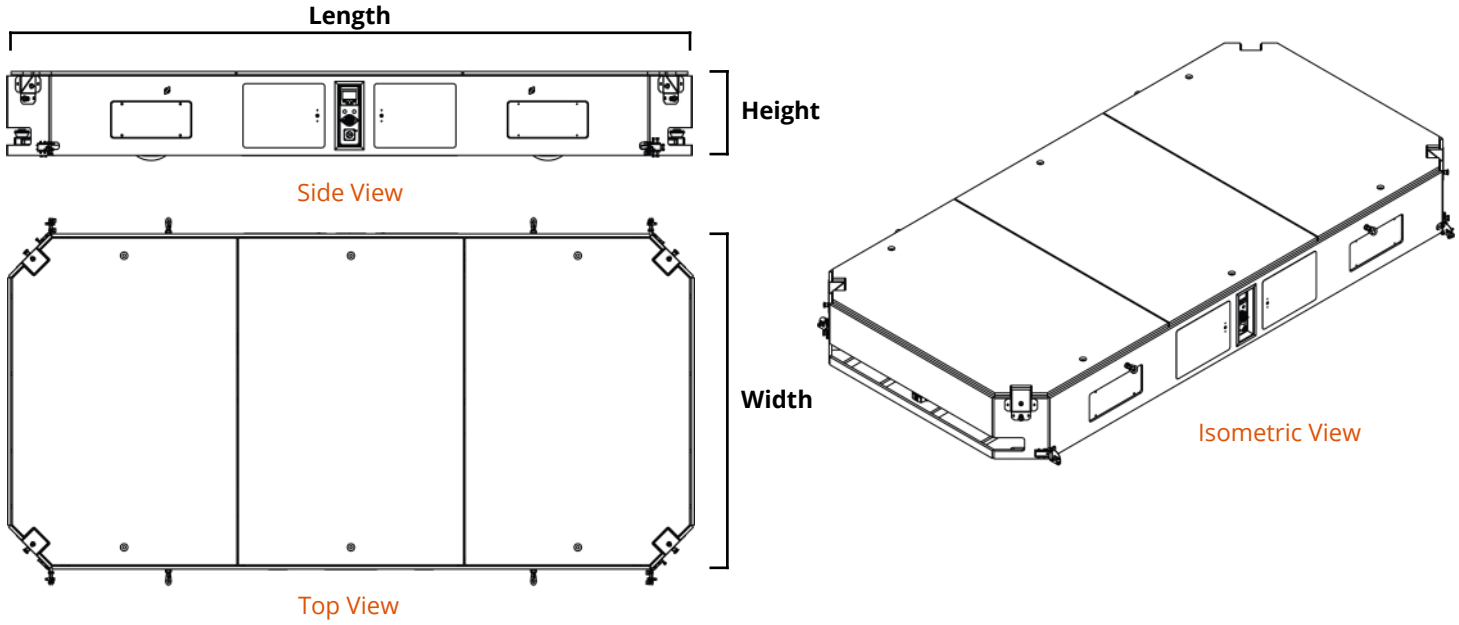
The Flatbed Transporter can be kitted with an optional auxiliary lift, granting operators the ability to lift and transport pallets - removing the need for overhead cranes.



Tandem Operation

Multiple Flatbed Transporters can be connected for tandem operation, resulting in high powered, high capacity transportation.

Flatbed Transporter Single-Drive



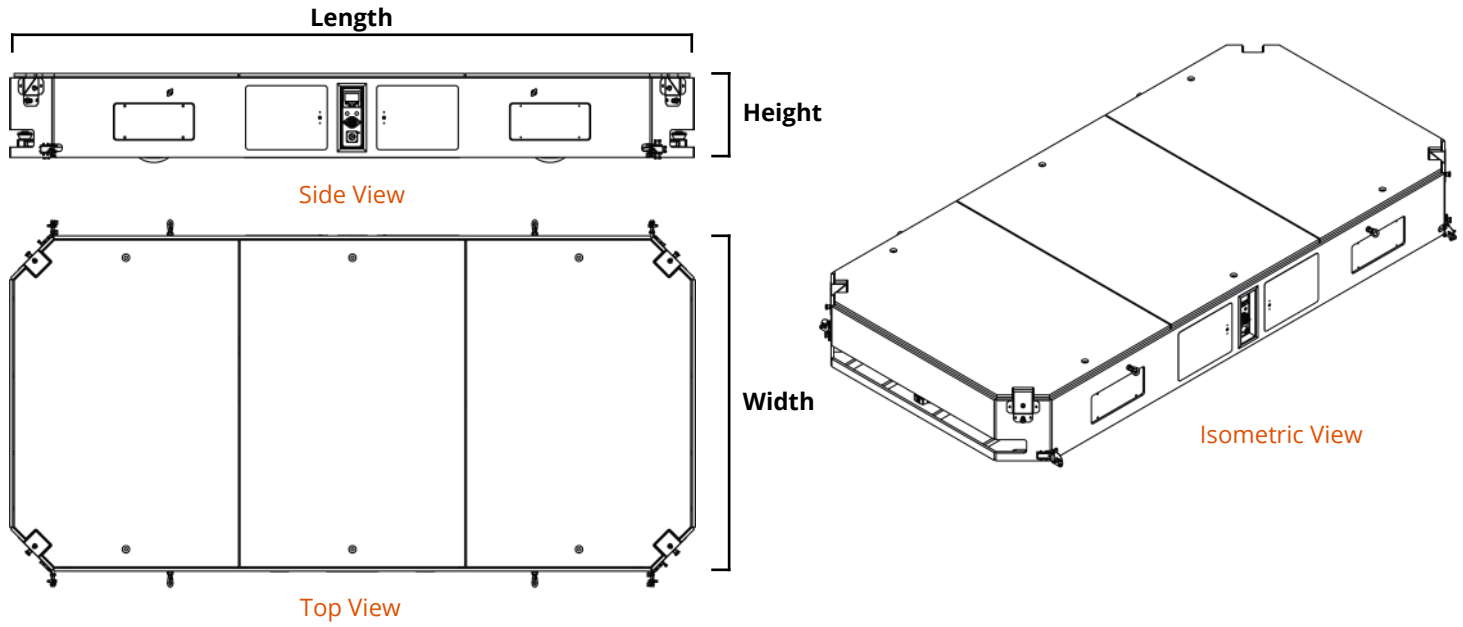
Flatbed Transporter Single-Drive Specifications

Model No.	Capacity	Range	Speed	Transporter Size ²		
				Length	Width	Height
HED010	Total ¹	Distance ²	Max			
HED010-0010	22,000lb 10,000kg	13,100ft 4,000m	180fpm 55mpm	98.43" 2,500mm	55.12" 1,400mm	19.69" 500mm
HED010-0020	44,000lb 20,000kg	19,700ft 6,000m	150fpm 45mpm	118.11" 3,000mm	63" 1,600mm	22.83" 580mm
HED010-0030	66,000lb 30,000kg	19,700ft 6,000m	100fpm 30mpm	137.80" 3,500mm	78.74" 2,000mm	25.59" 650mm
HED010-0040	88,000lb 40,000kg	13,100ft 4,000m	100fpm 30mpm	157.48" 4,000mm	78.74" 2,000mm	25.59" 650mm
HED010-0060	132,500lb 60,000kg	13,100ft 4,000m	100fpm 30mpm	157.48" 4,000mm	78.74" 2,000mm	25.59" 650mm
HED010-0080	176,500lb 80,000kg	9,850ft 3,000m	85fpm 26mpm	177.17" 4,500mm	90.55" 2,300mm	29.53" 750mm
HED010-0100	220,500lb 100,000kg	9,850ft 3,000m	85fpm 26mpm	177.17" 4,500mm	90.55" 2,300mm	29.53" 750mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Flatbed Transporter Single-Drive with Lift



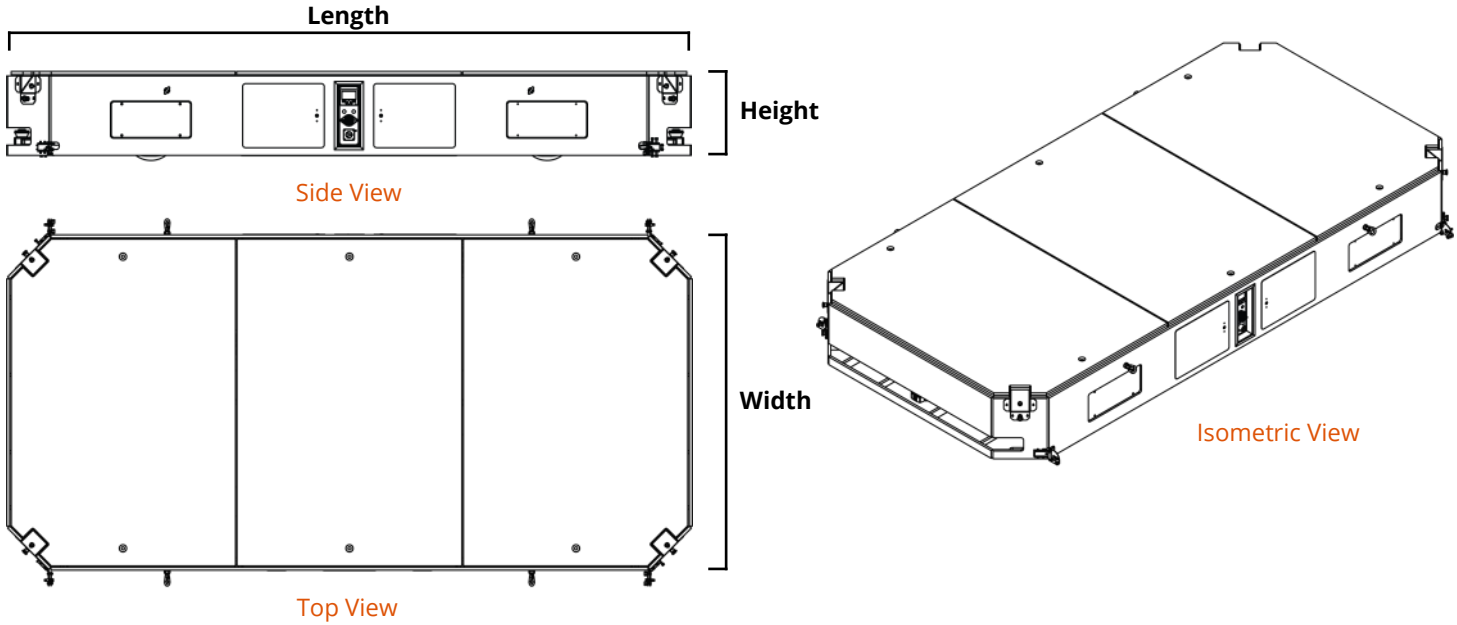
Flatbed Transporter Single-Drive with Lift Specifications

Model No.	Capacity	Stroke	Range	Speed	Transporter Size ²		
					Length	Width	Height
HED020	Total ¹		Distance ²	Max			
HED020-0010	22,000lb 10,000kg	3.15" 80mm	13,100ft 5,000m	180fpm 55mpm	98.43" 2,500mm	55.12" 1,400mm	19.69" 500mm
HED020-0020	44,000lb 20,000kg	3.15" 80mm	19,700ft 6,000m	150fpm 45mpm	118.11" 3,000mm	63" 1,600mm	22.83" 580mm
HED020-0030	66,000lb 30,000kg	3.94" 100mm	19,700ft 6,000m	100fpm 30mpm	137.80" 3,500mm	78.74" 2,000mm	25.59" 650mm
HED020-0040	88,000lb 40,000kg	3.94" 100mm	13,100ft 4,000m	100fpm 30mpm	157.48" 4,000mm	78.74" 2,000mm	25.59" 650mm
HED020-0060	132,500lb 60,000kg	3.94" 100mm	13,100ft 4,000m	100fpm 30mpm	157.48" 4,000mm	78.74" 2,000mm	25.59" 650mm
HED020-0080	176,500lb 80,000kg	5.91" 150mm	9,850ft 3,000m	85fpm 26mpm	177.17" 4,500mm	90.55" 2,300mm	29.53" 750mm
HED020-0100	220,500lb 100,000kg	5.91" 150mm	9,850ft 3,000m	85fpm 26mpm	177.17" 4,500mm	90.55" 2,300mm	29.53" 750mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Flatbed Transporter Multi-Drive



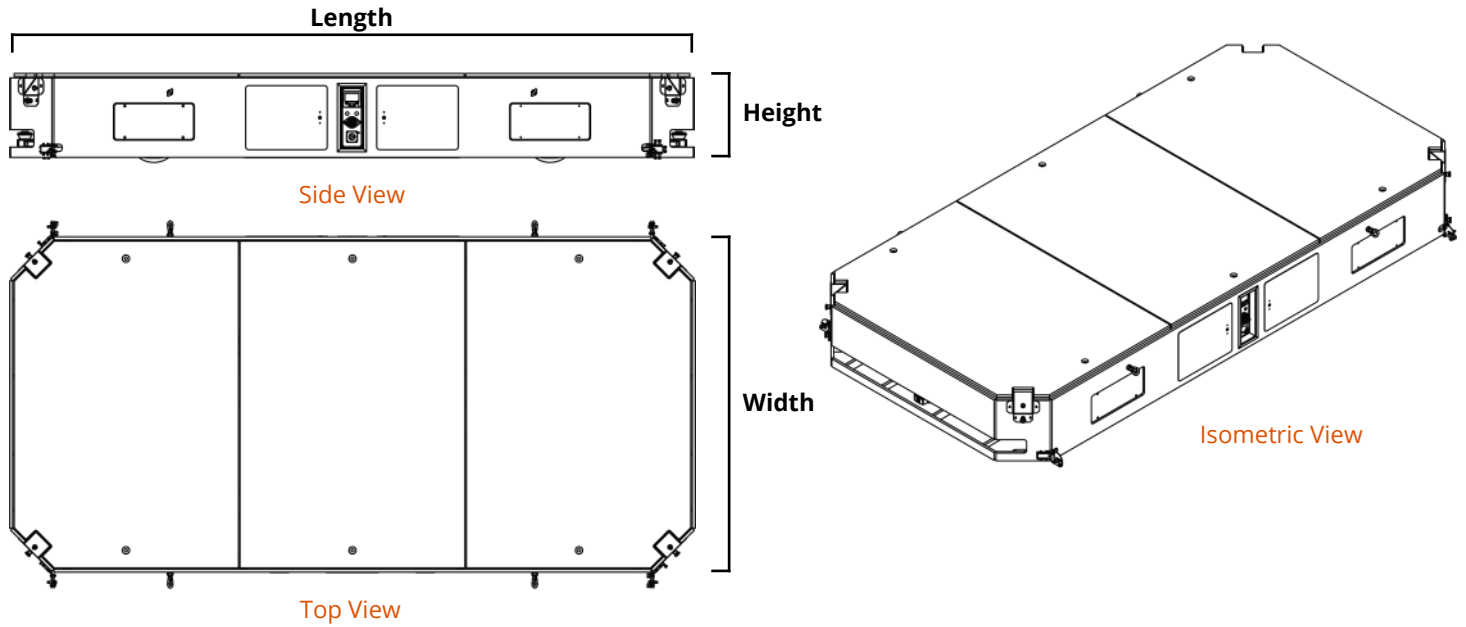
Flatbed Transporter Multi-Drive Specifications

Model No.	Capacity	Range	Speed	Transporter Size ²		
				Length	Width	Height
HED011	Total ¹	Distance ²	Max			
HED011-0010	22,000lb 10,000kg	13,100ft 5,000m	180fpm 55mpm	118.11" 3,000mm	70.87" 1,800mm	19.69" 500mm
HED011-0020	44,000lb 20,000kg	19,700ft 6,000m	150fpm 45mpm	137.80" 3,500mm	78.74" 2,000mm	22.83" 580mm
HED011-0040	88,000lb 40,000kg	19,700ft 6,000m	100fpm 30mpm	177.17" 4,500mm	90.55" 2,300mm	25.59" 650mm
HED011-0060	132,500lb 60,000kg	16,400ft 5,000m	150fpm 45mpm	196.85" 5,000mm	90.55" 2,300mm	29.53" 750mm
HED011-0100	220,500lb 100,000kg	13,100ft 4,000m	150fpm 45mpm	196.85" 5,000mm	90.55" 2,300mm	29.53" 750mm
HED011-0250	551,000lb 250,000kg	9,850ft 3,000m	100fpm 30mpm	275.59" 7,000mm	114.17" 2,900mm	35.43" 900mm
HED011-0450	992,000lb 450,000kg	9,850ft 3,000m	70fpm 21mpm	334.65" 8,500mm	208.66" 5,300mm	51.18" 1,300mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



Flatbed Transporter Multi-Drive with Lift



Flatbed Transporter Multi-Drive with Lift Specifications

Model No.	Capacity	Stroke	Range	Speed	Transporter Size ²		
					Length	Width	Height
HED021	Total ¹		Distance ²	Max			
HED021-0010	22,000lb 10,000kg	1.38" 35mm	13,100ft 3,993m	180fpm 55mpm	118.11" 3,000mm	70.87" 1,800mm	19.69" 500mm
HED021-0020	44,000lb 20,000kg	1.38" 35mm	19,700ft 6,005m	150fpm 45mpm	137.80" 3,500mm	78.74" 2,000mm	22.83" 580mm
HED021-0040	88,000lb 40,000kg	1.77" 45mm	19,700ft 6,005m	100fpm 30mpm	177.17" 4,500mm	90.55" 2,300mm	25.59" 650mm
HED021-0060	132,500lb 60,000kg	1.77" 45mm	16,400ft 4,998m	150fpm 45mpm	196.85" 5,000mm	90.55" 2,300mm	29.53" 750mm
HED021-0100	220,500lb 100,000kg	1.58" 40mm	13,100ft 3,993m	150fpm 45mpm	196.85" 5,000mm	90.55" 2,300mm	29.53" 750mm
HED021-0250	551,000lb 250,000kg	1.58" 40mm	9,850ft 3,002m	100fpm 30mpm	275.59" 7,000mm	114.17" 2,900mm	35.43" 900mm
HED021-0450	992,000lb 450,000kg	2.36" 60mm	9,850ft 3,002m	70fpm 21mpm	334.65" 8,500mm	208.66" 5,300mm	51.18" 1,300mm

1. Based on centrally located load. 2. Battery capacity is based upon full charge, under full load, with continuous operation in a linear path.



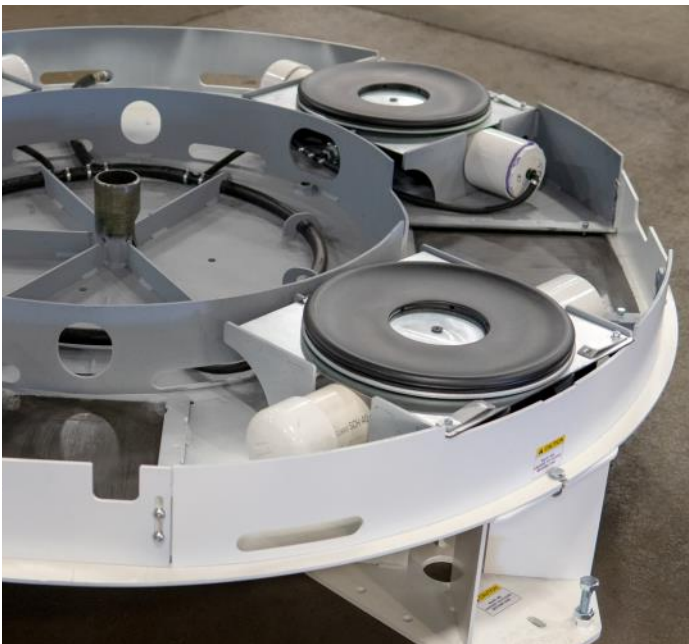
Air Caster Turntable



Air Caster Turntables are fitted with Airfloat air caster technology. Which creates a thin layer of air between the base and the top of the table, making the table nearly friction-free to move loads effortlessly. Quality materials matter, as reflected by our 100% urethane diaphragm design in our air casters for superior wear resistance.

- **Low down height of 7"**
- **Lower cost option compared to mechanical systems**
- **Varying levels of control - from manual push to turn-key robotics integration**
- **Custom tables for capacities up to 800,000 lbs. available**

Case Study



Mining Truck Assembly

Caterpillar worked with Align Production Systems to remove bottlenecks from their Mining Truck assembly line using 200,000 lbs. flush-floor air caster turntables.

Seamless Integration

The pit-mounted air caster turntables works in conjunction with existing rail systems, moving Caterpillar from a single rail to a multi-rail system.

Productivity Increase

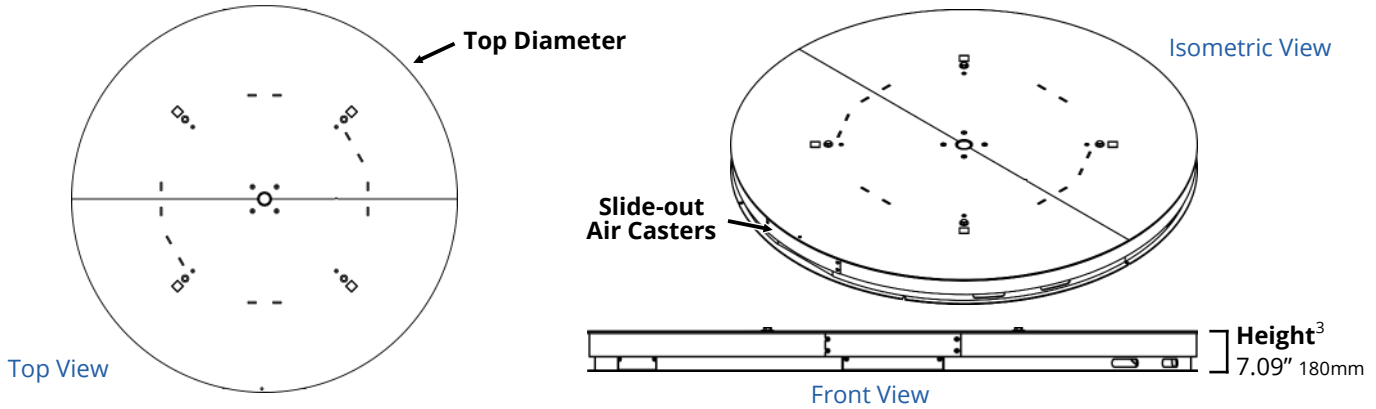
After implementing Air Caster Turntables, Caterpillar's assembly line had a substantial productivity increase.

Air Caster Turntable

	Options	Part No.	Description
Options	Electric Drive	AX5020-0020	AX series internal electric drive assembly.
	Pneumatic Drive	AX5020-0030	AX series pneumatic drive assembly / lubed motor.
	High Speed Electric Drive	AX5020-0040	AX series high speed internal electric drive assembly.
	High Speed Pneumatic Drive	AX5020-0050	AX series high speed pneumatic drive assembly / lubed motor.
	Internal 180° Bumper Stop	AX5030-0010	AX series turntable bumper stop assembly kit.
	Internal 180° Shock Stop	AX5030-0020	AX series turntable shock stop assembly kit.
	Internal 180° Shock Stop with Precision Locator	AX5030-0021	AX series turntable shock stop with prox. sensor assembly kit.
	Internal Shot Pin	AX5030-0030	AX series slide out shot pin assembly kit.
	Pneumatic Auto Shut-Off / Two Position	AX5010-0050	Auto shutoff assembly 2 position kit.
	Pneumatic Auto Shut-Off / Four Position	AX5010-0060	Auto shutoff assembly 4 position kit.
	Electric Auto Shut-Off / Two Position	AX5010-0070	Electric auto shutoff assembly 2 position kit.
	Electric Auto Shut-Off / Four Position	AX5010-0080	Electric auto shutoff assembly 4 position kit.
Config. Options	Hand Control Stand	APS5030-XXXX	Manual, hand-operated control stand.
	Foot Control Stand	APS5020-XXXX	Manual, foot-operated control stand.
	Robotic Interface Control Stand	AX5010-0040	I/O block provided to communicate with components and existing or robotic controller.
	Dirt Leg	APS5000-XXXX	Dirt leg assembly for air filtration. (factory recommended)
	Center Divider	AX5050-XXXX	Center divider tube / 8" tall.
	Center Fence - Screen	AX5051-XXXX	An expanded metal screen divider used to partition the table into two separate loading/working stations.
	Center Fence - Solid	AX5052-XXXX	A solid sheet metal divider used to partition the table into two separate loading/working stations.
	Center Fence - Polycarbonate	AX5053-XXXX	A solid transparent polycarbonate divider used to partition the table into two separate loading/working stations.
Riser Base	AX5060-XXXX	Raise the turntable to a more ergonomic height for the operator(s).	
Custom Options	Audible/Visual Alarm	Custom	Audible and/or visual alarm to indicate movement .
	Safety Guarding	Custom	Physical and/or electrical guarding to prevent personnel from entering equipment area during operation.
	Lead-Ins	Custom	Welded plate side guides used to ease loading/unloading of racks on table by forklift.
	Scraper Bar	Custom	Welded bar stopper for fork truck rack placement/protection.
	Corner Angles	Custom	Welded plate angles for rack placement mounted and the rack corners.
	Conical Locators	Custom	Bolt-on conical pads for open tube rack placement.
	Error Proofing Pin	Custom	Bolt-on pin used to prevent misalignment or incorrect orientation of racks.
	Rack Present Sensors	Custom	Sensors to detect the presence of racks on either side of the table.
	Custom Controls Package	Custom	PLC controlled stand programmed by Align.

Some options may preclude other options.

Round Air Caster Turntable



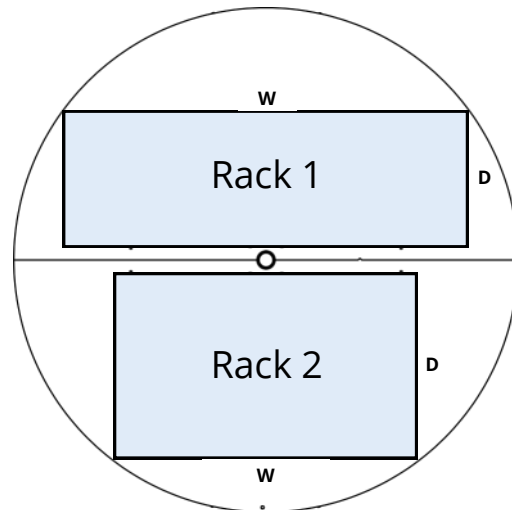
Round Air Caster Turntable Specifications

Model No.	Capacity	Cycle Time	Base Size	Height	Caster	Air Flow
AX040	Total ¹	180° Fully Loaded ²	Diameter	Deflated ³	Diameter	Average
AX040-0060	8,000lb 3,629kg	10 - 16 Sec.	60" 1,524mm	7.09" 180mm	12" 305mm	28 SCFM 793L/m
AX040-0072	8,000lb 3,629kg	10 - 16 Sec.	72" 1,829mm	7.09" 180mm	12" 305mm	32 SCFM 906L/m
AX040-0084	12,000lb 5,443kg	12 - 16 Sec.	84" 2,134mm	7.09" 180mm	17" 432mm	32 SCFM 906L/m
AX040-0096	16,000lb 7,257kg	12 - 18 Sec.	96" 2,438mm	7.09" 180mm	17" 432mm	40 SCFM 1,133L/m
AX040-0108	16,000lb 7,257kg	14 - 20 Sec.	108" 2,743mm	7.09" 180mm	17" 432mm	48 SCFM 1,359L/m
AX040-0120	16,000lb 7,257kg	14 - 20 Sec.	120" 3,048mm	7.09" 180mm	17" 432mm	48 SCFM 1,359L/m
AX040-0132	16,000lb 7,257kg	16 - 22 Sec.	132" 3,353mm	7.09" 180mm	17" 432mm	48 SCFM 1,359L/m
AX040-0144	16,000lb 7,257kg	16 - 24 Sec.	144" 3,658mm	7.09" 180mm	17" 432mm	48 SCFM 1,359L/m

1. Capacity evenly distributed across the table. 2. Cycle time for 180° rotation. Times will vary depending on drive type and loading conditions. May decrease with lighter load.

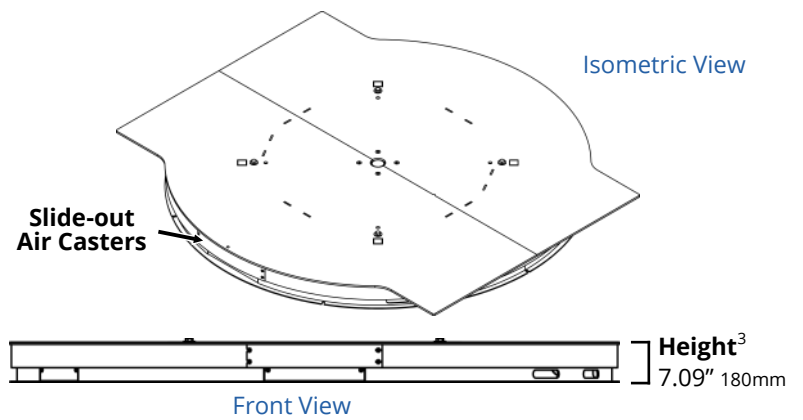
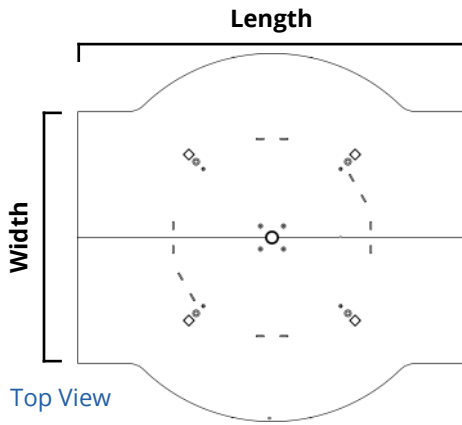
3. Inflated height adds approximately .25"(6mm) - 1"(25mm).

Model No.	Rack Example 1	Rack Example 2
AX040	W x D @ Max Cap.	W x D @ Max Cap.
AX040-0060	52" x 12" 1,320mm x 305mm	26" x 22" 660mm x 559mm
AX040-0072	62" x 15" 1,575mm x 381mm	32" x 28" 813mm x 711mm
AX040-0084	74" x 18" 1,880mm x 457mm	38" x 36" 965mm x 914mm
AX040-0096	84" x 22" 2,134mm x 559mm	50" x 40" 1,270mm x 1,016mm
AX040-0108	94" x 26" 2,388mm x 660mm	60" x 44" 1,524mm x 1,118mm
AX040-0120	102" x 30" 2,591mm x 762mm	68" x 48" 1,727mm x 1,219mm
AX040-0132	112" x 34" 2,845mm x 610mm	78" x 52" 1,981mm x 1,321mm
AX040-0144	122" x 38" 3,099mm x 965mm	88" x 56" 2,235mm x 1,422mm



Example rack sizes are not a minimum or maximum rack size. Consult with application engineer for assistance with sizing.

Square Air Caster Turntable

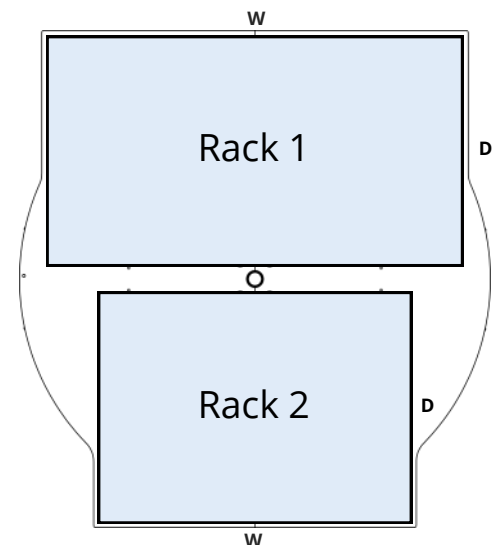


Square Air Caster Turntable Specifications

Model No.	Capacity	Cycle Time	Base Size	Top Size		Swing Radius	Air Flow
				Max Width ⁴	Max Depth ⁴		
AX04X	Total ¹	180° Fully Loaded ²	Diameter			max table size	Average
AX042-XXXXX	8,000lb 3,629kg	10 - 16 Sec.	60" 1,524mm	66" 1,676mm	66" 1,676mm	48" 1,219mm	28 SCFM 793L/m
AX043-XXXXX	8,000lb 3,629kg	10 - 16 Sec.	72" 1,829mm	78" 1,981mm	78" 1,981mm	56" 1,422mm	32 SCFM 906L/m
AX044-XXXXX	12,000lb 5,443kg	12 - 16 Sec.	84" 2,134mm	90" 2,286mm	90" 2,286mm	64" 1,626mm	32 SCFM 906L/m
AX045-XXXXX	16,000lb 7,257kg	12 - 18 Sec.	96" 2,438mm	102" 2,591mm	102" 2,591mm	72" 1,829mm	40 SCFM 1,133L/m
AX046-XXXXX	16,000lb 7,257kg	14 - 20 Sec.	108" 2,743mm	114" 2,896mm	114" 2,896mm	82" 2,083mm	48 SCFM 1,359L/m
AX047-XXXXX	16,000lb 7,257kg	14 - 20 Sec.	120" 3,048mm	126" 3,200mm	126" 3,200mm	90" 2,286mm	48 SCFM 1,359L/m
AX048-XXXXX	16,000lb 7,257kg	16 - 22 Sec.	132" 3,353mm	138" 3,505mm	138" 3,505mm	98" 2,489mm	48 SCFM 1,359L/m
AX049-XXXXX	16,000lb 7,257kg	16 - 24 Sec.	144" 3,658mm	150" 3,810mm	150" 3,810mm	106" 2,692mm	48 SCFM 1,359L/m

1. Capacity evenly distributed across the table. 2. Cycle time for 180° rotation. Times will vary depending on drive type and loading conditions. May decrease with lighter load. 3. Inflated height adds approximately .25"(6mm) - 1"(25mm). 4. Standard lengths available in 6" increments.

Model No.	Rack Example 1	Rack Example 2
AX04X	W x D @ Max Cap.	W x D @ Max Cap.
AX042-XXXXX	52" x 12" 1,320mm x 305mm	26" x 22" 660mm x 559mm
AX043-XXXXX	62" x 15" 1,575mm x 381mm	32" x 28" 813mm x 711mm
AX044-XXXXX	84" x 42" 2,134mm x 1,067mm	52" x 42" 1,321mm x 1,067mm
AX045-XXXXX	96" x 48" 2,438mm x 1,219mm	68" x 48" 1,727mm x 1,219mm
AX046-XXXXX	108" x 54" 2,743mm x 1,372mm	84" x 54" 2,134mm x 1,372mm
AX047-XXXXX	120" x 60" 3,048mm x 2,524mm	96" x 60" 2,438mm x 2,524mm
AX048-XXXXX	132" x 66" 3,353mm x 2,676mm	110" x 66" 2,794mm x 2,676mm
AX049-XXXXX	144" x 72" 3,658mm x 2,829mm	124" x 72" 3,150mm x 2,829mm



Example rack sizes are not a minimum or maximum rack size. Consult with application engineer for assistance with sizing.

Flush Floor Air Caster Turntable



Flush Floor Air Caster Turntables package our popular Air Caster Turntable into a solution designed for operations needing turntables to interact with fork lifts or rail systems. Our flush floor systems are more practical than mechanical ones, with a capacity of 100,000 lbs, max top size of 324", and optional rail spurs and curb ring.

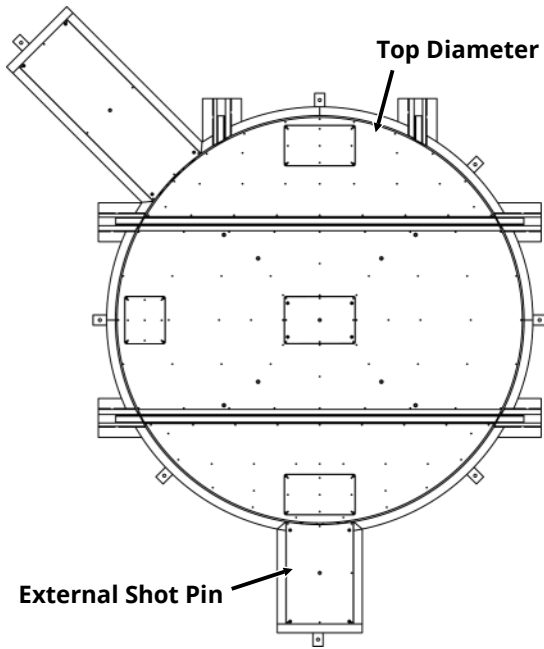
- **Capacities up to 100,000 lbs.**
- **Top sizes from 96" to 324"**
- **Optional rail spurs and curb ring**
- **Lower cost option compared to mechanical systems**

Flush Floor Turntable Options

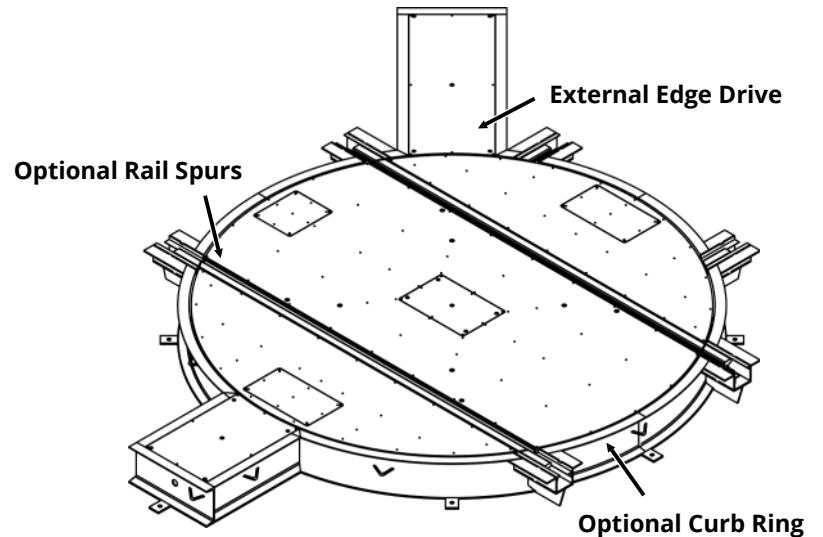
	Options	Part No.	Description
	Electric Edge Drive	AX5020-0060	AX050 series external electric drive assembly.
	Pneumatic Edge Drive	AX5020-0070	AX050 series external pneumatic drive assembly / lubed motor.
	Internal 180° Shock Stop with Precision Locator	AX5030-0022	AX050 series turntable shock stop with prox. sensor assembly kit.
	External Shot Pin	AX5030-0031	AX050 series shot pin assembly kit.
Options	Pneumatic Auto Shut-Off / Two Position	AX5012-0050	Auto shutoff assembly 2 position kit.
	Pneumatic Auto Shut-Off / Four Position	AX5012-0060	Auto shutoff assembly 4 position kit.
	Electric Auto Shut-Off / Two Position	AX5012-0070	Electric auto shutoff assembly 2 position kit.
	Electric Auto Shut-Off / Four Position	AX5012-0080	Electric auto shutoff assembly 4 position kit.
	Rail Spurs	Custom	Two or Four way in-ground rail spurs.
	Curb Ring	Custom	External curb ring outlining pit dimensions and protecting turntable.
	Custom Table Top Material	Custom	Treaded, diamond, slip knot or aluminum top plating available.

Available in conjunction with AX04X Air Caster Turntable configurable and custom options.

Flush Floor Air Caster Turntable



Top View



Isometric View

Flush Floor Air Caster Turntable Specifications

Model No.	Capacity	Top Size		Base Size	Height	Caster	Air Flow
		Min Top Dia.	Max Top Dia.				
AX05X	Total			Diameter	Deflated ¹	Diameter	Average
AX050-0096	20,000lb 9,072kg	96" 2,438mm	120" 3,048mm	96" 2,438mm	10.5" 267mm	20" 508mm	48 SCFM 1,359L/m
AX050-0120	20,000lb 9,072kg	120" 3,048mm	144" 3,658mm	120" 3,048mm	10.5" 267mm	20" 508mm	48 SCFM 1,359L/m
AX050-0144	20,000lb 9,072kg	144" 3,658mm	168" 4,267mm	144" 3,658mm	10.5" 267mm	20" 508mm	48 SCFM 1,359L/m
AX050-0168	20,000lb 9,072kg	168" 4,267mm	192" 4,877mm	168" 4,267mm	10.5" 267mm	24" 610mm	66 SCFM 1,869L/m
AX050-0192	20,000lb 9,072kg	192" 4,877mm	216" 5,486mm	192" 4,877mm	10.5" 267mm	24" 610mm	66 SCFM 1,869L/m
AX051-0144	100,000lb 45,359kg	144" 3,658mm	180" 4,572mm	144" 3,658mm	13" 330mm	30" 762mm	114 SCFM 3,228L/m
AX051-0180	100,000lb 45,359kg	180" 4,572mm	216" 5,486mm	180" 4,572mm	13" 330mm	30" 762mm	114 SCFM 3,228L/m
AX051-0216	100,000lb 45,359kg	216" 5,486mm	252" 6,401mm	216" 5,486mm	13" 330mm	30" 762mm	114 SCFM 3,228L/m
AX051-0252	100,000lb 45,359kg	252" 6,401mm	288" 7,315mm	252" 6,401mm	13" 330mm	36" 914mm	138 SCFM 3,908L/m
AX051-0288	100,000lb 45,359kg	288" 7,315mm	324" 8,230mm	288" 7,315mm	13" 330mm	36" 914mm	138 SCFM 3,908L/m

1. Inflated height adds approximately .25"(6mm) - 1.5"(38mm).

High Speed Air Caster Turntable



Robotic manufacturing demands precision and speed. Hit your work cell's target cycle times with a High-Speed Air Caster Turntable. Powered by air caster technology, our product development team designed this turntable family from the ground up with high-speed oscillation and precision positioning for work cell applications.

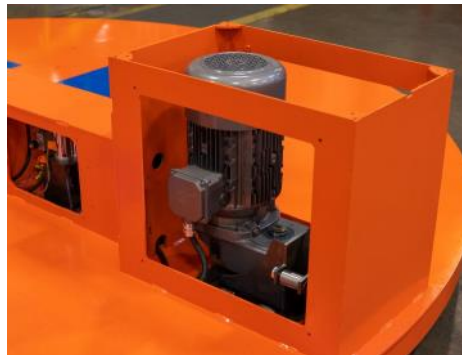
- Capacities up to 10,000 lbs. (5,000 lbs. per side)
- Low down height of 8.375"
- Top sizes from 108" to 156"
- 180° cycle times in as low as 6 seconds
- Integrate easily with robotic work cells

Features & Benefits



Easy to Maintain

Turntables allow for components to be replaced without removing the table top, ultimately reducing downtime. Few moving parts lead to a lower chance of needed maintenance.



Electric Drives

The two electric drives in the middle of the table provide the force required to rotate the table 180° in 6 seconds, with a shot pin precisely stopping the table to +/- 1/16 of an inch.



Low Load Height

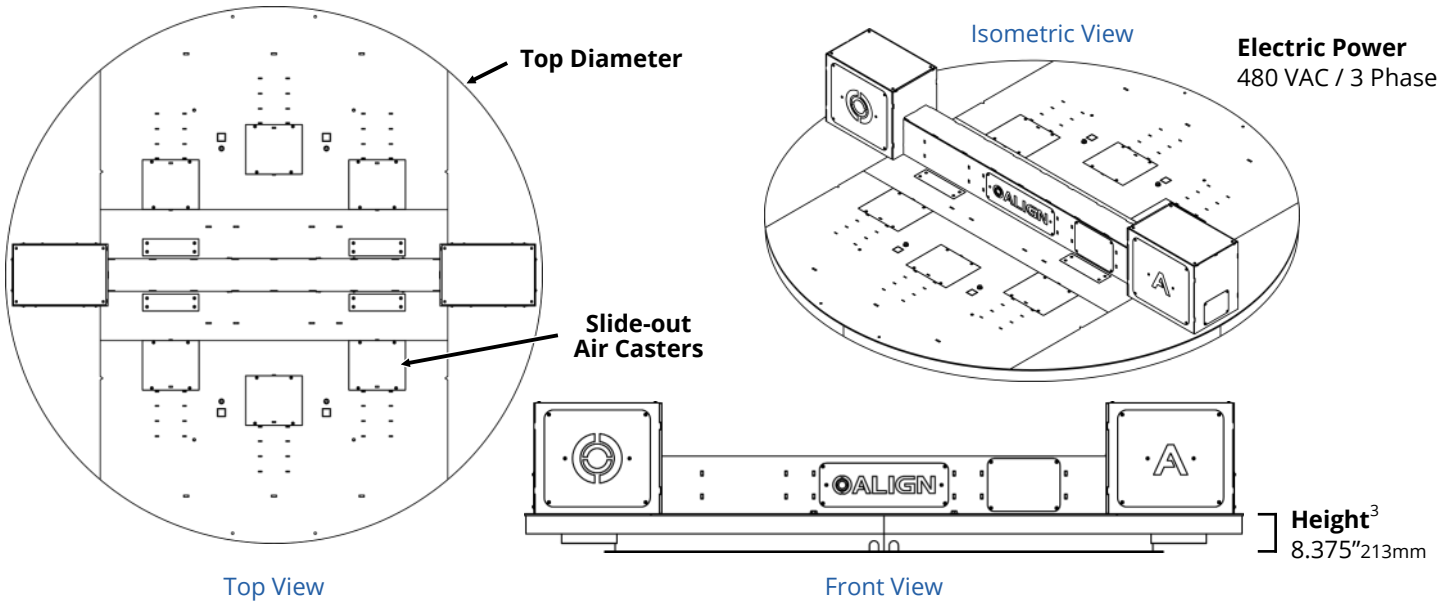
The tables have a low load height of 8" making it easy to load and unload the tables. Operators can access the components by easily stepping onto the turntable.

High Speed Turntable

	Options	Part No.	Description
Config. Options	Basic Control Stand	AX5011-XXXX	Standard pneumatic control valves with electrical enclosure and PLC program.
	Auxillary Control Stand	AX5040-XXXX	Remote mounted control stand.
	Robotic Interface Control Stand	AX5081-XXXX	Customer PLC operated control stand. I/O block provided to communicate with components.
	Dirt Leg	APS5000-XXXX	Dirt leg assembly for air filtration. (factory recommended)
	Center Fence - Screen	AX5054-XXXX	An expanded metal screen divider used to partition the table into two separate loading/working stations.
	Center Fence - Solid	AX5055-XXXX	A solid sheet metal divider used to partition the table into two separate loading/working stations.
	Center Fence - Polycarbonate	AX5056-XXXX	A solid sheet metal divider used to partition the table into two separate loading/working stations.
	Riser Base	AX5060-XXXX	Raise the turntable to a more ergonomic height for the operator(s).
	Slip Ring	AX5090-XXXX	Provide electrical supply to the tabletop.
	Rotary Union	AX5091-XXXX	Provide air supply to the tabletop.
	Slip Ring Union	AX5092-XXXX	Provide electrical and air supply to the tabletop.
	Central Grounding	AX5093-XXXX	Centrally located grounding point.
Custom Options	Audible/Visual Alarm	Custom	Audible and/or visual alarm to indicate movement.
	Safety Guarding	Custom	Physical and/or electrical guarding to prevent personnel from entering equipment area during operation.
	Lead-Ins	Custom	Welded plate side guides used for ease of loading/unloading racks on table by forklift.
	Scrapper Bar	Custom	Welded bar stopper for fork truck rack placement/protection.
	Corner Angles	Custom	Welded plate angles for rack placement mounted and the rack corners.
	Conical Locators	Custom	Bolt-on conical pads for open tube rack placement.
	Error Proofing Pin	Custom	Bolt-on pin used to prevent misalignment or incorrect orientation of racks.
	Rack Present Sensors	Custom	Sensors to detect the presence of racks on either side of the table.
Custom Controls Package	Custom	PLC controlled stand programmed by Align.	

Some options may preclude other options.

Round High Speed Turntable



Round High Speed Turntable Specifications

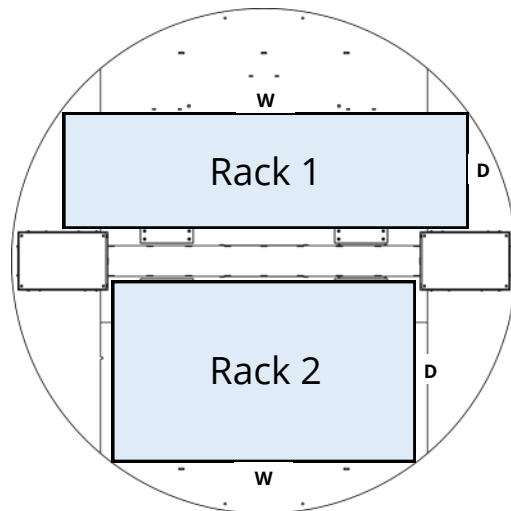
Model No.	Capacity	Cycle Time	Top Size	Base Size	Height	Caster	Air Flow
AX020	Total ¹	180° Fully Loaded ²	Diameter	Diameter	Deflated ³	Diameter	Average
AX020-0108	10,000lb 4,536kg	6 Seconds	108" 2,743mm	72" 1,829mm	8.375" 213mm	12" 305mm	60 SCFM 1,699L/m
AX020-0120	10,000lb 4,536kg	6.5 Seconds	120" 3,048mm	84" 2,134mm	8.375" 213mm	12" 305mm	60 SCFM 1,699L/m
AX020-0132	10,000lb 4,536kg	6.5 Seconds	132" 3,353mm	96" 2,438mm	8.375" 213mm	14" 356mm	75 SCFM 2,124L/m
AX020-0144	10,000lb 4,536kg	7 Seconds	144" 3,658mm	108" 2,743mm	8.375" 213mm	14" 356mm	75 SCFM 2,124L/m
AX020-0156	10,000lb 4,536kg	7 Seconds	156" 3,962mm	120" 3,048mm	8.375" 213mm	14" 356mm	75 SCFM 2,124L/m

1. 5,000 lbs. per side, 10,000 lbs. total. 2. Cycle time for 180° rotation. Times will vary depending on loading conditions. May decrease with lighter load.

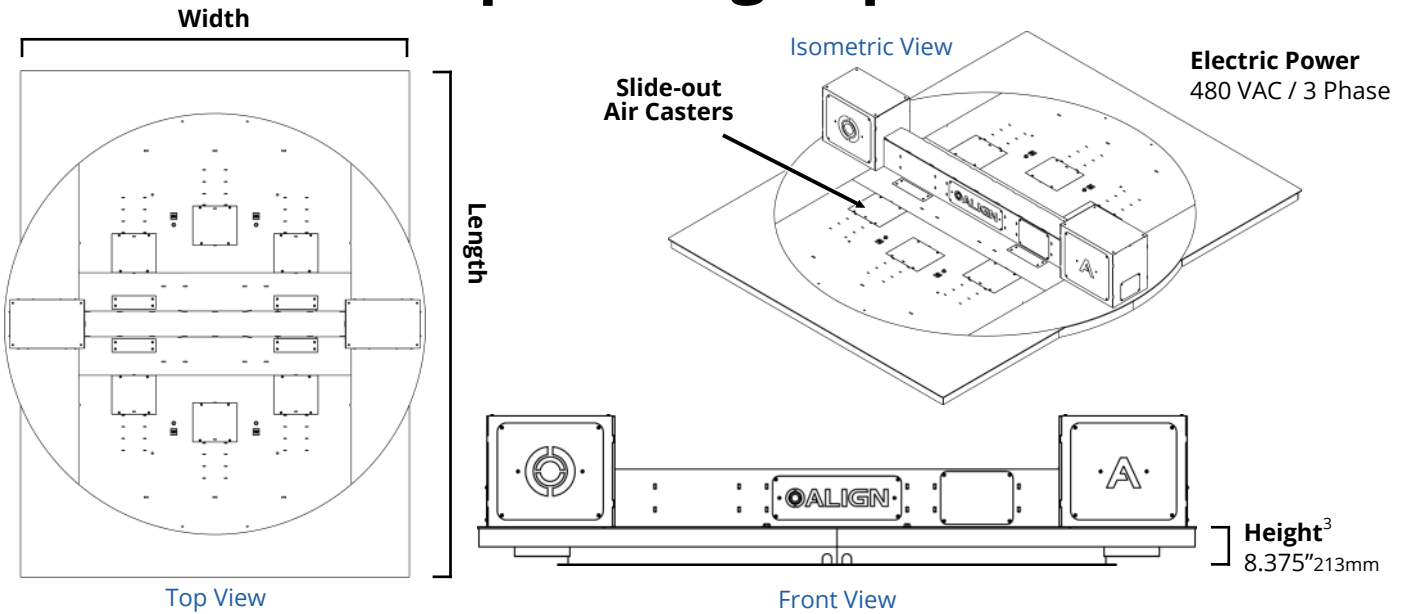
3. Inflated height adds approximately .25"(6mm) - 1"(25mm).

Model No.	Rack Size Example 1	Rack Size Example 2
AX020	W x D	W x D
AX020-0108	72" x 28" 1,829mm x 711mm	44" x 42" 1,118mm x 1,067mm
AX020-0120	84" x 30" 2,134mm x 762mm	56" x 46" 1,422mm x 1,168mm
AX020-0132	96" x 32" 2,438mm x 813mm	68" x 48" 1,727mm x 1,219mm
AX020-0144	108" x 34" 2,743mm x 864mm	80" x 52" 2,032mm x 1,321mm
AX020-0156	120" x 36" 3,048mm x 914mm	92" x 56" 2,337mm x 1,422mm

Example rack sizes are not a minimum or maximum rack size. Consult with application engineer for assistance with sizing.



Square High Speed Turntable



Square High Speed Turntable Specifications

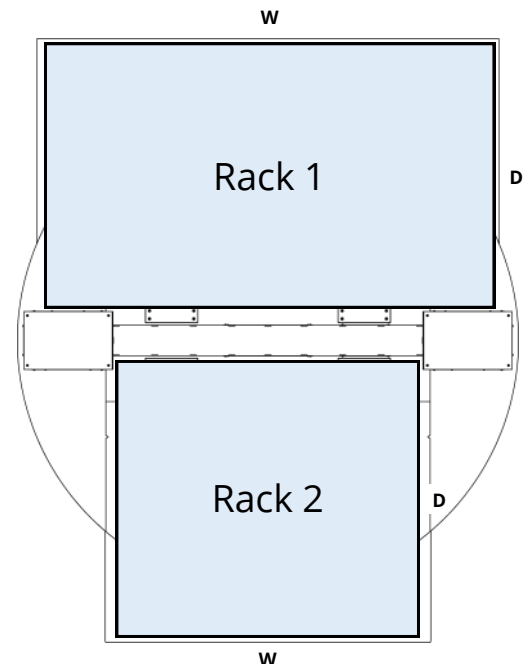
Model No.	Capacity	Cycle Time	Base Size	Top Size		Air Flow
				Max Width ⁴	Max Depth ⁴	
AX021	Total ¹	180° Fully Loaded ²	Diameter			Average
AX021-0108	10,000lb 4,536kg	6 Seconds	72" 1,829mm	104" 2,642mm	114" 2,896mm	60 SCFM 1,699L/m
AX021-0120	10,000lb 4,536kg	6.5 Seconds	84" 2,134mm	116" 2,946mm	126" 3,200mm	60 SCFM 1,699L/m
AX021-0132	10,000lb 4,536kg	6.5 Seconds	96" 2,438mm	128" 3,251mm	138" 3,505mm	75 SCFM 2,124L/m
AX021-0144	10,000lb 4,536kg	7 Seconds	108" 2,743mm	140" 3,556mm	150" 3,810mm	75 SCFM 2,124L/m
AX021-0156	10,000lb 4,536kg	7 Seconds	120" 3,048mm	152" 3,861mm	162" 4,115mm	75 SCFM 2,124L/m

1. 5,000 lbs. per side, 10,000 lbs. total. 2. Cycle time for 180° rotation. Times will vary depending on loading conditions. May decrease with lighter load.

3. Inflated height adds approximately .25"(6mm) - 1"(25mm). 4. Standard lengths available in 6" increments.

Model No.	Swing Radius	Rack Size Example #1	Rack Size Example #2
AX021	at max table size	W x D	W x D
AX021-0108	62" 3,511mm	96" x 28" 2,438mm x 711mm	44" x 36" 1,118mm x 914mm
AX021-0120	75" 4,219mm	108" x 40" 2,743mm x 1,016mm	56" x 48" 1,422mm x 1,219mm
AX021-0132	87" 4,927mm	120" x 52" 3,048mm x 1,321mm	68" x 60" 1,727mm x 1,524mm
AX021-0144	100" 5,663mm	132" x 64" 3,353mm x 1,626mm	80" x 72" 2,032mm x 1,829mm
AX021-0156	113" 6,400mm	144" x 76" 3,658mm x 1,930mm	92" x 84" 2,337mm x 2,134mm

Example rack sizes are not a minimum or maximum rack size. Consult with application engineer for assistance with sizing.



Precision Mechanical Turntable



Maximize efficiency in your robotic cell with the Precision Mechanical Turntable. The table is accurate up to 0.01" and boasts a weight capacity up to 5,000 lbs. It can be easily integrated into existing or future work cells thanks to its compatibility with all major robotic controllers. Customizable round and rectangular tops are available from 60" up to 120".

- **Capacities up to 5,000 lbs.**
- **Table edge accuracy $\leq 0.01"$**
- **Integrate easily with robotic work cells**
- **Resolver for accurate, infinite positioning**
- **Fully programable system, turn-key operation available**

Features & Benefits



High speed Accuracy

High speed mechanical turntable with accuracy of $\leq 0.01"$ (0.254mm) at table edge, meeting the demands that are required for robotic applications.

Integration

The turntable can be easily integrated into existing or future working cells and compatible with all major robotic controllers.

Easy to Maintain

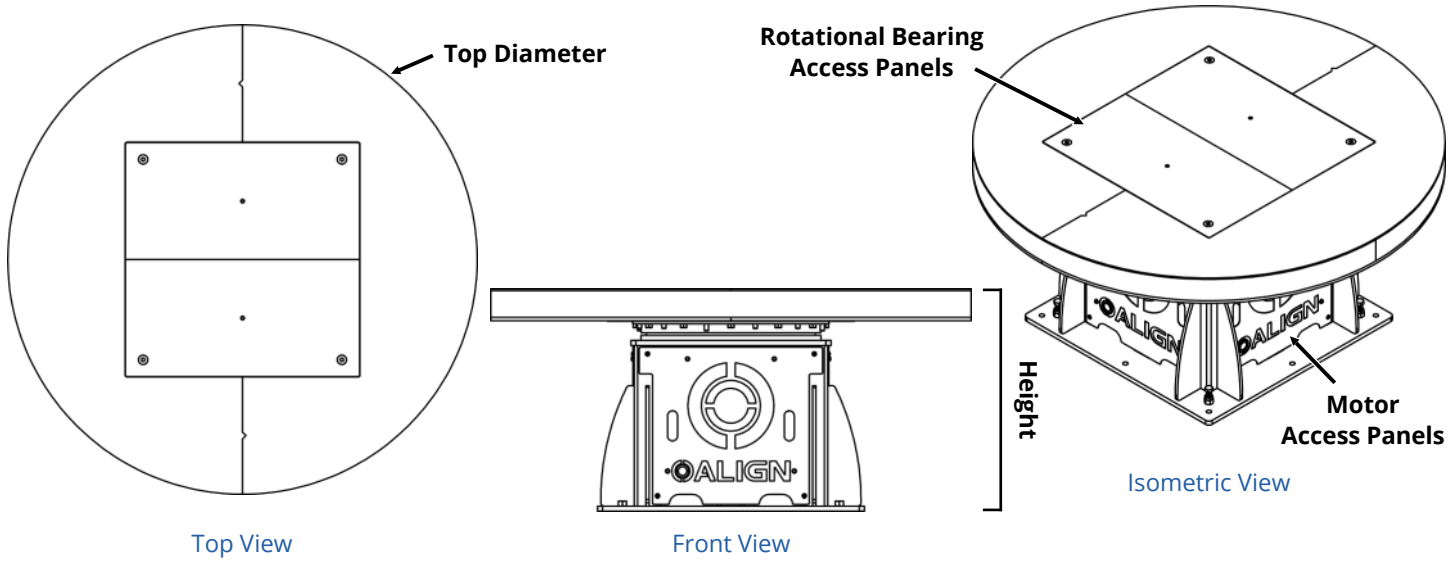
All major components can be easily maintained and replaced from central maintenance hatch and side mounted auxiliary cover plates.

Precision Mechanical Turntable

	Options	Part No.	Description
	Central Grounding Block	APS5041-0130	Table mounted spring loaded 500A rotary block with shavings capture bracket.
Config. Options	Basic Control Stand	APS5011-XXXX	Standard electrical enclosure and PLC program.
	Auxiliary Control Stand	APS5031-XXXX	Remote mounted control stand.
	Robotic Interface Control Stand	APS5081-XXXX	Customer PLC operated control stand. I/O block provided to communicate with components.
	Center Divider	APS5053-XXXX	Center divider tube / 8" tall.
	Center Fence - Screen	APS5054-XXXX	An expanded metal screen divider used to partition the table into two separate loading/working stations.
	Center Fence - Solid	APS5055-XXXX	A solid sheet metal divider used to partition the table into two separate loading/working stations.
	Center Fence - Polycarbonate	APS5056-XXXX	A solid transparent polycarbonate divider used to partition the table into two separate loading/working stations.
	Riser Base	APS5060-XXXX	Raise the turntable to a more ergonomic height for the operator(s).
	Slip Ring	APS5090-XXXX	Provide electrical supply to the tabletop.
Custom Options	Audible/Visual Alarm	Custom	Audible and/or visual alarm to indicate movement.
	Safety Guarding	Custom	Physical and/or electrical guarding to prevent personnel from entering equipment area during operation.
	Lead-Ins	Custom	Welded plate side guides used for ease of loading/unloading racks on table by forktruck.
	Scraper Bar	Custom	Welded bar stopper for fork truck rack placement/protection.
	Corner Angles	Custom	Welded plate angles for rack placement mounted and the rack corners.
	Conical Locators	Custom	Bolt-on conical pads for open tube rack placement.
	Error Proofing Pin	Custom	Bolt-on pin used to prevent misalignment or incorrect orientation of racks.
	Rack Present Sensors	Custom	Sensors to detect the presence of racks on either side of the table.
	Custom Controls Package	Custom	PLC controlled stand programmed by Align.
Positive Stop Brake	Custom	Mechanical locking mechanism to guarantee repeatability.	

Some options may preclude other options.

Round Precision Mech. Turntable



Round Precision Mechanical Turntable Specifications

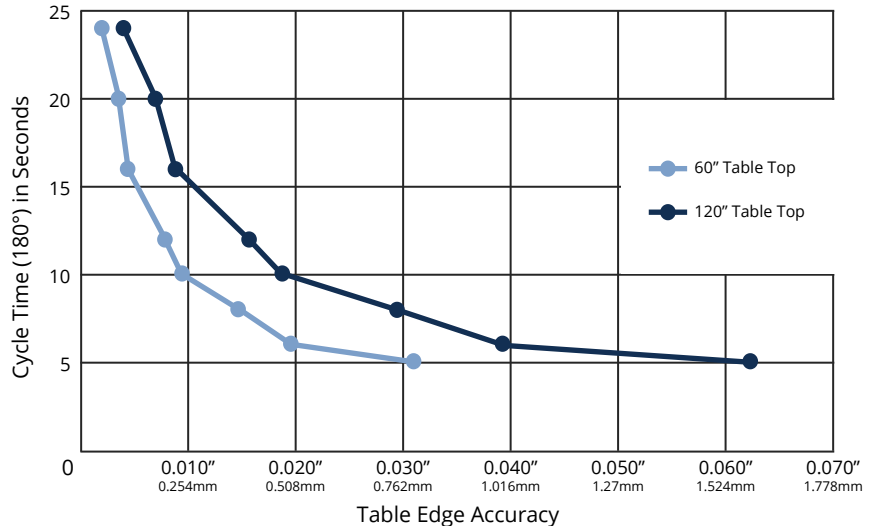
Model No.	Capacity	Cycle Time	Accuracy	Top Size	Height	Base Size
APS070	Total ¹	Fastest/Standard ²	Fastest/Standard	Diameter ³		L x W
APS070-0060	5,000lb 2,268kg	4.5 Seconds 10 Seconds	0.066° 0.018°	60" 1,524mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS070-0072	5,000lb 2,268kg	5 Seconds 10 Seconds	0.059° 0.018°	72" 1,829mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS070-0084	5,000lb 2,268kg	5.5 Seconds 10 Seconds	0.054° 0.018°	84" 2,134mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS070-0096	5,000lb 2,268kg	6 Seconds 10 Seconds	0.050° 0.018°	96" 2,438mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS070-0108	5,000lb 2,268kg	6.5 Seconds 10 Seconds	0.046° 0.018°	108" 2,743mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS070-0120	5,000lb 2,268kg	7 Seconds 10 Seconds	0.042° 0.018°	120" 3,048mm	38" 965mm	40" x 40" 1,016mm - 1,016mm

1. Capacity based on two racks at 2,500lb per side. 2. Cycle considered to be 180° rotation. 3. Consult with application engineer for assistance with sizing.

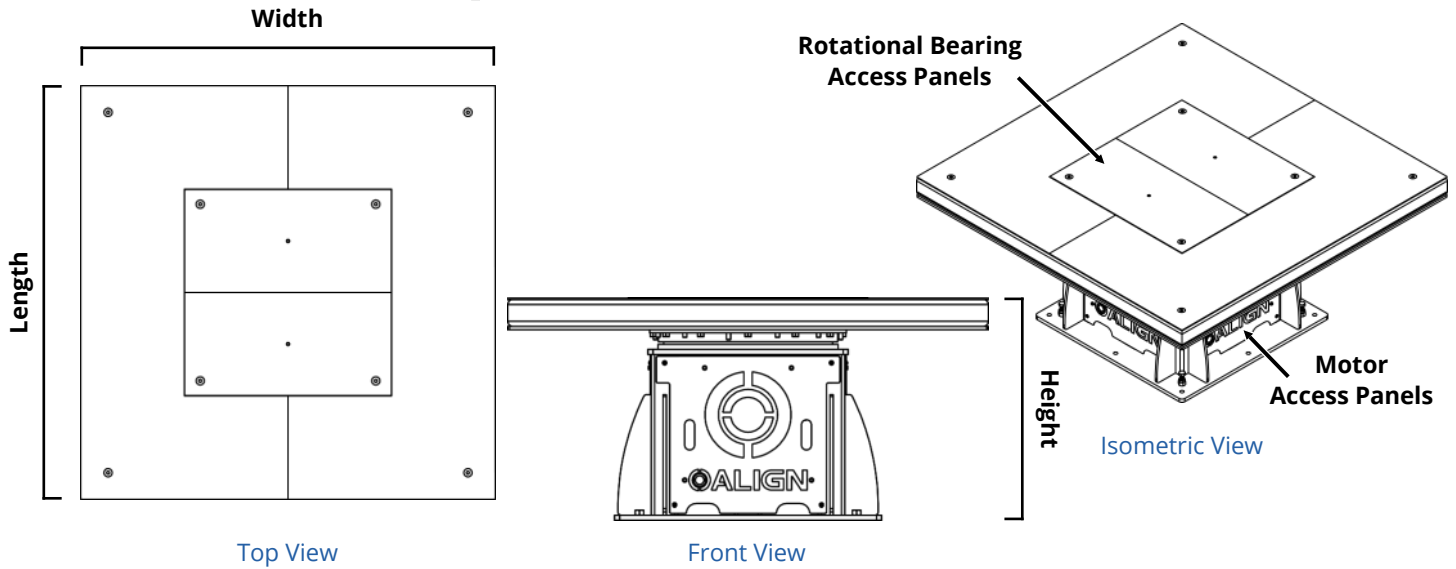
Cycle Time vs Table Edge Accuracy

Cycle Time	Speed	Accuracy	
		60" Top	120" Top
Seconds	RPM		
5 Seconds	5	0.037" 0.940mm	0.062" 1.575mm
6 Seconds	5	0.024" 0.610mm	0.039" 0.991mm
8 Seconds	3.75	0.018" 0.457mm	0.030" 0.762mm
10 Seconds	3	0.01" 0.254mm	0.019" 0.483mm
12 Seconds	2.5	0.01" 0.254mm	0.016" 0.406mm
16 Seconds	1.875	0.01" 0.254mm	0.01" 0.254mm

Cycle Time vs Table Edge Accuracy



Square Precision Mech. Turntable



Square Precision Mechanical Turntable Specifications

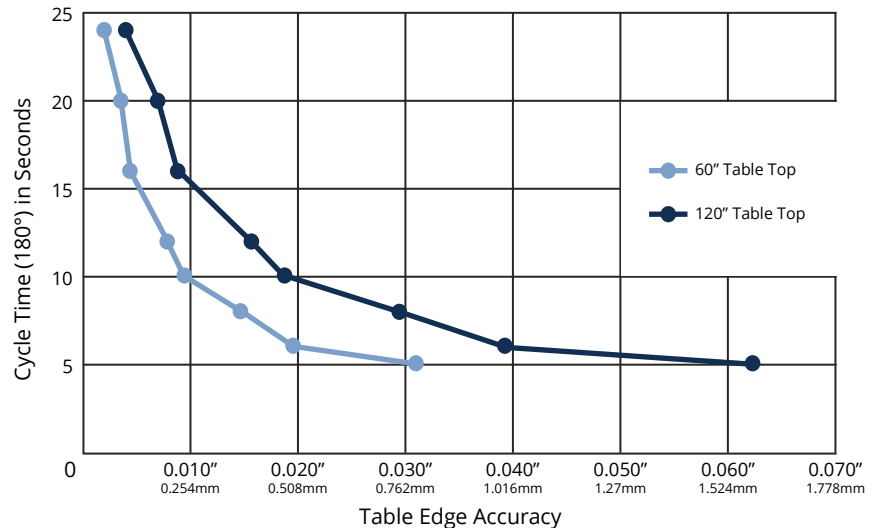
Model No.	Capacity	Cycle Time	Accuracy	Top Size	Height	Base Size
APS071	Total ¹	Fastest/Standard ²	Fastest/Standard	L / D (Min-Max) ³		L x W
APS071-0060	5,000lb 2,268kg	4.5 Seconds 10 Seconds	0.066° 0.018°	40" - 60" 1,016mm - 1,524mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS071-0072	5,000lb 2,268kg	5 Seconds 10 Seconds	0.059° 0.018°	60" - 72" 1,524mm - 1,829mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS071-0084	5,000lb 2,268kg	5.5 Seconds 10 Seconds	0.054° 0.018°	72" - 84" 1,829mm - 2,134mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS071-0096	5,000lb 2,268kg	6 Seconds 10 Seconds	0.050° 0.018°	84" - 96" 2,134mm - 2,438mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS071-0108	5,000lb 2,268kg	6.5 Seconds 10 Seconds	0.046° 0.018°	96" - 108" 2,438mm - 2,743mm	38" 965mm	40" x 40" 1,016mm - 1,016mm
APS071-0120	5,000lb 2,268kg	7 Seconds 10 Seconds	0.042° 0.018°	108" - 120" 2,743mm - 3,048mm	38" 965mm	40" x 40" 1,016mm - 1,016mm

1. Capacity based on two racks at 2,500lb per side. 2. Cycle considered to be 180° rotation. 3. Consult with application engineer for assistance with sizing.

Cycle Time vs Table Edge Accuracy

Cycle Time	Speed	Accuracy	
		60" Top	120" Top
Seconds	RPM		
5 Seconds	5	0.031" 0.790mm	0.062" 1.575mm
6 Seconds	5	0.020" 0.510mm	0.039" 0.991mm
8 Seconds	3.75	0.015" 0.381mm	0.030" 0.762mm
10 Seconds	3	0.01" 0.254mm	0.019" 0.483mm
12 Seconds	2.5	0.01" 0.254mm	0.016" 0.406mm
16 Seconds	1.875	0.01" 0.254mm	0.01" 0.254mm

Cycle Time vs Table Edge Accuracy



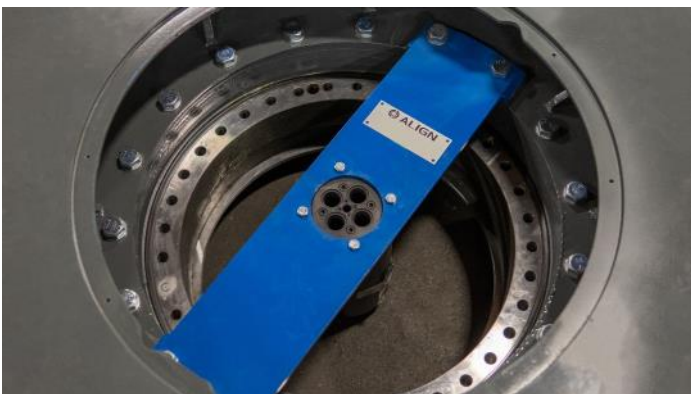
Mechanical Turntable



Take your robotic manufacturing to the next level of performance with mechanical indexing turntables. Designed for integration into robotic work cells, our turntables feature slewing drive that can handle continuous and cycle-on-demand applications. As with all of our products, the mechanical turntable is designed and built in the United States.

- **Capacities up to 35,000 lbs.**
- **Low down height of 16"**
- **Easy access to internal components**
- **Customizable amount of stations based on station capacity and distance from center.**

Features & Benefits



Slewing Drive

Features include a high-performance slewing drive that can handle continuous and cycle-on-demand applications with 0.3 degrees of accuracy with optional shot pin.



Low Maintenance

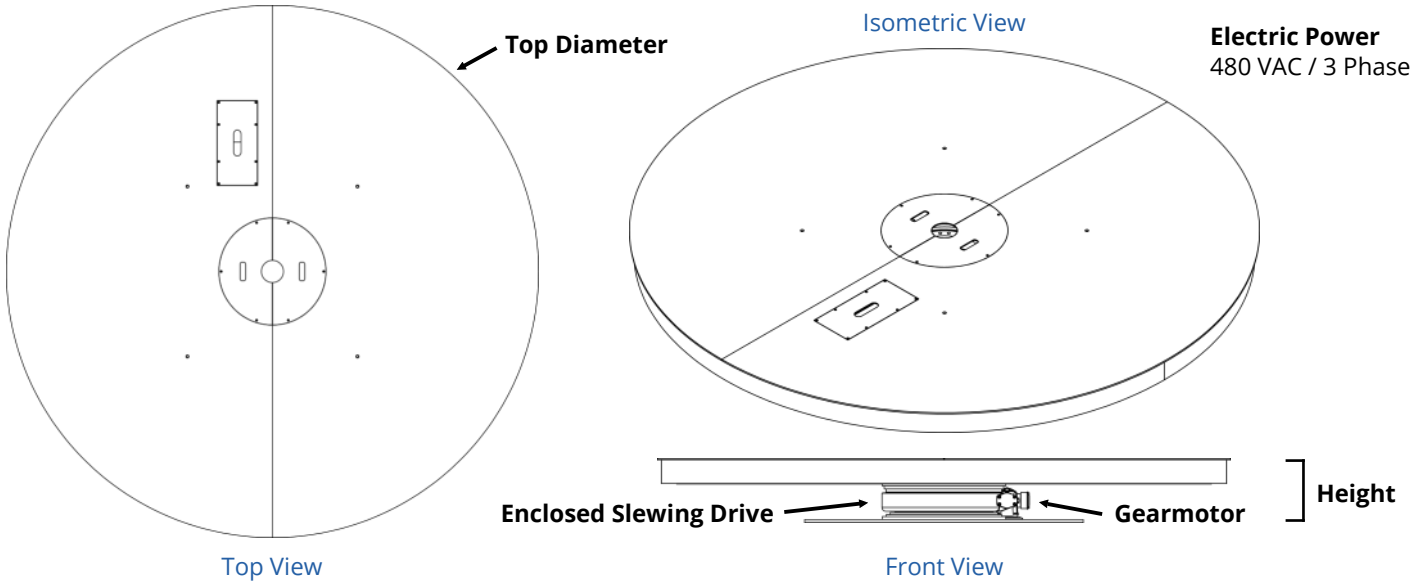
All electric unit built to minimize wear and potential downtime with few moving parts and easy access to internal components if an issue arises.

Mechanical Turntable

	Options	Part No.	Description
Options	External Shot Pin	APS5021-0030	External electrical shot pin for positioning of mechanical turntable up to ±1/16"
	Electric Auto Shut-Off / Two Position	APS5050-0070	Electric limit switch to disengage table at designated positions.
	Electric Auto Shut-Off / Four Position	APS5050-0080	Electric limit switch to disengage table at designated positions.
Config. Options	Basic Control Stand	APS5011-XXXX	Standard electrical enclosure and PLC program.
	Auxiliary Control Stand	APS5031-XXXX	Remote mounted control stand.
	Robotic Interface Control Stand	APS5081-XXXX	Customer PLC operated control stand. I/O block provided to communicate with components.
	Center Divider	APS5061-XXXX	Center divider tube / 8" tall.
	Center Fence - Screen	APS5062-XXXX	An expanded metal screen divider used to partition the table into two separate loading/working stations.
	Center Fence - Solid	APS5063-XXXX	A solid sheet metal divider used to partition the table into two separate loading/working stations.
	Center Fence - Polycarbonate	APS5064-XXXX	A solid transparent polycarbonate divider used to partition the table into two separate loading/working stations.
	Riser Base	APS5060-XXXX	Raise the turntable to a more ergonomic height for the operator(s).
	Slip Ring	APS5090-XXXX	Provide electrical supply to the tabletop.
	Rotary Union	APS5091-XXXX	Provide air supply to the tabletop.
	Slip Ring Union	APS5092-XXXX	Provide electrical and air supply to the tabletop.
	Central Grounding	APS5093-XXXX	Centrally located grounding point.
Custom Options	Audible/Visual Alarm	Custom	Audible and/or visual alarm to indicate movement.
	Safety Guarding	Custom	Physical and/or electrical guarding to prevent personnel from entering equipment area during operation.
	Lead-Ins	Custom	Welded plate side guides used for ease of loading/unloading racks on table by forklift.
	Scraper Bar	Custom	Welded bar stopper for fork truck rack placement/protection.
	Corner Angles	Custom	Welded plate angles for rack placement mounted and the rack corners.
	Conical Locators	Custom	Bolt-on conical pads for open tube rack placement.
	Error Proofing Pin	Custom	Bolt-on pin used to prevent misalignment or incorrect orientation of racks.
	Rack Present Sensors	Custom	Sensors to detect the presence of racks on either side of the table.
Custom Controls Package	Custom	PLC controlled stand programmed by Align.	

Some options may preclude other options.

Mechanical Turntable

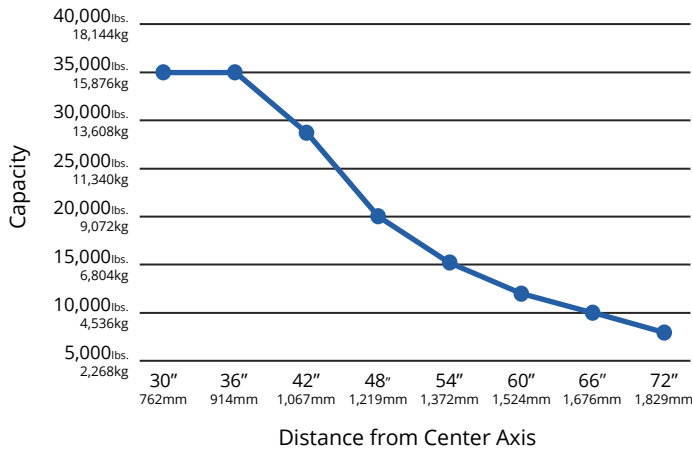


Mechanical Turntable Specifications

Model No.	Capacity	Top Size	Height	Base Size	RPM	Accuracy
APS060	Total ¹	Diameter		L x W	Min - Max ²	Degrees ³
APS060-0072	35,000lb 15,876kg	72" 1,829mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0084	35,000lb 15,876kg	84" 2,134mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0096	35,000lb 15,876kg	96" 2,438mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0108	35,000lb 15,876kg	108" 2,743mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0120	35,000lb 15,876kg	120" 3,048mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0132	35,000lb 15,876kg	132" 3,353mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS060-0144	35,000lb 15,876kg	144" 3,658mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°

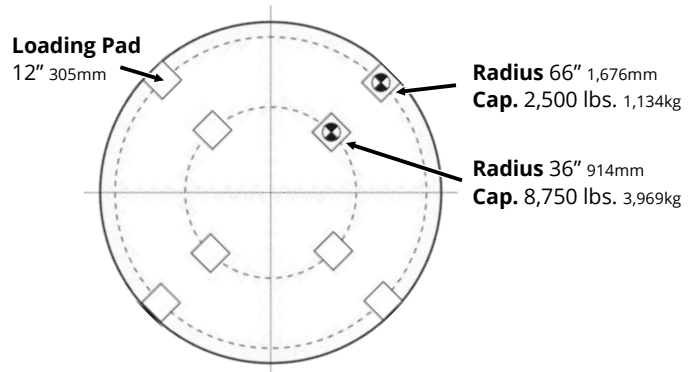
1. Based on centrally located load (see chart below) 2. 2RPM fixed, Unless controlled by optional VFD. 3. Based on slewing drive rated backlash

Weight Capacity



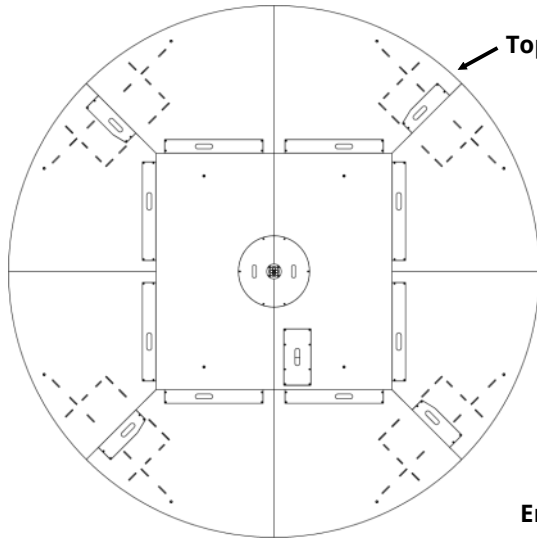
Example CG Table Diagram

144" 3,658mm Diameter

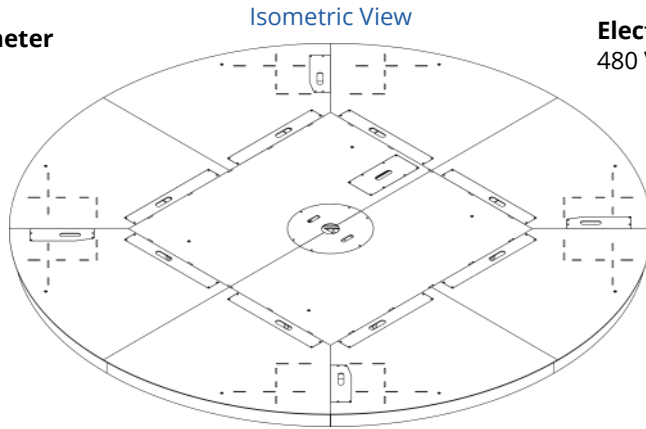


Consult with application engineer for assistance with sizing.

Mechanical Turntable

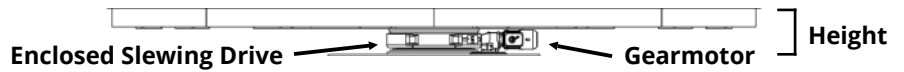


Top View



Isometric View

Electric Power
480 VAC / 3 Phase

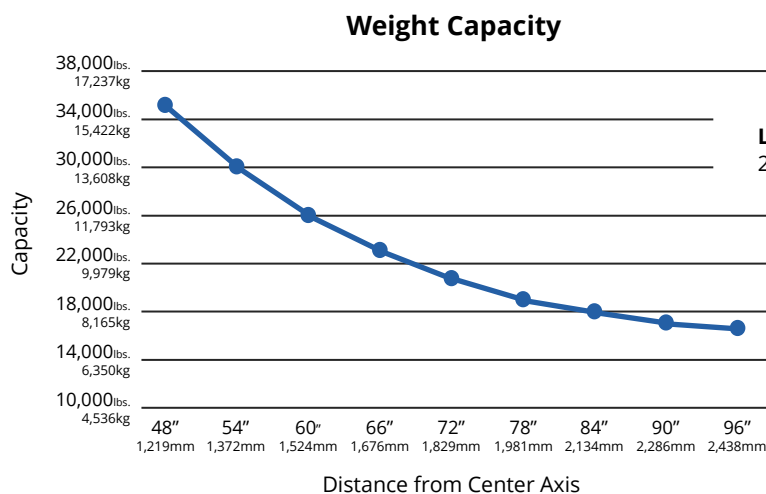


Front View

Mechanical Turntable Specifications

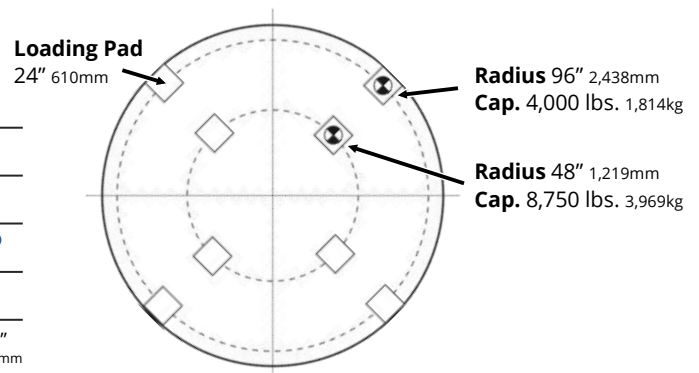
Model No.	Capacity	Top Size	Height	Base Size	RPM	Accuracy
APS061	Total ¹	Diameter		L x W	Min - Max ²	Degrees ³
APS061-0144	35,000lb 15,876kg	144" 3,658mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0156	35,000lb 15,876kg	156" 3,962mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0168	35,000lb 15,876kg	168" 4,267mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0180	35,000lb 15,876kg	180" 4,572mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0192	35,000lb 15,876kg	192" 4,877mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0204	35,000lb 15,876kg	204" 5,182mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°
APS061-0216	35,000lb 15,876kg	216" 5,486mm	16" 406mm	70" x 70" 1,778mm x 1,778mm	0.5 - 2.2 RPM	0.3°

1. Based on centrally located load (see chart below) 2. 2RPM fixed, Unless controlled by optional VFD. 3. Based on slewing drive rated backlash



Example CG Table Diagram

216" 5,486mm Diameter



Consult with application engineer for assistance with sizing.

Heavy Duty Mechanical Turntable



Heavy Duty Mechanical Turntable features a geared slewing bearing allowing for high weight capacities up to 150,000 lbs, standard sizes from 48" to 120" and the ability to run extended amounts of time. Custom top sizes are available, and if needed, with larger load sizes, wheels will be added in order to give the table additional stability. These turntables are also excellent for outdoor areas or areas that an air supply cannot be easily connected.

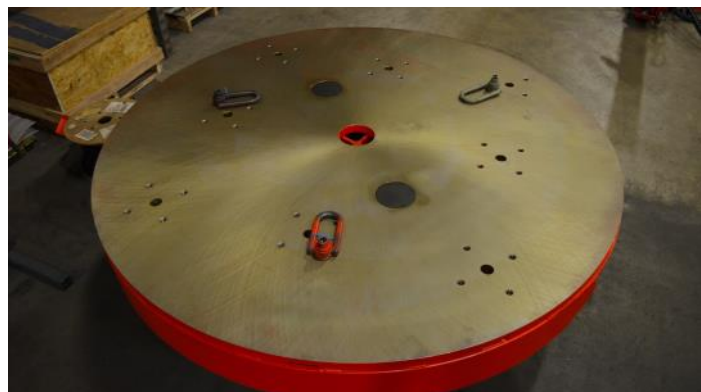
- **Capacities up to 150,000 lbs.**
- **Top sizes from 48" to 120"**
- **Integrate easily with robotic work cells**
- **If needed, larger table sizes can have wheels added for table stability**

Features & Benefits



Slewing Bearing Drive

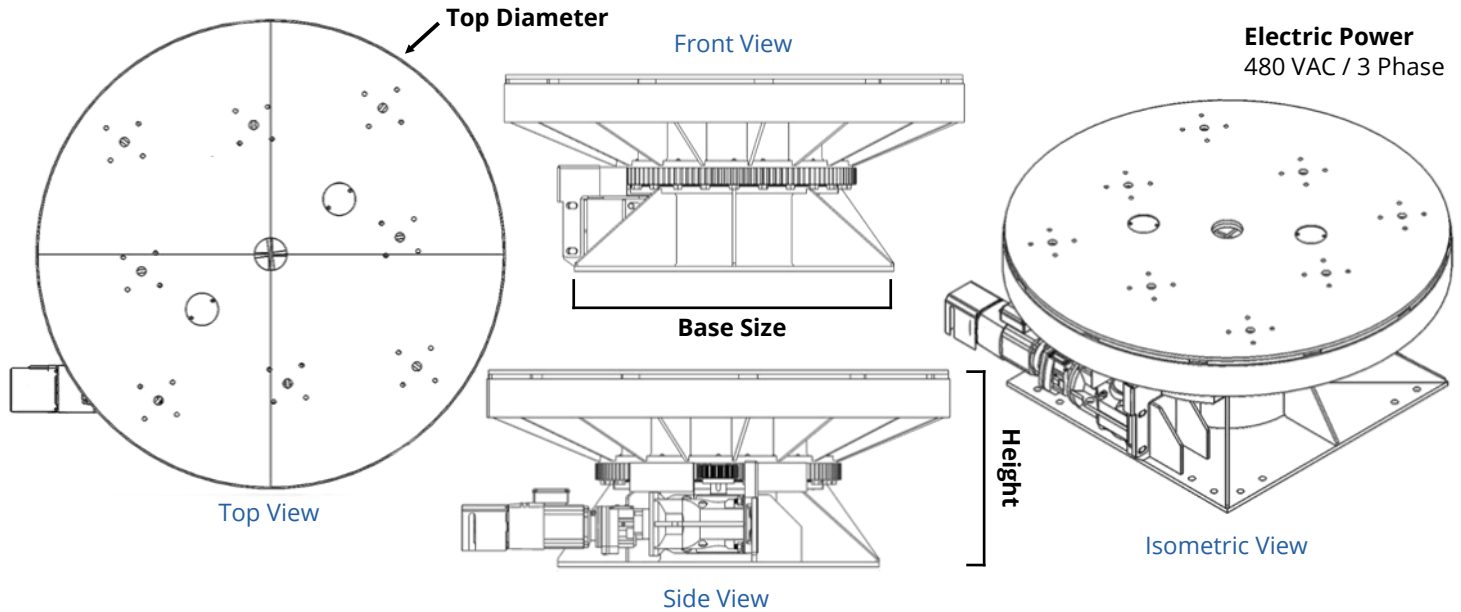
Features include a high-performance drive that can handle continuous and cycle-on-demand applications with 0.3 degrees of accuracy with optional shot pin.



Low Maintenance

This all electric unit is built to minimize wear and potential downtime with few moving parts and easy access to internal components if an issue arises.

Heavy Duty Mechanical Turntable



High Capacity Turntable Specifications

Model No.	Capacity	Top Size	Height	RPM	Accuracy	Base Size
AX010	Total ¹	Diameter		Min - Max ²	Degrees	L x W
AX010-048	150,000lb 68,039kg	48" 1,219mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-060	150,000lb 68,039kg	60" 1,524mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-072	150,000lb 68,039kg	72" 1,829mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-084	150,000lb 68,039kg	84" 2,134mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-096	125,000lb 56,699kg	96" 2,438mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-108	100,000lb 45,359kg	108" 2,743mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm
AX010-120	100,000lb 45,359kg	120" 3,048mm	31" 787mm	0 - 1 RPM	0.3°	50" x 50" 1,270mm x 1,270mm

1. Based on centrally located load (see chart below) 2. 1RPM fixed, Unless controlled by optional VFD.

Heavy Duty Head & Tailstock



Align Production Systems Heavy Duty Head & Tailstock Positioners deliver variable-speed rotation in either direction to optimize your fabrication or assembly operation. Our positioners are designed to improve worker ergonomics in your fabrication, assembly, and repair operations by positioning the workpiece into the ideal work position.

- **Capacities up to 35,000 lbs.**
- **Rotational torque up to 190,000in/lb**
- **All electric unit with no hydraulic mess**
- **Optional centrally located grounding point for the whole machine**

Available Models

Heavy Duty Welding Positioners

Align Production Systems offers a fixed and adjustable model of our Head & Tailstock to optimize worker ergonomics when welding.

Fixed Head & Tailstock

Improve worker safety and weld quality by easily positioning weldments.

Adjustable Head & Tailstock

Adds height and or length adjustment to further fine tune weldments into the optimal welding position.

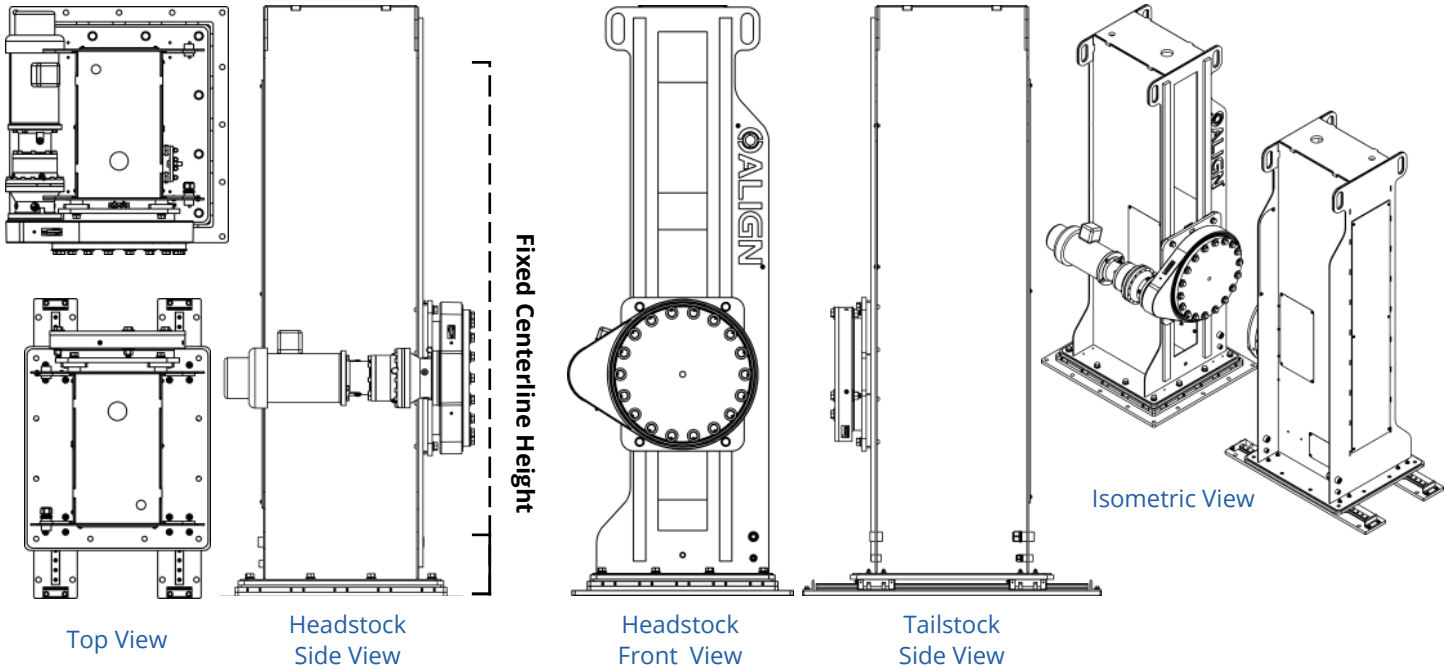


Heavy Duty Head & Tailstock

	Options	Part No.	Description
Options	Auxiliary Control Option / Pendant / HD Head & Tailstock	APS5040-0100	Handheld wired pendant controller.
	Auxiliary Control Option / Foot / HD Head & Tailstock	APS5040-0110	Foot operated controller.
	Auxiliary Control Option / Remote Stand / HD Head & Tailstock	APS5040-0120	Remote mounted control stand.
	Auxiliary Control Option / Wireless Pendant / HD Head & Tailstock	APS5040-0130	Handheld wireless pendant controller.
	Central Grounding / 800A / HD Head & Tailstock	APS5041-0100	800A central grounding system. (Not compatible with 35,000 lbs capacity unit)
	Central Grounding / 1500A / HD Head & Tailstock	APS5041-0110	1500A central grounding system.
Config. Options	Basic Control Stand	APS5043-XXXX	Standard electrical enclosure and PLC program.
	Horizontal Adjustment Rails	APS5045-XXXX	Linear rail mounted tailstock for horizontal direction adjustment.
	Vertical Rail Bellows	APS5046-XXXX	Mounted bellows for protection of the vertical travel ball screw.
	Horizontal Rail Bellows	APS5047-XXXX	Mounted bellows for protection of the horizontal travel linear rails.
	Riser Base	APS5049-XXXX	Adjust the machine for a more ergonomic height for the operator(s).
Custom Options	Audible/Visual Alarm	Custom	Audible and/or visual alarm to indicate movement.
	Safety Guarding	Custom	Physical and/or electrical guarding to prevent personnel from entering equipment area during operation.
	Conical Locators	Custom	Bolt-on conical pads for open tube rack placement.
	Error Proofing Pin	Custom	Bolt-on pin used to prevent misalignment or incorrect orientation of racks.
	Rack Present Sensors	Custom	Sensors to detect the presence of racks on either side of the table.
	Custom Controls Package	Custom	PLC controlled stand programmed by Align.
Custom Tooling Interface	Custom	Custom designed tooling for fixturing customer components.	

Some options may preclude other options.

Fixed Head and Tailstock

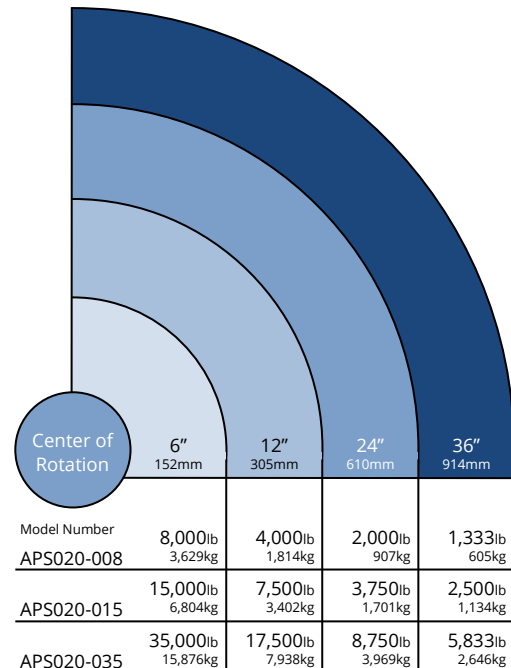
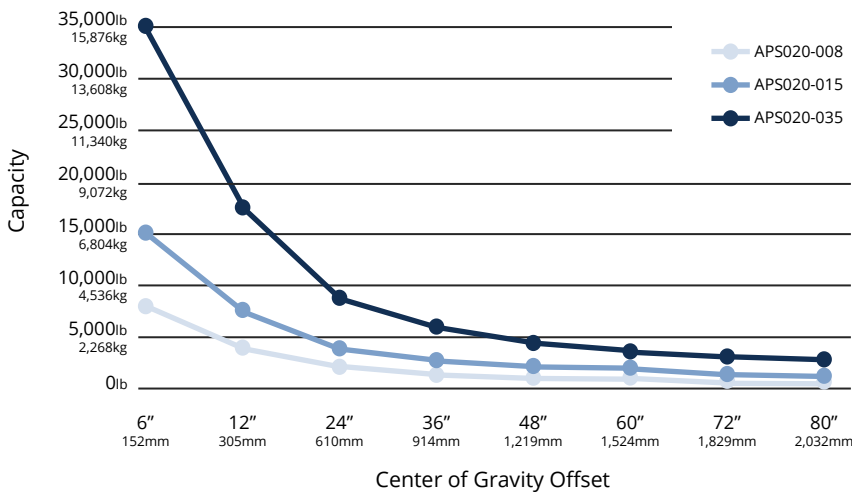


Fixed Head and Tailstock Specifications

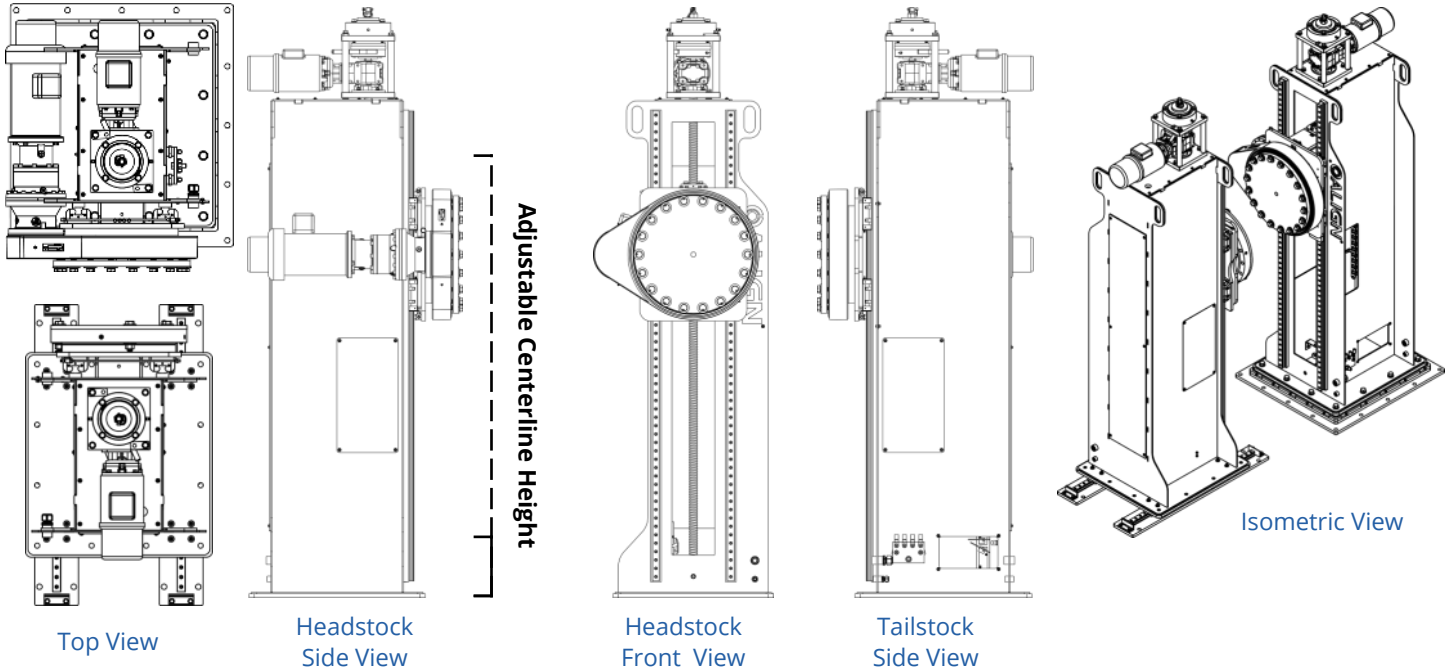
Model No.	Capacity	Rotational	Centerline Height	Optional Grounding
APS020	Total ¹	Torque ²	Min - Max	Max Current
APS020-008	8,000lb 3,629kg	48,000in/lb 5,423Nm	18" - 80" 457mm - 2,032mm	800A
APS020-015	15,000lb 6,804kg	75,000in/lb 8,474Nm	18" - 80" 457mm - 2,032mm	800A
APS020-035	35,000lb 15,876kg	190,000in/lb 21,467Nm	18" - 80" 457mm - 2,032mm	1,500A

1. Based on Head and Tailstock each holding half the listed weight. 2. Max rotational load, including fixturing. Consult with application engineer for assistance with sizing.

Capacity vs Center of Gravity Offset



Adjustable Head and Tailstock

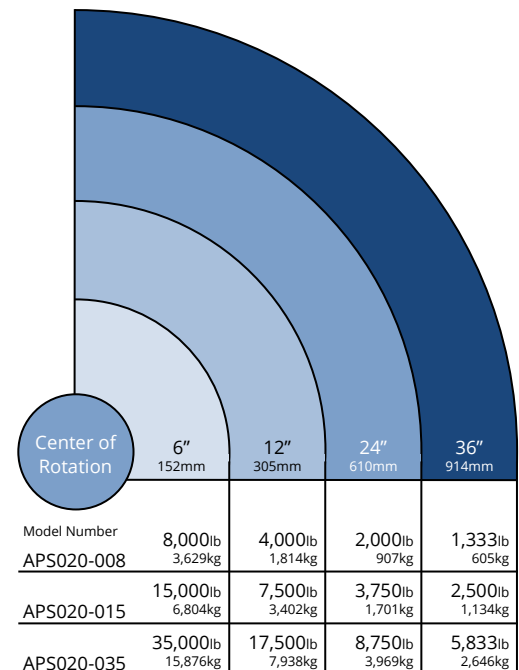
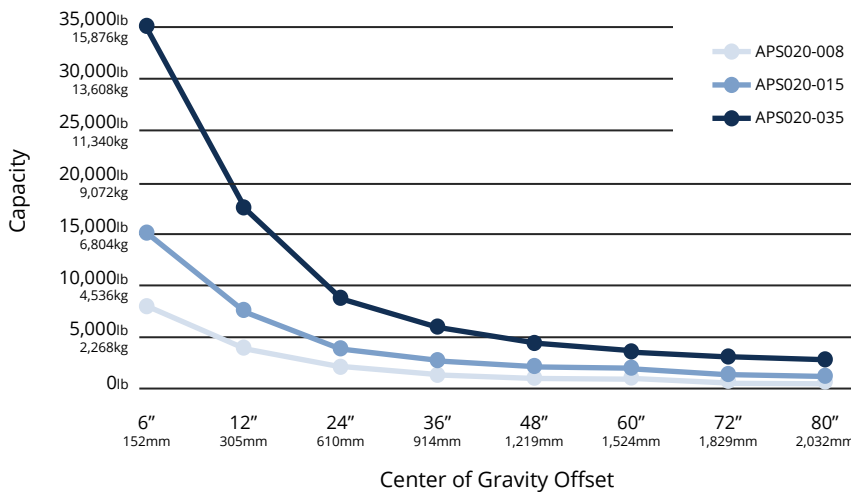


Adjustable Head and Tailstock Specifications

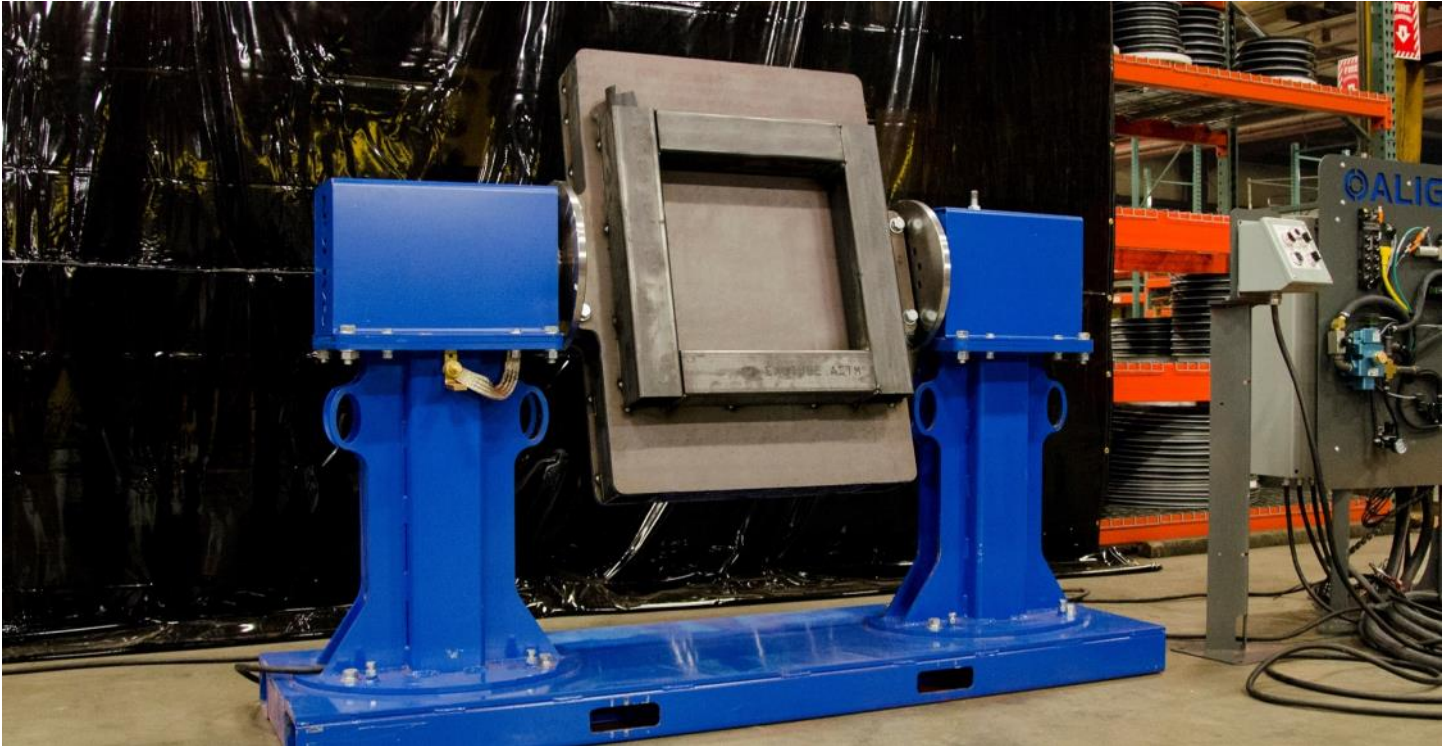
Model No.	Capacity	Rotational		Vertical		Centerline Height	Optional Grounding
		Torque ²	RPM	Travel	Travel Speed	Min - Max	Max Current
APS021	Total ¹						
APS021-008	8,000lb 3,629kg	48,000in/lb 5,423Nm	0.1 - 3.0 RPM (Variable)	60" 1,524mm	1.7 - 34.0 in/min (Var)	16" - 76" 406mm - 1,930mm	800A
APS021-015	15,000lb 6,804kg	75,000in/lb 8,474Nm	0.1 - 2.0 RPM (Variable)	60" 1,524mm	1.7 - 34.0 in/min (Var)	16" - 76" 406mm - 1,930mm	800A
APS021-035	35,000lb 15,876kg	190,000in/lb 21,467Nm	0.04 - 0.9 RPM (Variable)	60" 1,524mm	1.7 - 34.0 in/min (Var)	20" - 80" 508mm - 2,032mm	1,500A

1. Based on Head and Tailstock each holding half the listed weight. 2. Max rotational load, including fixturing. Consult with application engineer for assistance with sizing. Ball Screw has built in "Load Lock". This prevents the load from free falling in the event the motor would ever fail.

Capacity vs Center of Gravity Offset



Head & Tailstock



Align Production System's Head and Tailstock Positioners deliver powered variable-speed rotation in either direction to optimize your fabrication or assembly operation. The product line is designed to optimize your welding, torching, cutting, or cladding operations.

- **Capacities of 5,000 lbs.**
- **Rotational torque of 12,000in/lb**
- **All electric unit with no hydraulic mess**
- **Centrally located grounding point for the whole machine**

Positioner Benefits



Improve Worker Safety

Eliminate overhead welding and manual positioner, and instead utilize the ease of use of Align Production System's welding positioners.

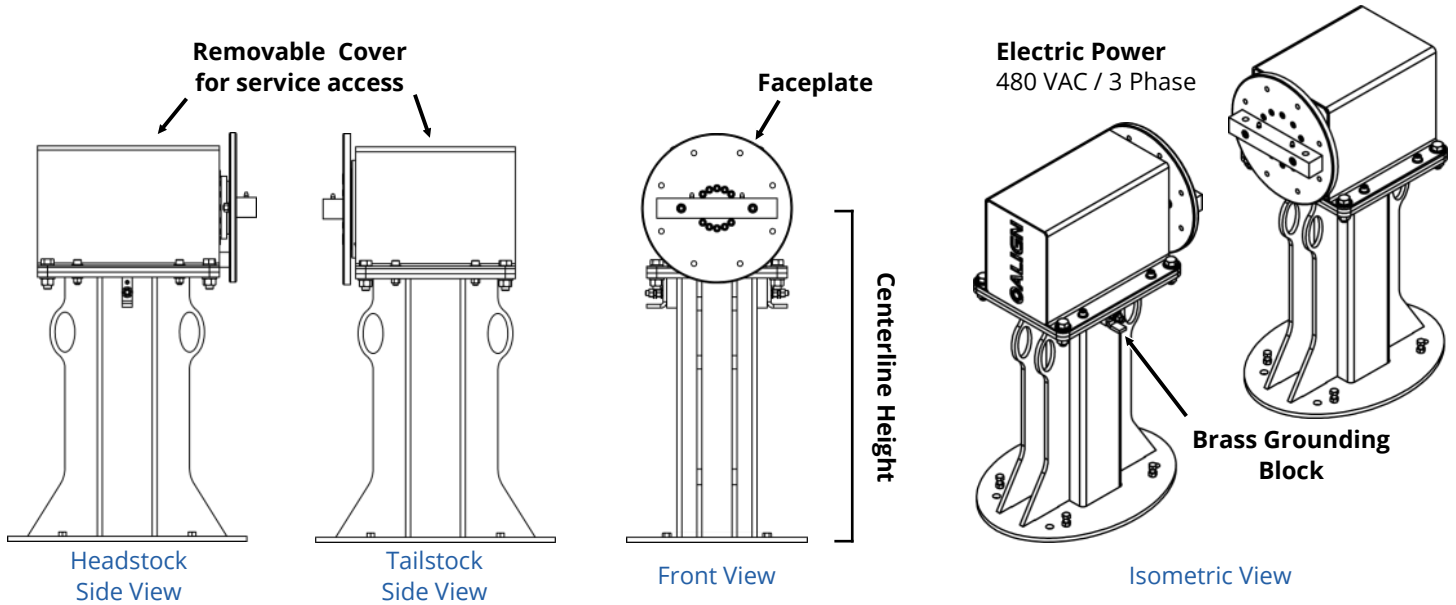
Ergonomic Benefits

Increase workpiece access by rotating the weldment to the optimal angle for welding.

Reduce Downtime & Fatigue

Since the need for manual positioning is eliminated, downtime due to worker fatigue will be drastically reduced while increasing safety.

Head and Tailstock

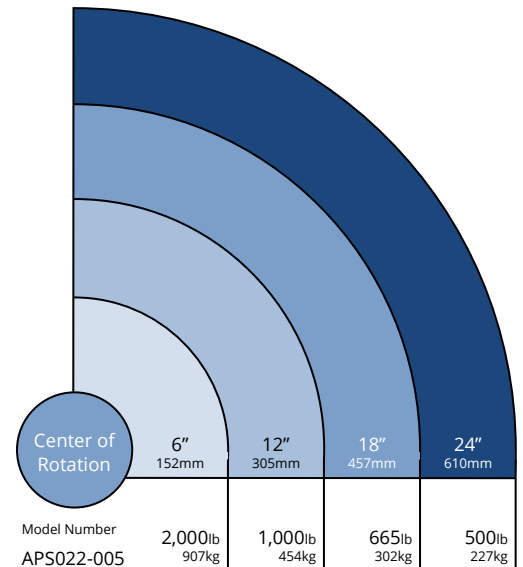
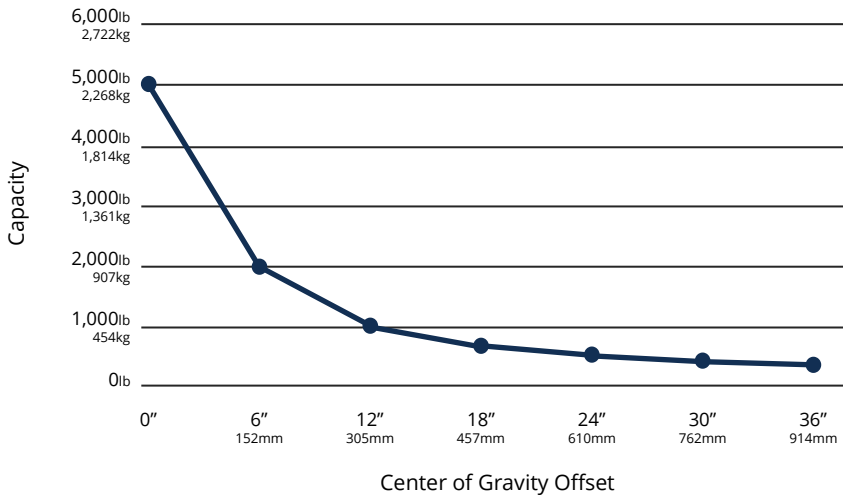


Fixed Head and Tailstock Specifications

Model No.	Capacity	Rotational		Centerline Height	Faceplate
		Torque ²	RPM		
APS022	Total ¹				Diameter
APS022-005	5,000lbs 2,268kg	12,000in/lbs 1,356Nm	0.6 to 6.0 Variable	33.5" 851mm	15" 381mm

1. Based on Head and Tailstock each holding half the listed weight. 2. Max rotational load, including fixturing. Consult application engineer for assistance with sizing.

Capacity vs Center of Gravity Offset



Two Axis Welding Positioner



Simplify circular welds and improve worker ergonomics with our Two Axis Welding Positioners - designed for maximizing stability, reducing vibrations, and preventing elastic deformations that may compromise weld quality. Our positioners feature a 115° incline, weight capacities up to 25,000 lbs., and have face diameters up to 76 inches.

- **Capacities up to 25,000 lbs.**
- **Reduce vibrations and elastic deformations**
- **Manual, motor-driven and hydraulic tilt models available**
- **Reduce cycle times by 45 - 50% over static positioning**

Features & Benefits



Steady Rotation

Steady rotation and 115° of tilt to allow the operator to access the weld from the optimal angle and maintain a consistent weld.

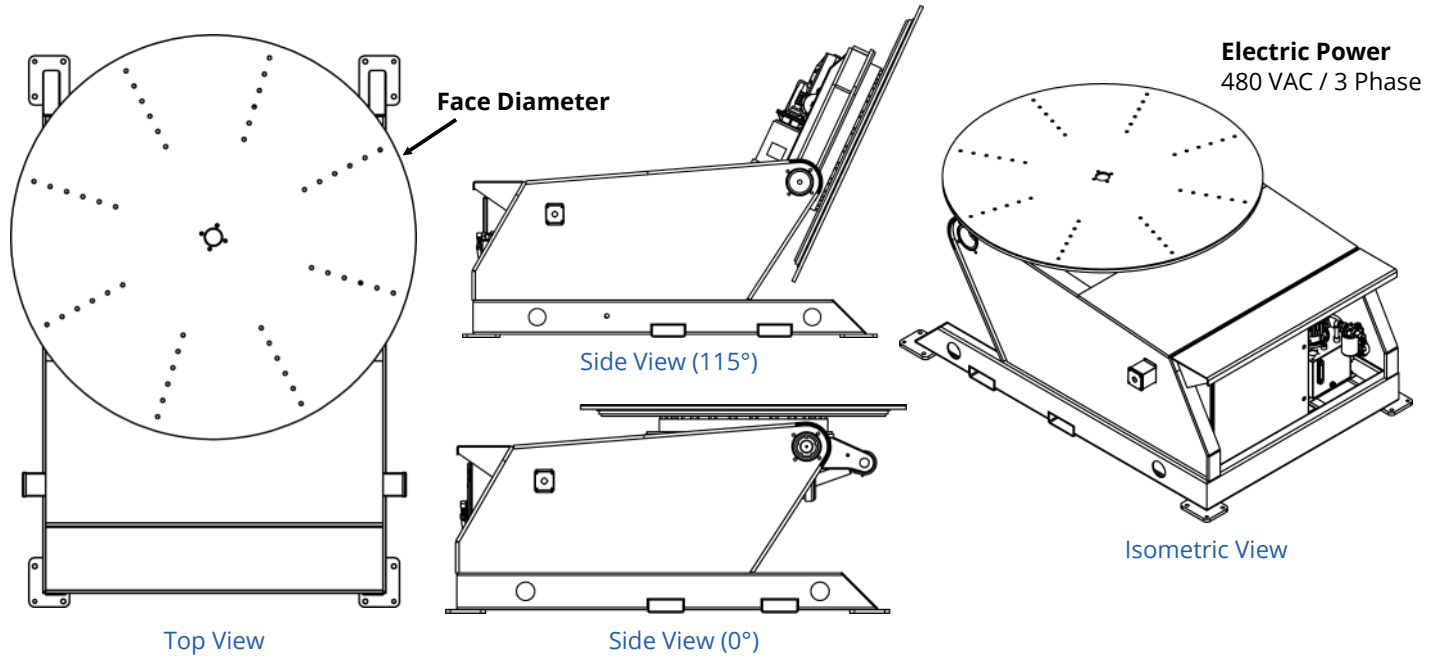
Structural Confidence

Feature four radial housings to solidly fix the piece to the positioner during fabrication.

Reduce Fatigue

Designed to improve worker ergonomics, helping to reduce fatigue and downtime.

Two-Axis Welding Positioner



Two-Axis Welding Positioner Specifications

Model No.	Capacity	Rotational		Face Diameter	Max Tilting
		Torque	RPM	Travel	Angle
APS023	Total				
APS023-003	3,000lb 1,361kg	750in/lb 85Nm	0.1 to .35 Variable	56" 1,422mm	115°
APS023-005	5,000lb 2,268kg	1,200in/lb 136Nm	0.1 to .35 Variable	61" 1,549mm	115°
APS023-010	10,000lb 4,536kg	3,700in/lb 418Nm	0.1 to .35 Variable	66" 1,676mm	115°
APS023-015	15,000lb 6,804kg	6,250in/lb 706Nm	0.1 to .35 Variable	71" 1,803mm	115°
APS023-025	25,000lb 11,340kg	11,800in/lb 1,333Nm	0.1 to .35 Variable	76" 1,930mm	115°

Pneumatic Pallet Jack



Effortlessly move and position pallets weighing up to 15,000 lbs. with the Heavy-Duty Pneumatic Pallet Jack. The Pallet Jacks are built to last, featuring full steel construction, and all-pneumatic operation to minimize downtime and part replacement. Because our units are all pneumatic, they offer spark free operation - making them ideal for environments with flammable or explosive elements.

- **Capacities up to 15,000 lbs.**
- **Fork height as low as 3"**
- **Intuitive hand controls for easy operation**
- **Spark-free operation is ideal for explosion prone environments**

Features & Benefits



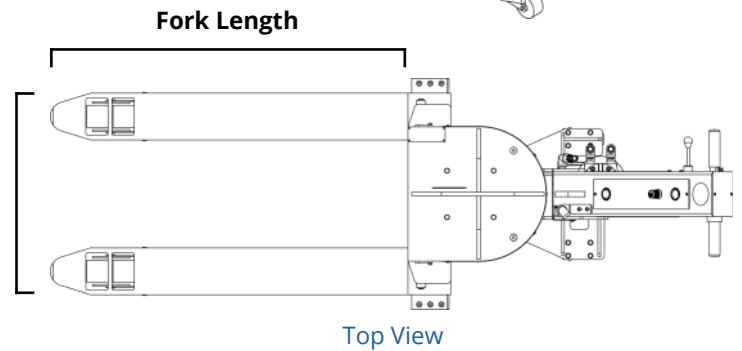
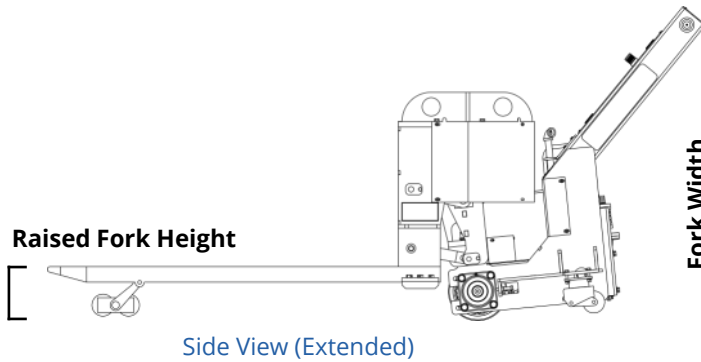
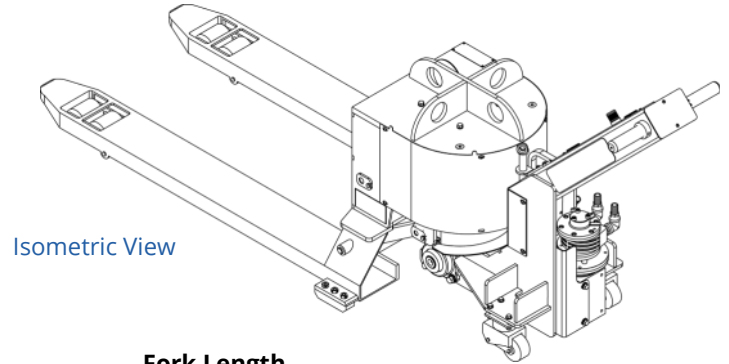
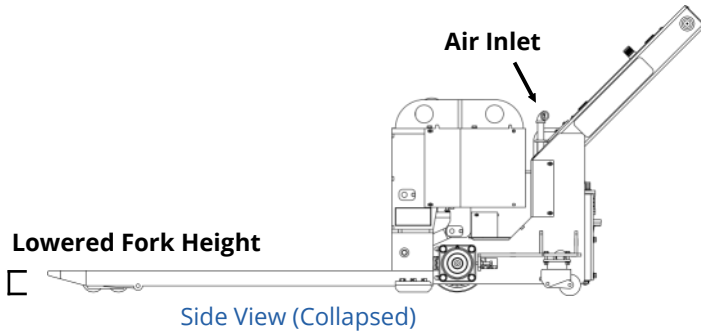
High Capacity

Pneumatic Pallet Jacks reach high capacities of up to 15,000 lbs. Instead of hydraulically lifting heavy loads and pumping the handle, simply use the hand controls to automatically lift the load.

Hand Controls

Focus on moving your load instead of your hands. Simple controls make it easy to pick up and guide your load without having to overthink the hand controls.

Pneumatic Pallet Jack

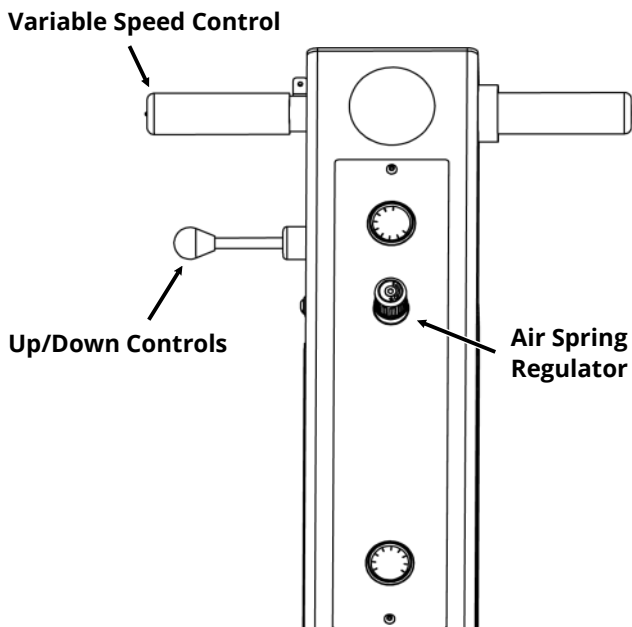


Pneumatic Pallet Jack Specifications

Model No.	Capacity	Drawbar Force	Fork Size	Fork Height		Speed	Air Flow
				Lowered	Raised		
ST040	Total ¹	Total ²	W x L			Max	Avg
ST040-7500	7,500lb 3,402kg	640lb 2,847N	27" x 48" 686mm x 1,219mm	3" 76mm	6.75" 171mm	50fpm 15mpm	80 SCFM 2,266L/m
ST040-15000	15,000lb 6,804kg	2,625lb 11,677N	32.25" x 73.5" 819mm x 1,867mm	5.25" 133mm	7.25" 184mm	40fpm 12mpm	150 SCFM 4,240L/m

1. With air caster supported loads. 2. Performance based on operation on dry, level floor. For oily or sloping floor, more tractive effort may be required.

Pallet Jack Controls



Pneumatic Scissor Lift



Pneumatic Lift tables are built to withstand the demands of manufacturing. All of our tables feature solid steel cross arms, and are engineered for optimum performance, strength, and durability unsurpassed in the industry. All scissor lifts meet the ANSI MH29.1-2012 design standards. In addition to standalone operation, our lift tables can be integrated into a solution with other equipment.

- Capacities up to 8,000 lbs.
- Vertical stroke of 24" and 25"
- Collapsed height of 8.25"
- Self lubricating Rulon Bushings
- Designed for off-center loading
- ANSI MH29.1-2012 design standards

Common Configuration



Lift with Extended Bolt-on Tops

Above shows our oversized table top that bolts on to the lift table. Our Extended Tops are built to your measurements.



Lift with Pneumatic Tilt

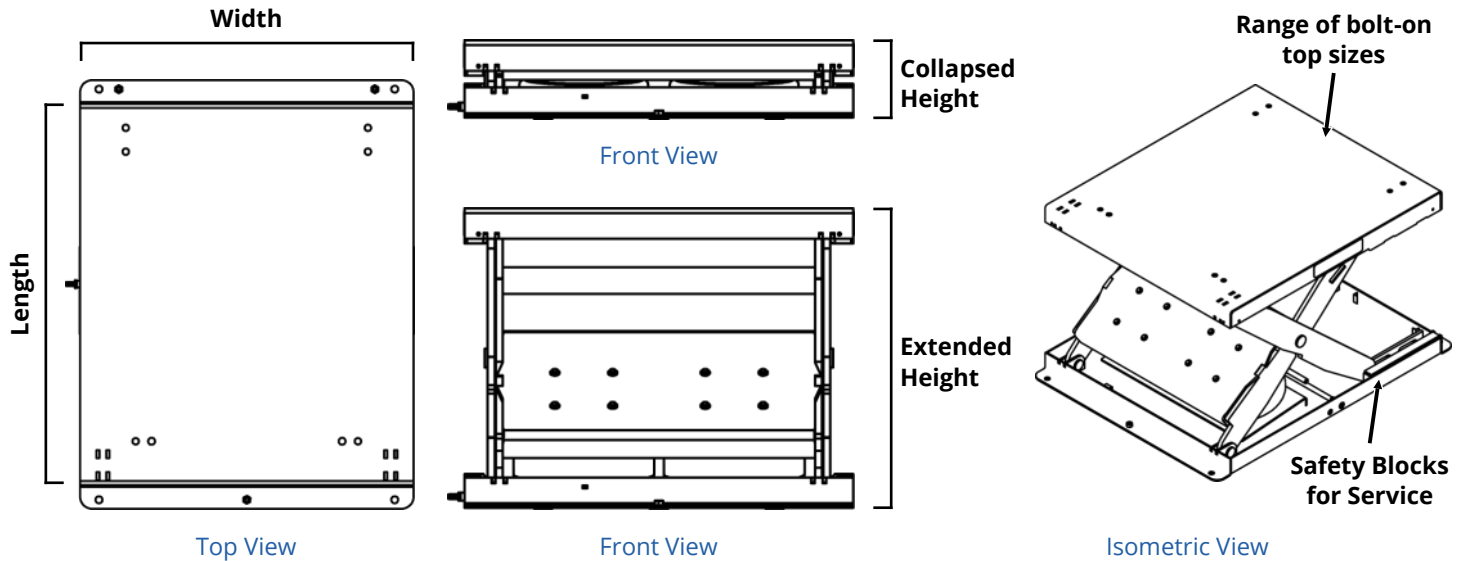
Featured above is our Pneumatic Lift Table combined with our Tilt Table. This is often used for part packaging or presentation.



Lift with Mechanical Rotate

Putting our Pneumatic Lift Table with our Mechanical Rotate makes for easy rotation of the table top.

Pneumatic Scissor Lift



Pneumatic Lift Specifications

Model No.	Capacity	Arm Type	Stroke	Height	Base Size		Top Size	
					Width	Length	Width	Length
ST01X	Total	Type		Min - Max				
ST014-2448	2,000lb 907kg	Lever	25" 635mm	8.25" - 33.25" 210mm - 845mm	24" 610mm	48" 1,219mm	24" 610mm	48" 1,219mm
ST011-4248	4,000lb 1,814kg	Lever	25" 635mm	8.25" - 33.25" 210mm - 845mm	42" 1,067mm	48" 1,219mm	42" 1,067mm	48" 1,219mm
ST012-4848	6,000lb 2,722kg	Direct	24" 610mm	12" - 36" 305mm - 914mm	48" 1,219mm	48" 1,219mm	48" 1,219mm	48" 1,219mm
ST013-4848	8,000lb 3,629kg	Direct	24" 610mm	12" - 36" 305mm - 914mm	48" 1,219mm	48" 1,219mm	48" 1,219mm	48" 1,219mm

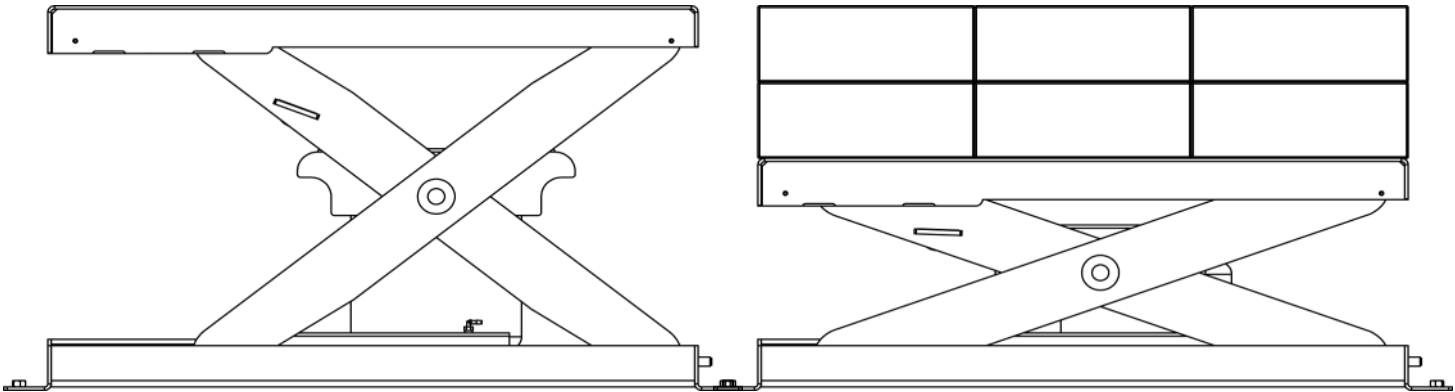
Options for the Pneumatic Lifts

Options	Part No.
Hand Control Stand	APS5010-0100
Foot Control Stand	APS5020-0100
Lift Skirt	ST5010
Bolt-on Top	ST5020
Corner Angle Locators	ST5070
Lift Adjustable Riser	ST5030

Extended bolt-on top sizes

Model No.	Width	Length
	Min - Max	Min - Max
ST014-2448	24" - 46" 610mm x 1,168mm	48" - 70" 1,219mm x 1,778mm
ST010-3648	36" - 58" 914mm x 1,473mm	48" - 70" 1,219mm x 1,778mm
ST011-4248	42" - 64" 1,067mm x 1,626mm	48" - 70" 1,219mm x 1,778mm
ST012-4848	48" - 70" 1,219mm x 1,778mm	48" - 70" 1,219mm x 1,778mm
ST013-4848	48" - 70" 1,219mm x 1,778mm	48" - 70" 1,219mm x 1,778mm

Self-Leveling Pneumatic Lift



Self-Leveling Pneumatic Lift tables offer our lift table with a leveling mechanism to ensure the lift is always at the ergonomically correct height. All of our tables feature solid steel cross arms, and are engineered for optimum performance, strength, and durability unsurpassed in the industry.

- **Capacities up to 4,000 lbs.**
- **Vertical stroke of 20"**
- **Collapsed height of 10"**
- **Self lubricating Rulon Bushings**

Features & Benefits



Ergonomic Loading & Unloading

Our Self-Leveling Lift Table automatically adjusts to the set ergonomic height as products are added or removed from the table top, reducing operator strain.

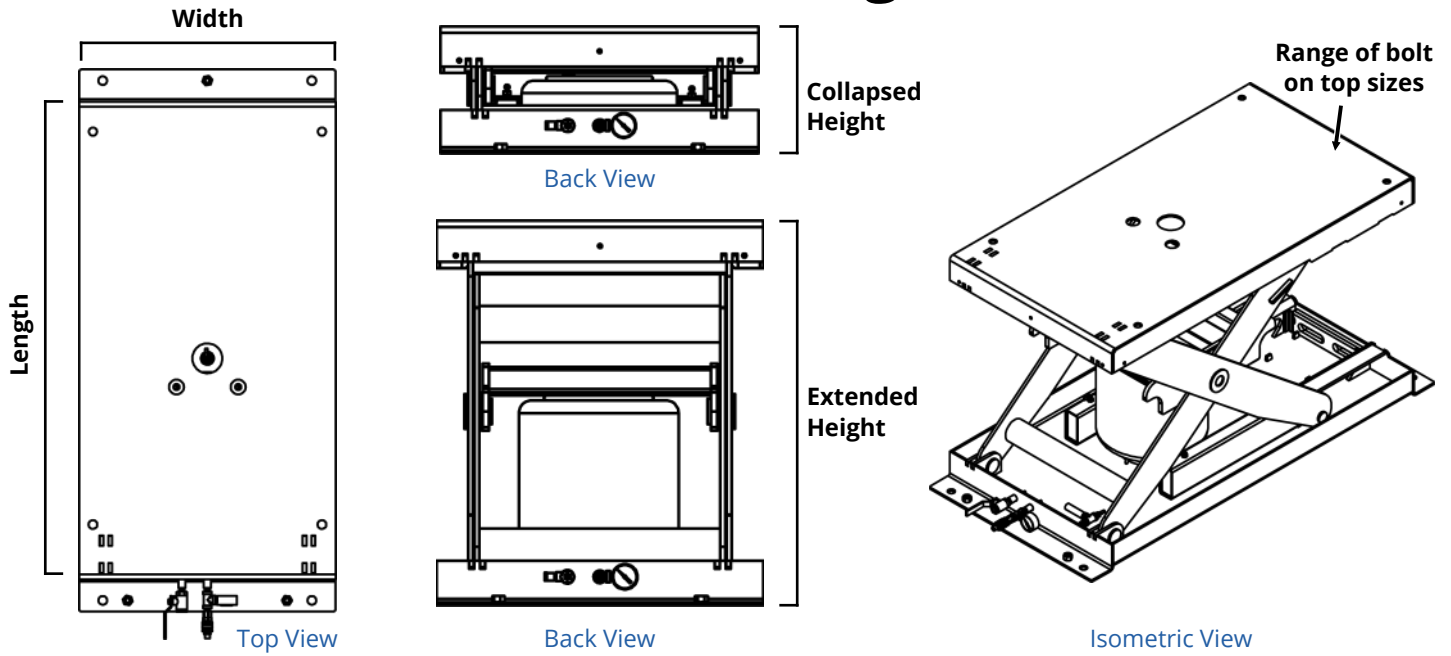
Easily Integrated

Our Self-Leveling Lift Tables can be easily integrated with our Tilt Tables and Mechanical Rotates to create Lift & Tilt, Lift & Rotate, and Lift, Tilt, & Rotate Tables.

Steel Construction

Our Lift Tables are built in Decatur, IL from USA steel with notch & tab construction.

Self-Leveling Pneumatic Lift



Self-Leveling Pneumatic Lift Specifications

Model No.	Capacity	Arm	Stroke	Height	Base Size		Top Size	
					Width	Length	Width	Length
ST080	Total	Type		Min - Max				
ST080-2648	4,000lb 1,814kg	Direct	20" 508mm	10" - 30" 254mm - 762mm	25.75" 654mm	48" 1,219mm	25.75" 654mm	48" 1,219mm

Options for the Self-Leveling Lifts

Options	Part No.
Hand Control Stand	APS5010-0100
Foot Control Stand	APS5020-0100
Lift Skirt	ST5010
Bolt-on Top	ST5020
Corner Angle Locators	ST5070
Lift Adjustable Riser	ST5030

For Lift Model No.	Extended bolt-on top sizes	
	Width	Length
ST08X	Min - Max	Min - Max
ST080-2648	26" - 48" 660mm x 1,219mm	48" - 70" 1,219mm x 1,778mm

Pneumatic Tilt



Pneumatic tilt tables are designed to be stand-alone or bolt-on configurations with other equipment like our pneumatic lift and mechanical rotates. Safety features include two up-stop chains per actuator, a safety prop for maintenance, corner retainer, safety skirt, and enclosed base pan to protect internal components.

- Capacities up to 6,000 lbs.
- Low down height of 6"
- Available in 30° or 45° angles
- Self-lubricating Rulon Bushings

Non-Invasive Model

Pneumatic Non-Invasive Tilt

Pneumatic Non-Invasive Tilt Tables are designed to maximize space by keeping the load centered over the tilt. The Non-Invasive Tilt Tables can be stand-alone or a bolt-on configuration with other equipment.

Easily Integrated

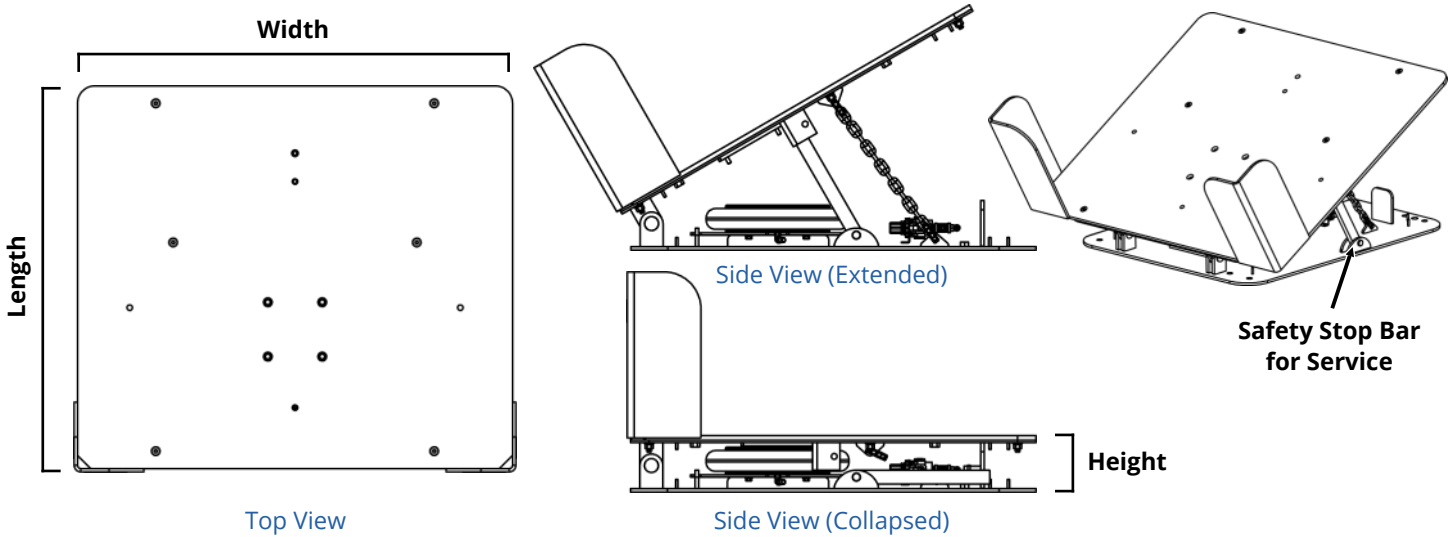
Align Production Systems offers a multitude of ergonomic equipment, and our Pneumatic Tilt Tables can be integrated with our other equipment.

Rulon Bushings

To provide longer wear and extended operating life, we use Rulon Bushings with a self-lubricating design and no messy greasing system.



Pneumatic Tilt



Pneumatic Tilt Specifications

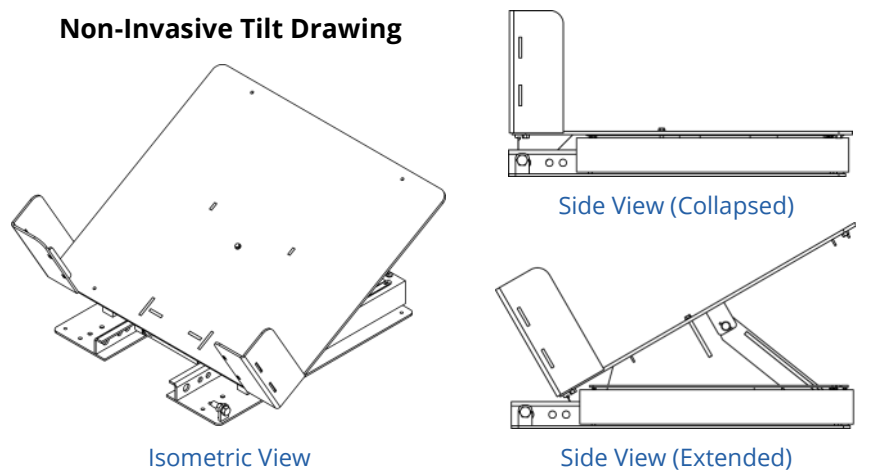
Model No.	Capacity	Tilt Angle	Height	Base Size	Top Size	
					Width	Length
ST02X/ST07X ⁽¹⁾	Total	Degrees	Down	W x L	Width	Length
ST020-XXXX	2,000lb 907kg	30°	6" 152mm	36" x 44" 914mm - 1,118mm	38" - 62" 965mm - 1,575mm	44" - 56" 1,118mm - 1,422mm
ST022-XXXX	4,000lb 1,814kg	30°	6" 152mm	36" x 44" 914mm - 1,118mm	44" - 62" 1,118mm - 1,575mm	44" - 56" 1,118mm - 1,422mm
ST024-XXXX	6,000lb 2,721kg	30°	6" 152mm	48" x 48" 1,219mm - 1,219mm	50" - 62" 1,270mm - 1,575mm	50" - 62" 1,270mm - 1,575mm
ST021-XXXX	2,000lb 907kg	45°	7" 178mm	36" x 44" 914mm - 1,118mm	44" - 62" 1,118mm - 1,575mm	44" - 56" 1,118mm - 1,422mm
ST023-XXXX	4,000lb 1,814kg	45°	7" 178mm	42" x 48" 1,067mm - 1,219mm	44" - 62" 1,118mm - 1,575mm	44" - 56" 1,118mm - 1,422mm
ST025-XXXX	6,000lb 2,721kg	45°	7" 178mm	48" x 48" 1,219mm - 1,219mm	50" - 62" 1,270mm - 1,575mm	50" - 62" 1,270mm - 1,575mm
ST070-XXXX	2,000lb 907kg	30°	7" 178mm	36" x 48" 914mm - 1,219mm	44" - 62" 1,117mm - 1,575mm	50" - 56" 1,270mm - 1,422mm
ST072-XXXX	4,000lb 1,814kg	30°	7" 178mm	42" x 50" 1,067mm - 1,270mm	44" - 62" 1,117mm - 1,575mm	50" - 56" 1,270mm - 1,422mm

1. Model Number ST07X are Non-Invasive Pneumatic Tilts.

Options for the Pneumatic Tilt

Options	Part No.
Hand Control Stand	APS5010-0100
Foot Control Stand	APS5020-0100
Dirt Leg Stand	APS5010-1100
Tilt Skirt	ST5040-XXXX
Riser Base	ST5080-XXXX

Non-Invasive Tilt Drawing



Mechanical Rotate



Both of Align's Mechanical Rotate options allow for you to easily rotate parts containers or other heavy loads. Offering bolt-on or stand-alone operation, our rotates use sealed, lubricated-for-life slewing bearings or turntable bearings with cam follower supports. Options include pneumatic friction brakes, 90 and 180-degree spring lock pin, riser base with fork pockets and corner locators to hold the container in place.

- **Capacities up to 4,000 lbs.**
- **Low down height of 4"**
- **Bi-directional 360° rotation**
- **Simple design and easy installation**

Features & Benefits



Integration with Lifts

Mechanical Rotates are designed to be easily integrated with our Lift tables, combining the two together to create one system to transform your facility's efficiency and productivity.

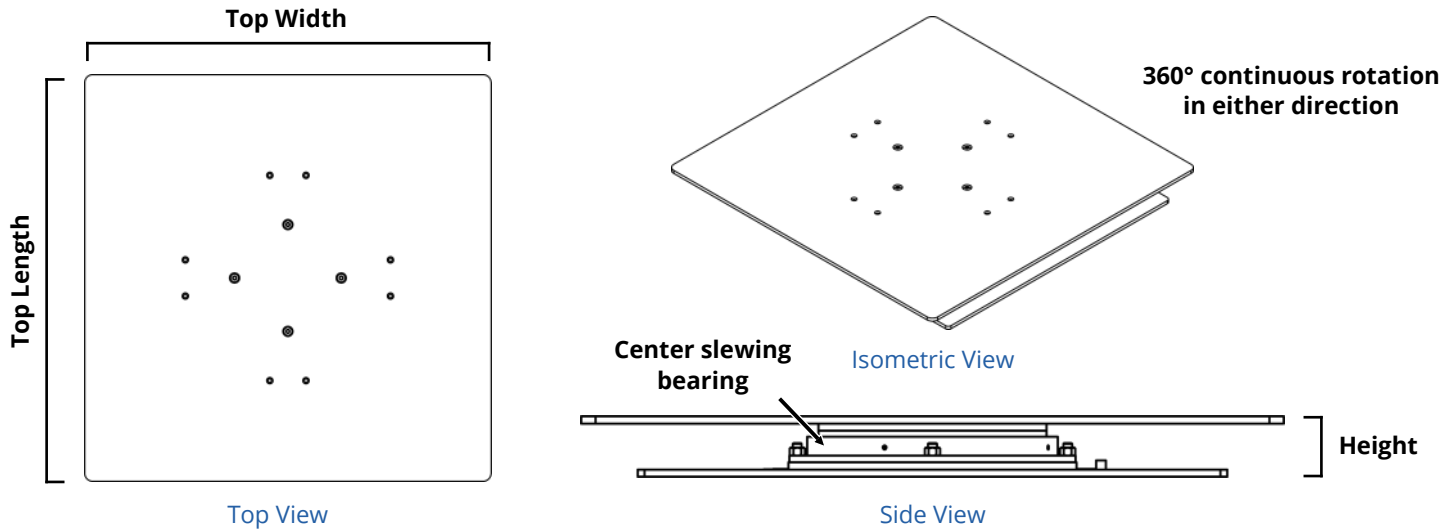
Custom Designs

Align Production Systems will work with you to develop and create Mechanical Rotates that meet your facility's needs and wants.

Benefits

Various benefits of using Mechanical Rotates include increased productivity, low initial cost and maintenance, work positioning and ergonomic handling, as well as simple design and easy installation.

Mechanical Rotates



Mechanical Rotates Specifications

Model No.	Capacity	Height	Base Size	Top Size		Rotation Type
				Width	Length	
ST03X	Total		W x L			
ST030-XXXX	4,000lb 1,814kg	4" 102mm	42" - 48" 1,067mm - 1,219mm	38" - 62" 965mm - 1,575mm	38" - 62" 965mm - 1,575mm	Slewing Bearing
ST031-XXXX	4,000lb 1,814kg	4" 102mm	42" - 48" 1,067mm - 1,219mm	38" - 62" 965mm - 1,575mm	38" - 62" 965mm - 1,575mm	Turntable Bearing

ST031 Economy Turntable Bearing Rotate

- Medium-duty bearing life cycle
- Minimal biannual maintenance schedule
- Turntable bearing with cam follower support
- OSHA compliant manual pull required for rotation
- Budget-friendly option

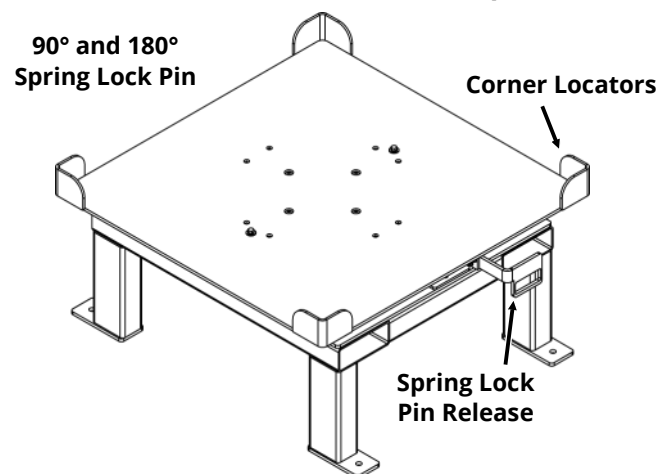
ST030 Heavy Duty Slewing Bearing Rotate

- Extremely long bearing life cycle
- Virtually maintenance free for life of product
- Precision slewing bearing rotation
- Lightweight manual pull required for rotation
- Higher cost for higher quality

Options for Mechanical Rotates

Options	Part No.
Pneumatic Friction Brake Hand	ST5060-0010
Pneumatic Friction Brake Foot	ST5060-0020
90° Spring Lock Pin	ST5060-0030
180° Spring Lock Pin	ST5060-0040
Corner Angle	ST5070-0010
10" Riser Base / Fork Pockets	ST5080-0010

Mechanical Rotates with Options



Hydraulic Scissor Lift



Hydraulic Lifts are built to withstand the demands of manufacturing. All of our tables feature solid steel cross arms, an internal HPU and are engineered for optimum performance, strength, and durability unsurpassed in the industry. All scissor lifts meet the ANSI MH29.1-2012 design standards. In addition to stand-alone operation, our lift tables can be integrated into a solution with other equipment.

- **Capacities up to 8,000 lbs.**
- **Vertical stroke of 32"**
- **Collapsed height as low as 9"**
- **Self lubricating Rulon Bushings**
- **Designed for off-center loading**

Features & Benefits



Easily Integrated

Hydraulic Lifts can be easily integrated with our Tilt Tables and Mechanical Rotates to create Lift & Tilt, Lift & Rotate, and Lift, Tilt, & Rotate Tables.

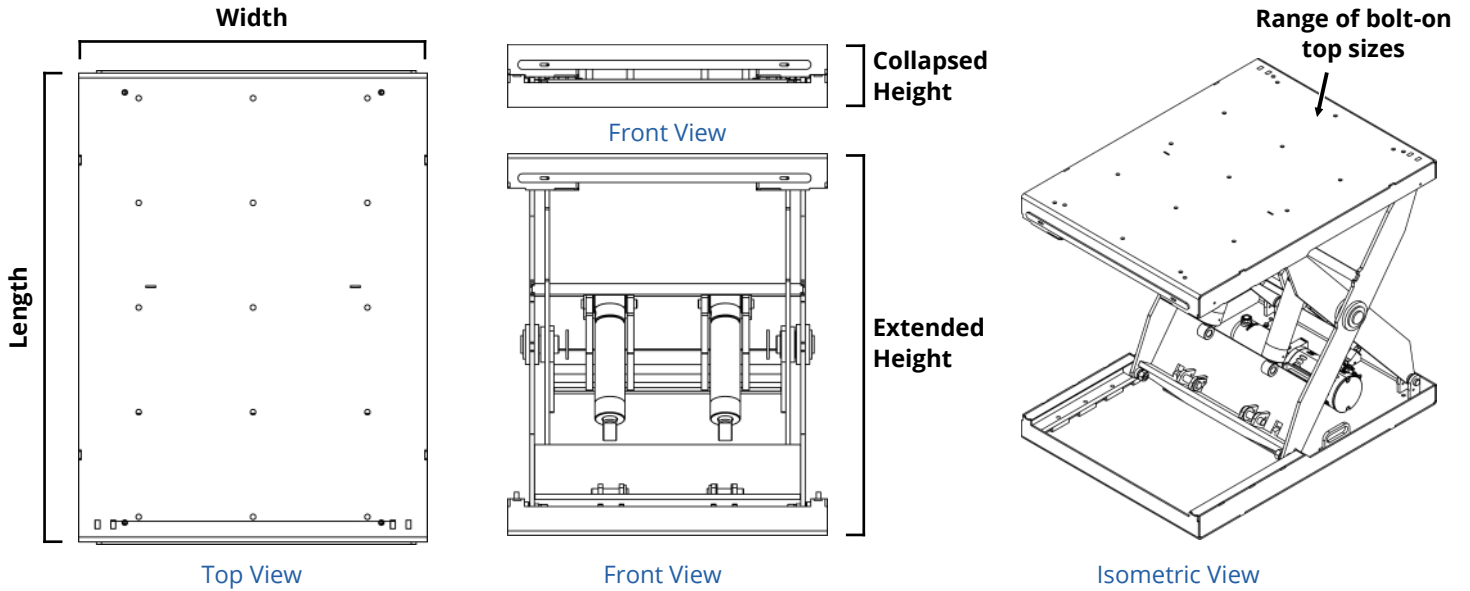
Custom Designs

Not seeing a size or weight capacity that meets your needs? Contact our application engineering team for a solution that meets your specification.

Steel Construction

Lift Tables are built in Decatur, IL from USA steel with notch & tab construction.

Hydraulic Scissor Lift



Hydraulic Lift Specifications

Model No.	Capacity	Arm	Stroke	Height	Base Size		Top Size	
					Width	Length	Width	Length
ST05X	Total	Type		Min - Max				
ST051-3648	4,000lb 1,814kg	Lever	32" 813mm	9" - 41" 229mm - 1,041mm	36" 914mm	48" 1,219mm	36" 914mm	48" 1,219mm
ST053-3648	8,000lb 3,629kg	Lever	32" 813mm	14" - 48" 356mm - 1,219mm	48" 1,219mm	50" 1,270mm	48" 1,219mm	48" 1,219mm

Options for Hydraulic Lift

Options	Part No.
Hydraulic Lift Skirt	ST5010
Hydraulic Lift Hand Control	ST5090-0010
Hydraulic Lift Foot Control	ST5090-0020
Power Supply 24V DC	ST5090-0030
Power Supply 110 VAC	ST5090-0040
Power Supply 480 VAC	ST5090-0050

Extended bolt-on top sizes

Model No.	Width	Length		
			Min - Max	Min - Max
ST05X				
ST050-3648	36" - 58" 914mm x 1,473mm	48" - 70" 1,219mm x 1,778mm		
ST051-3648	36" - 58" 914mm x 1,473mm	48" - 70" 1,219mm x 1,778mm		
ST052-3648	40" - 62" 1,016mm x 1,473mm	48" - 70" 1,219mm x 1,778mm		
ST053-3648	48" - 70" 1,219mm x 1,778mm	48" - 70" 1,219mm x 1,778mm		

Hydraulic 90° Degree Upender



Prioritize worker safety by eliminating dangerous overhead crane maneuvers by using 90° Upenders in your assembly or fabrication operation. The Upenders are designed to flip heavy or large objects 90° to optimize your product’s fabrication or assembly with the push of a button. Upenders not only offer a safe way to flip products, but they also save substantial time over other methods.

- **Capacities up to 12,000 lbs.**
- **Low down height of 12”**
- **90° rotation times as low as 30 seconds**
- **Featuring velocity fuses for safety and load holding valves to suspend loads**

Features & Benefits



Counter-Balance Valve

Also known as a load holding valve, the valve safely holds suspended loads in position and prevents run-away or overrunning loads.



Adjustable Leveling Pads

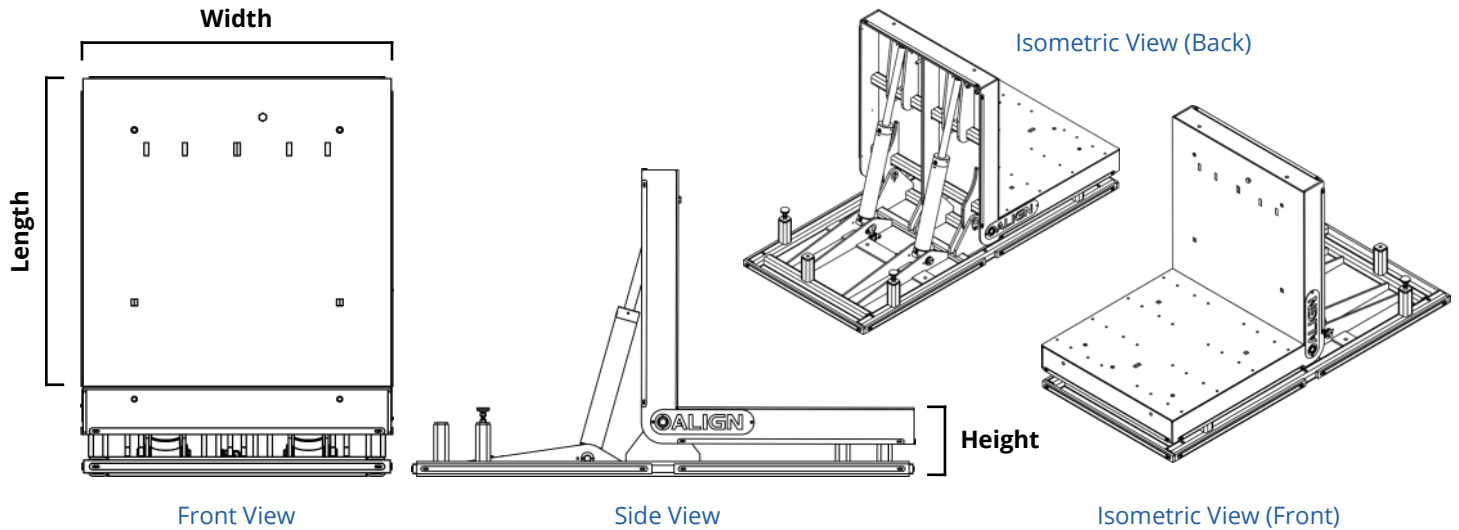
Upenders adjustable leveling pads for leveling the upender’s deck in the 0° and 90° positions.



Safety and Time Savings

Upenders not only offer a safe way to flip products, but they also save substantial time over other methods of flipping products.

Hydraulic 90° Degree Upender

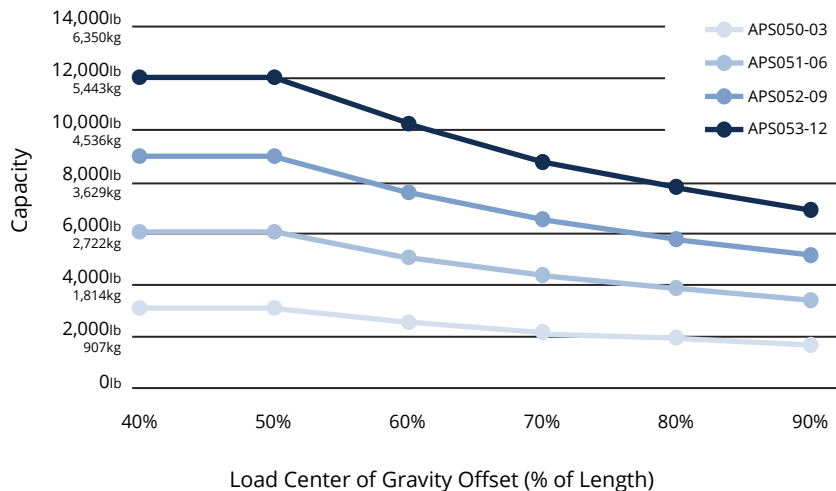


Hydraulic 90 Degree Upender Specifications

Model No.	Capacity	Platform Size		Down Height	90° Rotation Time
		Width	Length		
APS05X	Total ¹				
APS050-XXXXXX	3,000lb 1,361kg	36" - 96" 914mm - 2,438mm	36" - 96" 914mm - 2,438mm	12" 305mm	30 Seconds
APS051-XXXXXX	6,000lb 2,722kg	48" - 120" 1,219mm - 3,048mm	36" - 120" 914mm - 3,048mm	14" 356mm	45 Seconds
APS052-XXXXXX	9,000lb 4,082kg	60" - 120" 1,524mm - 3,048mm	36" - 120" 914mm - 3,048mm	16" 406mm	60 Seconds
APS053-XXXXXX	12,000lb 5,443kg	60" - 120" 1,524mm - 3,048mm	48" - 120" 1,219mm - 3,048mm	18" 457mm	75 Seconds

1. Based on centrally located load

Upender Capacity vs C.G. Distance



Capacity at % of Length

	0 - 50%	60%	70%	80%
Model Number	3,000lb 1,361kg	2,550lb 1,157kg	2,190lb 993kg	1,950lb 885kg
APS050				
Model Number	6,000lb 2,722kg	5,100lb 2,313kg	4,380lb 1,987kg	3,420lb 1,551kg
APS051				
Model Number	9,000lb 4,082kg	7,650lb 3,470kg	6,570lb 2,980kg	5,130lb 2,327kg
APS052				
Model Number	12,000lb 5,443kg	10,200lb 4,627kg	8,760lb 3,973kg	6,840lb 3,103kg
APS053				



1.800.888.0018

SALES@ALIGNPROD.COM

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