

***Largest Movable Structure Ever Built
Provides Enclosed Servicing of Airliner Tails
&***

Travels on World's Strongest Casters with 100,000 lbs Capacity

Call us Toll Free for any application solution.

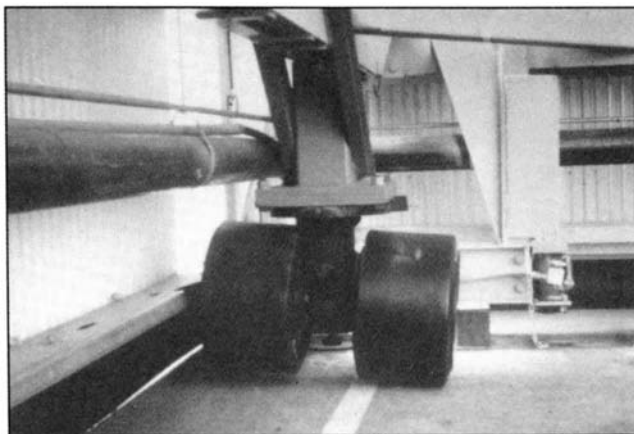
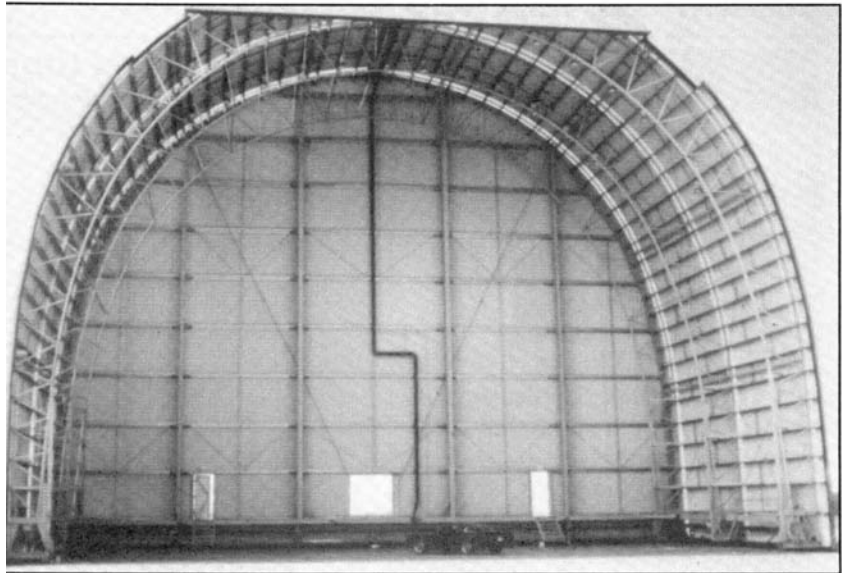
Three movable steel buildings, including what is believed to be the world's largest transportable structure, were recently installed in Lockheed Aeromod's Greenville, South Carolina maintenance center by AmSTRARCH, Inc., also located in Greenville, for use as tail hangars.

The structures, the largest of which is 100 feet wide, 50 feet deep and 78 feet high, provide an enclosed environment for servicing large, wide-bodied aircraft such as Boeing 747's and McDonnell-Douglas DC10's. The airliners are placed tail-out in existing hangars and a movable tail hangar is rolled into place to cover the tail section.

Building a portable structure was far less expensive than expanding the existing permanent hangar because the temporary structure can be only one-half as wide because it does not have to provide clearance for the wings. In addition, each of the movable hangars services up to six permanent hangars because they are moved into place only when needed for maintenance.

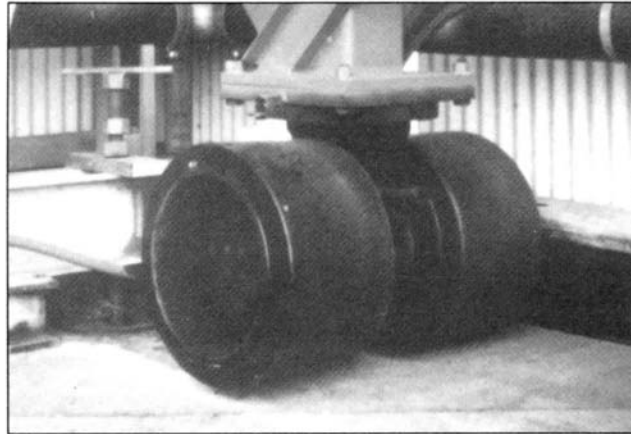
Putting a 140,000 pound steel building on wheels provided perhaps the greatest challenge ever to the caster manufacturer.

The solution was Custom swivel oscillating casters rated at 100, 000 pounds with premium polyurethane press-on tires.



***Largest Movable Structure Ever Built
Provides Enclosed Servicing of Airliner Tails
&
Travels on World's Strongest Casters - 100,000 lbs Capacity***

Call us Toll Free: 1- 800- 523- 5474
for any Custom application requirement.



Each caster assembly is 27 inches high and 36 inches wide, weighs 1200 pounds and includes (two) 22 inch diameter and 12 inch wide polyurethane tires pressed onto extra heavy duty fabricated steel cores. Metal tires could not be used because they would probably damage the airport surface -- the polyurethane tires can move the structure at 20 feet per minute without damage to the tarmac.

In order to support the huge load, the legs of the casters are positioned perpendicular to the ground without the offset or lead that is normally used to allow the caster to be steered by pushing it in the desired direction. Steering capability was provided by locating two bosses on the lower swivel plate of the caster to which a handle is attached to turn the caster assembly. It should be noted that the casters are designed to be turned only when they are in motion.

When the casters are stationary, the torque required to turn them would be beyond the strength of any normal human.

The swivel mechanism itself is unusual in that it does not have any bearings. Because of limited swiveling action needed, the designers felt that it wasn't necessary to go to an expensive bearing when a greased plate arrangement would do the job. The swivel mechanism can be locked at various positions in order to simplify control of the structure while it is being moved.

It is essential that both wheels remain on the ground at all times in order to avoid an overstress condition. This is accomplished through the use of an articulating axle carrier so that if one wheel goes up on a higher surface, the axle will pivot to keep both wheels on the ground.

Capacity to 20,000 lbs.

Designed to meet the needs of the Aviation Ground Support equipment industry, the use of Pivoting Axle Casters assures that if one wheel goes on a higher surface, the axle will pivot to keep both wheels under load. It is essential when handling heavy loads that both wheels remain on the ground at all times to avoid an overstress condition. All optional features are standard factory installed for quick delivery. The swivel lock and face contact brake can be installed in the field if not included with the original order. The spring assembly can be retrofitted at a later date by returning the caster to the factory.

Features:

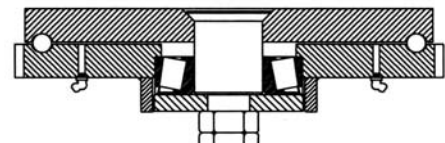
- **Top plate and Yoke Base:**
1" thick 1045 AISI heat treated steel Plate for superior strength
- **Swivel Raceway:**
11" diameter precision machined load raceway w/ 5/8" steel and tapered thrust bearing for easy swiveling.
- **King bolt:**
2" diameter bolt and nut heat treated for added strength.
- **Legs:**
1/2" thick steel plate welded to form a box section column for maximum load capacity.
- **Lubrication:**
Zerk fitting in swivel section and wheel hub for ease of lubrication.

Used in:

- Aviation Work Stands
- Hanger Doors
- Fuel cell Transport



Cross Sectional View



Top Plate Size

**KINGPINLESS
construction
recommended
for
greater strength**

Options:

- **SL298-2** Swivel Lock
- **FCB298-3** Face Contact Brake
- **SA298-4** Spring Assembly
- **SL/FCB298-5** Swivel Lock and Face Contact Brake.
- **SL/SA298-6** Swivel Lock & Spring Assembly.
- **FCB/SA298-7** Face Contact Brake and Spring Assembly.
- **SL/FCB/SA298-8** Swivel Lock, Face Contact Brake and Spring Assembly.

	TOP PLATE SIZE (INCHES)	SLOTTED BOLT HOLE CENTERS (INCHES)	ATTACHING BOLT SIZE (INCHES)
STANDARD	12 x 12	10 x 10	5/8

Add 3 digit option # to end of part number for style option desired. Weights in pounds. Custom configurations & Wheels available.

DIAMETER (INCHES)	WIDTH (INCHES)	WHEEL TYPE	CAPACITY (RATED FOR MANUAL OPERATION)	OVERALL HEIGHT (INCHES)	SWIVEL LEAD (INCHES)	CASTER NUMBER
						TAPERED ROLLER
12	4-1/2	Rubber Press-on	4200	19	3-1/8	298OA12709S
		Polyurethane Press-on	6600			298OG12709S
16-1/4	6	Rubber Press-on	7800	21.13	3-1/8	298OA16909S
		Polyurethane Press-on	12000			298OG16909S
18	9	Rubber Press-on	13000	22	3-1/8	298OA18909S
		Polyurethane Press-on	20000			298OG18909S



AVIATION / AIR CARGO APPLICATIONS



NEW PRIORITY ECONOMY AIR CARGO CASTER



03PE03028S006

- Same great quality as our Priority Economy Air Cargo Caster, with the addition of metal thread guards and dual ball bearings

Wheel Size	OAH	Metal Finish	Load Bearing	Wheel Bearings	Thread Guards	Wheel Material	Load Capacity
70mm	4-1/32"	clear zinc	unsealed	sealed (2)	metal	black PP	400 lbs

ALBION WEIGHT CART CASTER



- Designed to fit weight carts for air cargo loading applications.
- 4 position swivel lock
- Please specify part no. S750PX10809S001 or S750PX10809R001

Wheel Size	OAH	Wheel Material	Load Capacity	Total Deflection
10x5	16.88"	Polyurethane	10,000 lbs	1.3"

AIRLINE FOOD SERVICE CART CASTERS



361A34C075VZPS
Zinc Plated Metal

361A34C075VGPS
Yellow Passivated Metal

361A34C075VKPS
Plastic Grey/Black

- Low installation height
- High load capacity
- Good maneuverability
- Low surface pressure



Wheel Size	Tread Width	Overall Height	Top Plate	Swivel Lead	Load Capacity
75mm	2x23mm	102mm	55x70mm	28.5 mm	100kg

BAGGAGE CART WHEELS



SN167005201

- Tread Rubber Tensile Strength: 2,700 PSI
- Tread Rubber Tear Strength: 300 PSI
- Tire deflects .30" maximum at 50% load
- Tire deflects .47" maximum at 100% load
- All metal surfaces are black powder coated
- 480" x 8" tire size, 3.75" rim width
- Load capacity : 2,905 pounds at 7 mph
- Tire: 2 stage construction

Tire Size	Rim Width	Wheel Diameter	Load Capacity	Part Number
4.8/8"	3.75"	16.2"	2,900 lbs	SN167005201

GROUND SUPPORT EQUIPMENT

410 SERIES



410PX08509S002



410PX08509S003

- Thick tread poly on iron
- Tapered roller bearings
- Swivel lock
- Yellow zinc dichromate on rig

Wheel Diam.	Tread Width	Load Cap.	Overall Height	Swivel Lead	Caster No.
8"	3"	2,520	10-1/2"	2-15/16"	410PX08509S002
8"	3"	2,520	10-1/2"	2-15/16"	410PX08509S003

610 SERIES



610PX10709S003



610PX10709S004

- Thick tread poly on iron
- Tapered roller bearings
- Swivel lock
- Yellow zinc dichromate on rig



610PX12709S001



610PX12709S002

Wheel Diam.	Tread Width	Load Cap.	Overall Height	Swivel Lead	Caster No.
10"	4"	4,200 lbs.	12-1/2"	2-3/4"	610PX10709S003
10"	4"	4,200 lbs.	12-1/2"	2-3/4"	610PX10709S004
12"	4"	4,800 lbs.	15-1/2"	3-5/8"	610PX12709S001
12"	4"	4,800 lbs.	15-1/2"	3-5/8"	610PX12709S002

S610 SERIES SPRING LOADED CASTERS



S610PX12709S001



S610PX12709S002

- Load capacity stated is at 50% wheel deflection
- Tapered roller bearings
- Swivel lock
- Yellow zinc dichromate on rig

Wheel Diam.	Tread Width	Load Cap.	Overall Height	Swivel Lead	Caster No.
12"	4"	3,000	16-7/8"	5-5/16"	S610PX12709S001
12"	4"	3,000	16-7/8"	5-5/16"	S610PX12709S002

S700 SERIES SPRING LOADED CASTERS



S700PX10809S004



S700PX10809S005

- Load capacity stated is at 50% wheel deflection
- Thick tread poly on iron
- Tapered roller bearings
- Swivel lock
- Yellow zinc dichromate on rig

Wheel Diam.	Tread Width	Load Cap.	Overall Height	Swivel Lead	Caster No.
10"	5"	3,000	15-1/4"	4-1/8"	S700PX10809S004
10"	5"	3,000	15-1/4"	4-1/8"	S700PX10809S005

AIR CARGO CASTERS

AIRLINE/CONVEYOR CASTERS



- Easy installation and replacement
- Corrosive resistant zinc dichromate finish



Order No.	Wheel Diam.	Tread Width	Wheel Type	Wheel Bearing	Axle Size	Load Cap.	Overall Height	Swivel Radius	Mounting Bolt Diam.	Top Plate
27013	2-3/4"	1-3/8"	Polyflex	Needle	3/8"	375 lb.	4-1/32"	2-3/8	5/16	A
26025	2-5/8"	1-3/8"	Polyflex	Needle	3/8"	375 lb.	3-25/32"	2-5/16	5/16, 3/8	B
26028	2-5/8"	1-3/8"	Polyflex	Needle	3/8"	375 lb.	3-25/32"	2-5/16	5/16, 3/8	C

FLANGED AIR CARGO/CONVEYOR CASTERS

Order No.
26382



- Toe protection flange safety feature



Order No.	Wheel Diam.	Tread Width	Wheel Type	Wheel Bearing	Axle Size	Load Cap.	Overall Height	Swivel Radius	Mounting Bolt Diam.	Top Plate
26382	2-3/4"	1-3/8"	Polyflex	Needle	3/8"	375 lb.	4-1/32"	2-13/16	5/16	A

STANDARD LINE CONVEYOR CASTERS

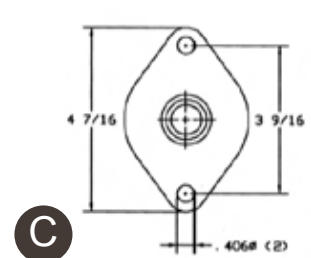
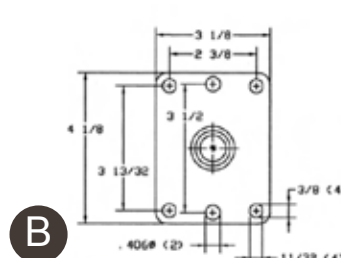
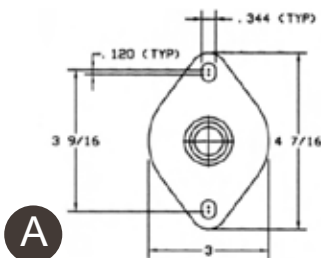
Order No.
25526
25675
25278
25696



- Double ball bearing raceway



Order No.	Wheel Diam.	Tread Width	Wheel Type	Wheel Bearing	Axle Size	Load Cap.	Overall Height	Swivel Radius	Mounting Bolt Diam.	Top Plate
25526	3"	1-1/8"	Hard Rbr.	Ball	5/16"	270 lb.	3-25/32"	2-5/8	3/8	C
25675	3"	1-5/16"	Polyflex	Ball	5/16"	270 lb.	3-25/32"	2-5/8	3/8	C
25278	3"	1-5/16"	Phenolic	Ball	5/16"	300 lb.	4-1/32"	2-15/32	3/8	C
25696	3"	1-5/16"	Polyflex	Ball	5/16"	300 lb.	4-1/32"	2-15/32	3/8	C



PRIORITY PREMIER AIR CARGO CASTERS



03XN02028S
03XN03028S



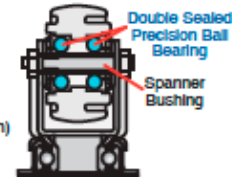
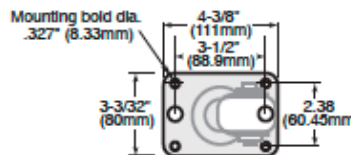
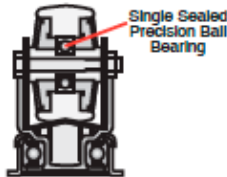
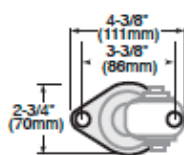
03XN02028S004C



03XN02028S001C

- Sealed precision ball bearing in swivel section and wheel
- 1/8" formed steel construction
- Additional O-ring seal in swivel section prevents contamination
- Shock resistant premium nylon wheel
- Zinc plated finish on diamond plate models, yellow dichromate finish on rectangular plate models
- Optional integral toe guard on 2.25" models
- Metal thread guards
- Optional Toe Guards available, see back page for details

Priority Premier™ Models



Wheel Diam.	Tread Width	Wheel Type	Wheel Bearing	Load Cap.	Overall Height	Approx. Weight	Caster No.
2.25"	1.34"	Nylon	Single Sealed Prec. Ball	450 lbs.	3.78"	1.75 lbs.	03XN02028S
2.75"	1.34"	Nylon	Single Sealed Prec. Ball	450 lbs.	4.03"	1.75 lbs.	03XN03028S
2.25	1.34"	Nylon	Double Sealed Prec. Ball	450 lbs.	3.78"	1.75 lbs.	03XN02028S004C
2.25	1.34"	Nylon	Double Sealed Prec. Ball	450 lbs.	3.78"	1.75 lbs.	03XN02028S001C

PRIORITY & PRIORITY ECONOMY AIR CARGO CASTERS

PRIORITY AIR CARGO CASTERS



03PR02028S
03PR03028S



03PR02028S004
03PR03028S004

- Sealed precision ball bearings in swivel section and wheel on Priority models
- Semi-precision unsealed ball bearings on Economy models
- 1/8" formed steel construction
- White nylon thread guards for Priority models (Black polypropylene thread guards for Priority Economy)
- Shock resistant wheels
- Zinc plated finish
- Optional Toe Guards available, see back page for details

PRIORITY ECONOMY AIR CARGO CASTERS

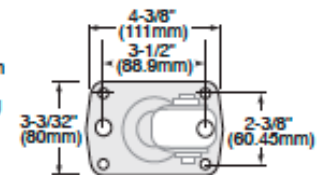
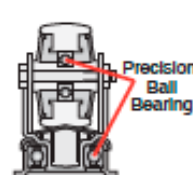
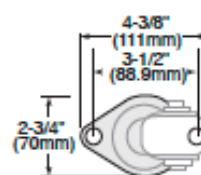


03PE02028S
03PE03028S



03PE02028S004
03PE03028S004

Priority and Priority Economy Models



Wheel Diam.	Tread Width	Wheel Type	Wheel Bearing	Load Cap.	Overall Height	Approx. Weight	Caster No.
2.25"	1.34"	W. Nylon	Sealed Prec. Ball	450 lbs.	3.78"	1.75 lbs.	03PR02028S
2.75"	1.34"	W. Nylon	Sealed Prec. Ball	450 lbs.	4.03"	1.75 lbs.	03PR03028S
2.25	1.34"	W. Nylon	Sealed Prec. Ball	450 lbs.	3.78"	1.75 lbs.	03PR02028S004
2.75	1.34"	W. Nylon	Sealed Prec. Ball	450 lbs.	4.03"	1.75 lbs.	03PR03028S004
2.25	1.34"	B. Polypro.	Semi Prec. Ball	300 lbs.	3.78"	1.75 lbs.	03PE02028S
2.75"	1.34"	B. Polypro.	Semi Prec. Ball	300 lbs.	4.03"	1.75 lbs.	03PE03028S
2.25"	1.34"	B. Polypro.	Semi Prec. Ball	300 lbs.	3.78"	1.75 lbs.	03PE02028S004
2.75"	1.34"	B. Polypro.	Semi Prec. Ball	300 lbs.	4.03"	1.75 lbs.	03PE03028S004

POPULAR AVIATION / GSE CASTERS



295 Standard Dual Wheel Casters

Designed for greater capacity and better distribution of floor load with lowest possible overall height. These casters have differential action when changing direction, thus greatly reducing the scrubbing effect resulting from use of wide faced smaller diameter wheels. 295 is an industry standard and one of our most popular models, but we offer many other dual wheel casters.



216 Cantilever Dual Wheel Casters

In most instances, these casters offer greater capacity, while maintaining the lowest possible overall height. Differential action helps reduce scrubbing when changing directions. They are made from the single wheel caster rig, so cantilever style dual wheel casters can be field built. Albion provides a complete line of dual line casters. Field installable kits available!



298 Ground Support Equipment Casters

The 298 series sets the standards. Constructed with an oscillating, compensating wheel axle and cushion suspension leveling, these casters can stand up to even the most rigorous conditions. A spring assembly can be specified or retrofitted at a later date by returning the caster to Albion.



95 Pneumatic Casters

Sometimes aviation equipment needs a cushioned ride. These casters and wheels are deluxe models. Use them for very heavy duty service. They will handle any job that is practical to mount on pneumatics. The tires are mounted on wide base rims. This permits more air volume, more load capacity, stability and cushioning. Wheel bearings are tapered with dust seals. Albion has a complete line of pneumatic casters to fit your needs.



Spring Loaded Casters

Available across our complete line, our spring loaded casters offer greater capacity and protects from damaging shocks or unwanted vibrations and movement. Noise levels are reduced through the dampening effect of these casters. Albion offers many custom spring loaded solutions for the aviation industry.

410 Contender Kingpinless Stamped Steel Casters

Manufactured with high quality, heat treated AISI 1045 stamped steel. Zinc plating delivers greater corrosion resistance than paint. Inside and outside welds deliver superior strength.



610 Contender Kingpinless Stamped Steel Casters

Highly recommended for automotive and aerospace applications. This caster is built to take the punishment of constant swiveling or for service where shock or impact loads might damage less rugged casters.



400 Shockmaster Kingpinless Forged Steel Casters

Extra heavy duty durable forged steel construction. Shockmaster through-hardened construction is much more durable than competitor's case or induction hardened construction.



600 Shockmaster Kingpinless Forged Steel Casters

Shockmaster casters feature "forged steel" construction and delivers industry leading durability and long life. Highly recommended for automotive and aerospace applications. This caster is built to take the punishment of constant swiveling or for service where shock or impact loads might damage less rugged casters.



700 Shockmaster Kingpinless Forged Steel Casters

These super duty casters are built specifically for that severe application where reliability is essential.



850 Shockmaster Kingpinless Forged Steel Casters

This dual wheel caster has been designed with features tailored to meet the varied needs of the aviation ground support equipment industry. Equally at home in other extremely abusive and rugged applications.



POPULAR AVIATION / GSE WHEELS



VX (Thick Tread) and VY Vulkollan® on Cast Iron

Now the highest quality polyurethane in the world is available from the highest quality caster company in the world. Under a strict licensing agreement with Bayer Material Science, Albion is now the exclusive caster manufacturer of Vulkollan® polyurethane wheels in North America. If you are looking for unmatched performance and legendary durability, look to Albion, your only source for the best polyurethane wheels in the world.



PY and PH Polyurethane on Cast Iron

Composed of a polyurethane elastomer, open cast or injection molded, on clean, close tolerance cores. Polyurethane tread is chemically bonded to a cast iron core. High capacity polyurethane protects floors, is non-marking and delivers quieter operation than standard metal wheels. Choose from different durometers to meet your needs.



PX Thick Tread Polyurethane on Cast Iron Core

The Albion PX wheels offer the same great features as our PY and PH Polyurethane on Cast Iron wheels, with a thick, non-marking tread.



PA and PD Polyurethane on Aluminum Core

The Albion PA and PD Polyurethane on Aluminum Core wheels offer the same features as our PY and PH Polyurethane wheels, only the PA wheels feature cast aluminum cores, and our PD wheels feature die cast aluminum cores.



XP X-treme® Plus Solid Elastomer

Designed specifically for high-capacity manual applications involving chemicals, solvents, or water. Extremely low rolling resistance provides the ergonomic qualities you demand. One-piece construction affords freedom from tread separation with an exceptionally long life. Non-marking, floor protective tread. Enhance the appearance of your equipment by selecting virtually any wheel color. Personalize with your company name!

OG Polyurethane Press On Tires

Polyurethane tires reduce operating cost because the high wear resistance of this material minimizes replacement. Polyurethane offers easier rollability, higher wear resistance, and greater capacity than rubber. User press on polyurethane as an alternative to standard mold-on polyurethane when greater cushioning or speed is involved. These wheels are also the perfect replacement wheel for many forklift brands.



OG Press On Mini Polyurethane Wheels

Albion offers the OG Series in a Mini Polyurethane Wheel. This wheel offers the same great advantages as the OG series Press On Tires.



SF Pneumatic Wheels

Full Pneumatic wheels are recommended for the greatest possible protection to both loads and floors. If you transport fragile materials or parts, or if you move delicate instruments over rough floors, you should consider a pneumatic tire. Full pneumatics cushion the load on air, just like an automobile. They must be properly inflated and can be filled with urethane foam to make them deflation proof, but foam has no effect on



OA Press On Rubber Wheels

For capacities and service conditions beyond the capabilities of regular cushion tread wheels, we offer industrial press on wheels. These are available in either standard or deluxe Hi-Profile cushion type.



NF Airplane Tow Bar Solid Tires

These wheels go on the tug tow bars. You can see them pushing 727s, 737s, 757s, DC-8s, and DC9s away from the jet way and airport structures. Available in 12" diameter.



SO Pneumatic Hand Truck Wheel

This 4-ply rating tire with offset hub is the perfect answer for all your hand truck replacement needs.



AVIATION / AIR CARGO ACCESSORIES

Optional Toe Guards for All Albion Models

Nylon glass filled toe guards provide added safety. They are easily installed in the field. Toe guards fit all air cargo casters except integral toe guard models and are rated at 300 lbs.



106mm

Specify T0-106 on caster
To field install specify TG030106



120mm

Specify T0-120 on caster
To field install specify TG030120



145mm

Specify T0-145 on caster
To field install specify TG030145



FBB Brake

Caster Brakes



Floor Locks



Leveling Jacks



Field Installable
Hand Operated

Field Installable
Foot Operated

Swivel Locks

Custom Fabrication: If you don't see it. We still do it!

This is not a one size fits all business. In fact, many of our orders require custom fabrication. If you can't find the right caster for your special application, put the Albion engineering team to work. We will create the perfect solution for your moving problem.

Visit our state of the art manufacturing facilities in Newnan, Georgia and Albion, Michigan and see for yourself why Albion flies above the rest for ground support equipment caster applications worldwide.

