

AIR SKIDS





 **AIRFLOAT** | *Air Skids Technology*



Frictionless

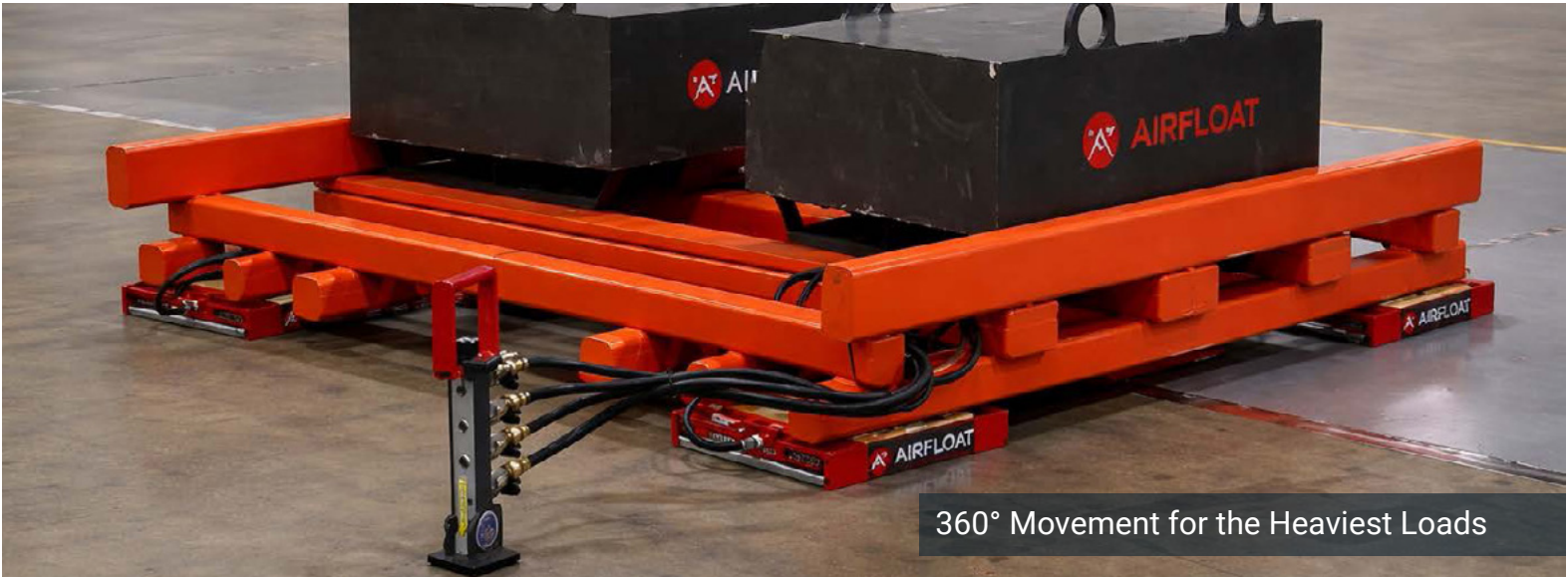
- Floats loads on thin film of air for nearly frictionless movement
- Fully pneumatic operation

Omnidirectional

- Full control of load
- 1 LB of force moves 1,000 LBS. of weight



Float Heavy Aerospace Loads with Ease



360° Movement for the Heaviest Loads



Modular Production Lines



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.

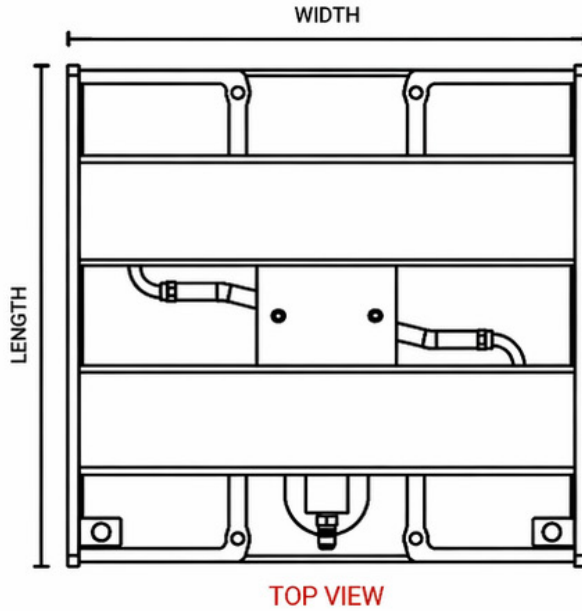
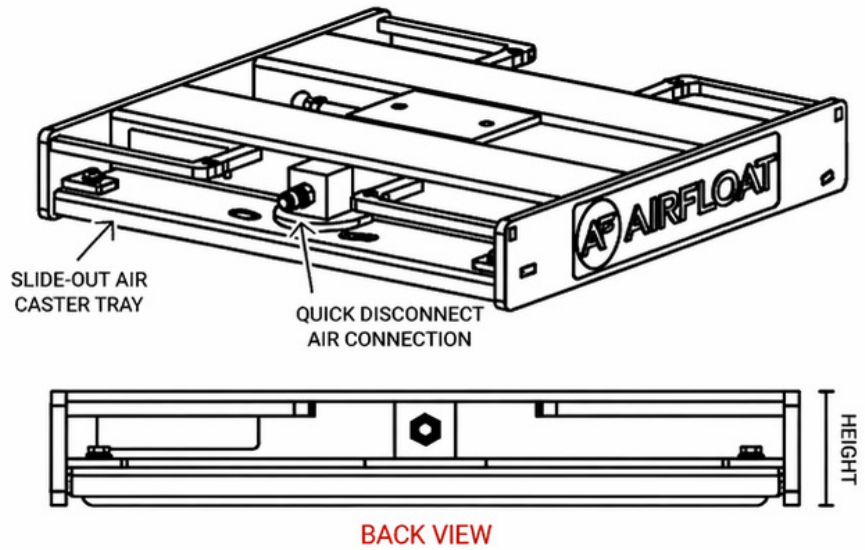


ALL-IN-ONE RIGGING KIT

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.



AIRFLOAT AIR SKIDS

**ISOMETRIC VIEW**

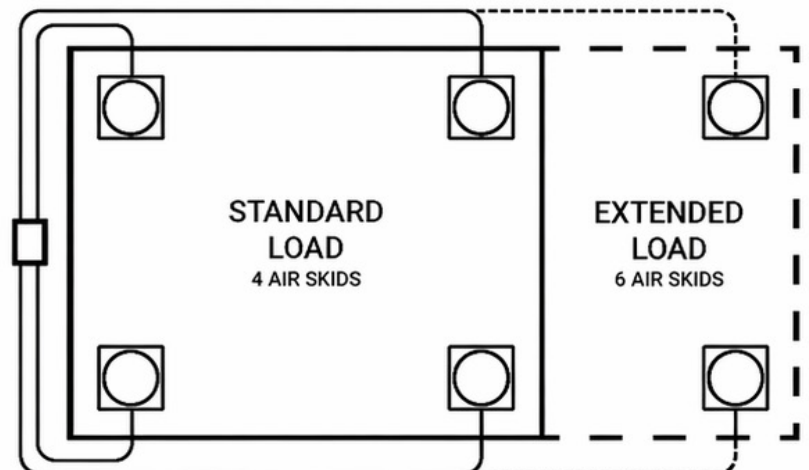
SET OF 4 & 6 AIR SKID SPECIFICATIONS

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			
STANDARD							
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 MANUAL





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- A.** Before operating your Airfloat equipment, please thoroughly read this manual.
- B.** Caution: When removing from crate, carefully remove skids from crate and place on smooth, clean floor, free of any foreign objects.
- C.** Inspect the equipment for possible damage in shipment or unpacking. Check especially for cuts or damage to air caster diaphragms.
- D.** Some skids are shipped with casters removed and crated separately to avoid caster damage. When applicable, install the air casters by sliding the air caster and tray assembly into the air skid frame at the opening provided. Fasten the tray in place with the retainer bolts.
- E.** Note: A Styrofoam spacer is used to protect the diaphragm in some shipments, and must be removed. Remove any tape residue left by the attachment tape.
- F.** Please review the information on skid placement under the load, air flow, and flooring contained on the following pages.

EQUIPMENT

Your equipment may include a combination of the following components:

1. Steel Air Skids
(with hose assemblies)



2. Air Skid Controller



3. "Deadman"
Safety Pendant



AIR SKID KIT



FULL MANUAL: ALIGNPROD.COM/MANUAL/AIR-SKID

REQUIRED COMPONENTS



4 - 6
AIR SKIDS



AIR SKID
CONTROLLER



4 - 6 QD
SKIDS HOSES

OPTIONAL (INCLUDED WITH RIGGING KIT)



SUPPLY
HOSE



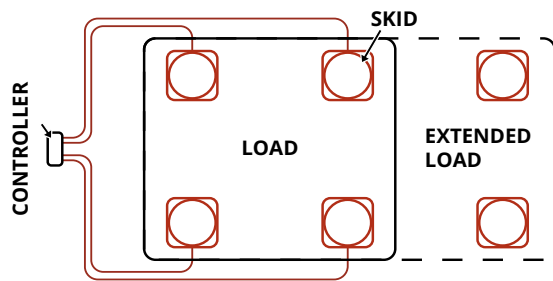
DEADMAN
PENDANT



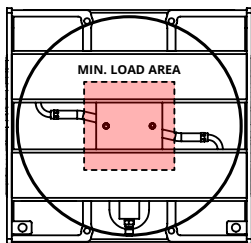
SPARE
AIR CASTERS

AFTER UNPACKING, INSPECT THE AIR SKIDS AND OTHER COMPONENTS FOR ANY DAMAGE OR DEFECTS.
WE RECOMMEND HAVING SPARE AIR CASTERS IN CASE DAMAGED AND TO AVOID DOWNTIME.

STEP 1: SKID PLACEMENT



1A Place the load onto the Air Skids. Ensure the load is properly secured and centered on the Skids.



1B Centering the load onto the Skids is critical. The load's contact point with the skid should meet or exceed the minimum load area.

Check the chart below for your Skid model and minimum load area.

AIR SKID MODELS	MIN. LOAD AREA (L x L)	AIR SKID MODELS	MIN. LOAD AREA (L x L)
AF01012	4 x 4 in.	AF01030	7 x 7 in.
AF01017	5 x 5 in.	AF01036	8 x 8 in.
AF01020 / 24	6 x 6 in.	AF01048	10 x 10 in.

1C When securing the load to the Skids, use the mounting holes provided or an adapter plate.

Do **NOT** drill holes in the tube frame of the Air Skids.



⚠ CAUTION: DO NOT DRILL HOLES IN THE TUBE FRAME OF THE STEEL SKID.

STEP 2: AIR SKID HOSES

IF DEADMAN PENDANT WAS PURCHASED SEPARATELY, COMPLETE STEP 5 BEFORE CONTINUING.



2A Connect the Skid hoses to each Skid, then run the hoses to the Air Skid controller and connect them.

Run the hoses off the ground to avoid getting caught or damaged during move.

STEP 3: AIR SUPPLY



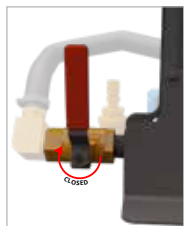
3A Connect the main air supply to the controller using the supply hose.



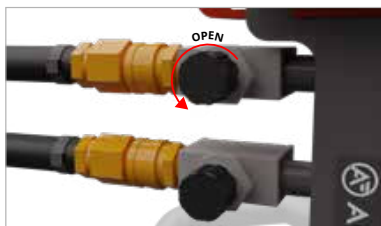
3B If using a deadman pendant, connect the air supply to the deadman assembly.

⚠ OSHA MAY REQUIRE SAFETY FLOW CHECK VALVE FOR HOSES GREATER THEN 1/2". CONSULT FACILITY IF REQUIRED.

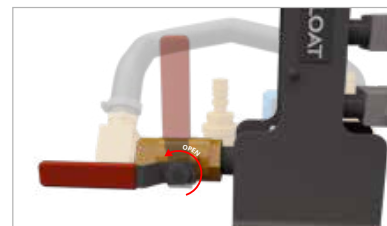
STEP 4: AIR FLOW



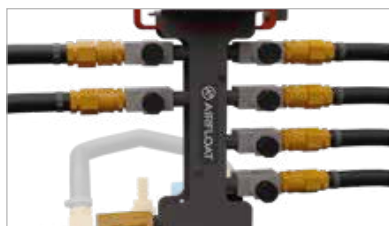
4A Start with valves closed and adjust the settings as you go.
The main ball valve and the individual Air Skid flow valve should be closed.



4B Set each Skid flow valve to one full turn open.
The weight of the load influences the required air flow. See **4D** for details.



4C Slowly open the main valve, the load should start to float freely. If using a deadman pendant, holding the trigger is required float the load.



4D If portions of the load are still touching the ground, adjust the individual valves until each Skid is lifted to an equal height.



FULL MANUAL

Read the full manual online for more information about air flow requirements, flooring specs, and troubleshooting.

ALIGNPROD.COM/MANUAL/AIR-SKID

STEP 5: DEADMAN PENDANT (OPTIONAL)



5A If purchased separately, attach the poppet valve assembly to the bottom of the controller located opposite of the Air Skid control valves.



5B Connect the 90° elbow to the controller inlet valve.



5C Connect the poppet valve to the controller's main flow valve with the provided hose using clamps on each end.

DEADMAN PENDANT

5D Connect the pendant to the assembly and attach the holder to the top of the controller.

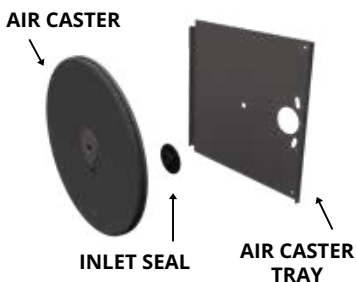


AIR CASTER REPLACEMENT



6A Replacement can be performed while the load is still place on the Skids.
Remove the two bolts securing the air caster tray and remove the tray.

6B Remove the air caster and the inlet seal from the tray. Inspect and replace all damaged components. Reassemble tray, slide into Skid, and tighten bolts.



PARTS AND SERVICES

Spare Parts can be purchased by scanning the QR Code or by visiting WWW.ALIGNPROD.STORE



SPARE PARTS

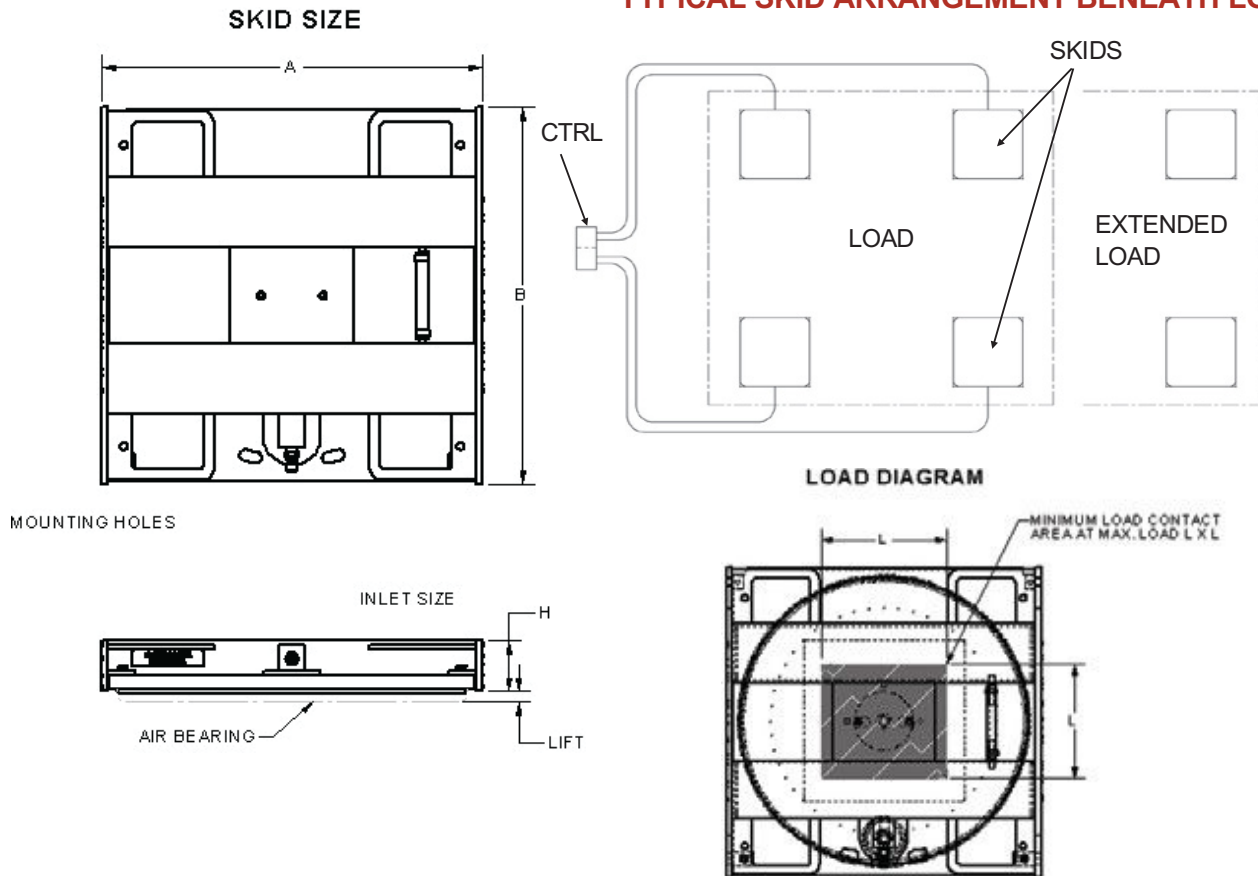
SUPPORT:
1-800-888-0018
support@alignprod.com

SIZING CHART/SINGLE SKID



Steel Skid Model No.	Capacity	Dimensions A x B x H	Mounting Holes	Inlet Size NPT.	Lift	Flow	Caster Number	Min. Load Area L x L	Weight
AF01012-1	3,000 lbs. 1,360 kg	13 x 13 1/4 x 3 in. 330 x 337 x 76 mm	2 @ 3/8" - 16 on 2 1/2" Ctr.	3/8 in.	1/4 in. .64 cm	11 CFM .39 L/min.	H-0012	4 x 4 in. 10.2 x 10.2 cm	26 lbs. 12 kg
AF01017-1	6,250 lbs. 2,800 kg	18 1/2 x 18 1/4 x 2 7/8 in. 470 x 464 x 73 mm	2 @ 3/8" - 16 on 3 1/2" Ctr.	3/8 in.	3/8 in. .95 cm	16 CFM .57 L/min.	H-0017	5 x 5 in. 12.7 x 12.7 cm	44 lbs. 18 kg
AF01020-1	8,750 lbs. 3,980 kg	21 1/2 x 21 1/4 x 2 7/8 in. 546 x 540 x 73 mm	2 @ 3/8" - 16 on 3 1/2" Ctr.	3/8 in.	3/8 in. .95 cm	18 CFM .64 L/min.	H-0020	6 x 6 in. 15.2 x 15.2 cm	58 lbs. 26 kg
AF01024-1	12,500 lbs. 5,680 kg	25 3/4 x 25 1/4 x 3 1/2 in. 654 x 641 x 89 mm	2 @ 3/8" - 16 on 3 1/2" Ctr.	3/8 in.	3/8 in. .95 cm	22 CFM .78 L/min.	H-0024	6 x 6 in. 15.2 x 15.2 cm	98 lbs. 44.5 kg
AF01030-1	21,250 lbs. 9,660 kg	31 3/4 x 31 1/2 x 3 1/2 in. 806 x 800 x 89 mm	2 @ 1/2" - 13 on 6" Ctr.	3/8 in.	3/8 in. .95 cm	28 CFM .99 L/min.	H-0030	7 x 7 in. 17.7 x 17.7 cm	138 lbs. 62.6 kg
AF01036-1	31,250 lbs. 14,200 kg	37 3/4 x 37 1/2 x 4 in. 959 x 953 x 102 mm	2 @ 1/2" - 13 on 3 1/2" Ctr.	3/4 in.	1/2 in. 1.3 cm	35 CFM 1.24 L/min.	H-0036	8 x 8 in. 20.3 x 20.3 cm	235 lbs. 107 kg
AF01048-1	52,500 lbs. 23,800 kg	50 x 49 1/2 x 5 in. 1,270 x 1,257 x 127 mm	4 @ 1/2" - 13 on 8" Ctr.	3/4 in.	1/2 in. 1.3 cm	47 CFM 1.66 L/min.	H-0048	10 x 10 in. 25.4 x 25.4 cm	430 lbs. 195 kg

TYPICAL SKID ARRANGEMENT BENEATH LOAD



COMPRESSOR SIZING GUIDE



***Consult Your Compressor Supplier- These Are Recommendations Only**

HOW TO USE THIS GUIDE

- Always size compressors based on airflow (SCFM), not horsepower
- Recommendations include a ~25% safety margin for hose loss, fittings, and real world conditions
- When in doubt -> size up one level, especially for long hose runs or jobsite use

COMPRESSOR RECOMMENDATIONS BY AIR SKID SYSTEM

Small Systems (Shop-Friendly Electric Compressors)

MODEL	CONFIGURATION	REQUIRED AIRFLOW	MINIMUM COMPRESSOR	RECOMMENDED COMPRESSOR
AF01012	Set of 4	44 SCFM	15 hp rotary screw	15 hp rotary screw
AF01012	Set of 6	66 SCFM	20 hp rotary screw	20 hp rotary screw
AF01017	Set of 4	64 SCFM	20 hp rotary screw	20 hp rotary screw
AF01017	Set of 6	96 SCFM	25 hp rotary screw	25 hp rotary screw
AF01020	Set of 4	72 SCFM	20 hp rotary screw	20 hp rotary screw
AF01020	Set of 6	108 SCFM	25 hp rotary screw	20-30 hp rotary screw

MODEL	CONFIGURATION	REQUIRED AIRFLOW	MINIMUM COMPRESSOR	RECOMMENDED COMPRESSOR
AF01024	Set of 4	88 SCFM	25 hp rotary screw	25 hp rotary screw
AF01024	Set of 6	132 SCFM	30 hp rotary screw	30 hp rotary screw (or 185 CFM diesel)
AF01030	Set of 4	112 SCFM	30 hp rotary screw	30 hp rotary screw
AF01030	Set of 4	112 SCFM	30 hp rotary screw	30 hp rotary screw
AF01030	Set of 6	168 SCFM	40 hp rotary screw	185 CFM diesel or 50 hp screw



Large Systems (Field / Heavy Industrial Applications)

MODEL	CONFIGURATION	REQUIRED AIRFLOW	MINIMUM COMPRESSOR	RECOMMENDED COMPRESSOR
AF01036	Set of 4	140 SCFM	40-50 hp screw	185 CFM diesel or 50hp screw
AF01036	Set of 6	210 SCFM	50 hp screw	375 CFM diesel
AF01048	Set of 4	188 SCFM	50 hp screw	375 CFM diesel
AF01048	Set of 6	282 SCFM	75 hp screw	375 CFM diesel (minimum)
AF01048	Set of 6	282 SCFM	75 hp screw	375 CFM diesel (preferred) 600CFM diesel (preferred)

Quick Selection Rules (Sales + Field Use)

1. Match the Use Case

- Indoor / plant use -> Electric rotary screw compressor
- Outdoor / mobile -> Towable diesel rotary screw

2. Use These Fast Rules of Thumb

REQUIRED AIRFLOW	RECOMMENDED COMPRESSOR
UP TO 100 SCF	Type 15-25 hp electric rotary
100-150 SCFM	screw 25-30 hp electric rotary
150-200 SCFM	screw 25-30 hp or 185 CFM
200-300 SCFM	diesel 375 CFM diesel
300+ SCFM	375-600 CFM diesel



3. When to Size Up

Recommend the next size up if:

- Hose length > 50–100 ft
- Multiple hose connections / fittings
- Lower supply pressure (<100 PSI)
- Outdoor or uneven floor conditions

Best Practice Setup (What to Recommend Along With Compressor)

For best performance and fewer issues:

- **Air receiver tank** (stabilizes flow)
- **1"–1.5" supply hose** for larger systems
- **High-flow fittings** (avoid restrictive couplers)
- **Dryer/filters** (recommended for indoor systems)

HIGH PERFORMANCE AIR BEARING



High Performance Air Bearing Application Engineering Chart

Applies to H-00XX and H-00XX-F Bearings, where XX represents the Nominal Size

Nominal Size (in.)	Lifting Capacity (lbs.)	Pressure Capacity (psi)	Inlet Size NPT	Area (sq. in.)	Perimeter (ft.)	Estimated Air Flow Per Bearing					Weight (lbs.)	Estimated Lift Height (in.)
						(SCFM)						
						Steel	Epoxy Floor	Great Concrete	Good Concrete	Poor Concrete		
ROUND												
10	2000	33.3	1/8"	60	2.3	4.6	5.75	6.9	9.2	11.5	2.5	1/16 to 1/2
12 STD	3000	33.3	1/8"	90	2.7	5.4	6.75	8.1	10.8	13.5	3.5	1/16 to 7/8
14	4100	34.2	1/8"	120	3.2	6.4	8	9.6	12.8	16	5	1/8 to 7/8
17 STD	6250	34.7	3/8"	180	4	8	10	12	16	20	6.5	7/16 to 1 1/8
20 STD	8250	35.9	3/8"	230	4.5	9	11.25	13.5	18	22.5	6.5	7/16 to 1 3/8
24 STD	12500	35.7	3/8"	350	5.5	11	13.75	16.5	22	27.5	12	11/16 to 1 5/16
30 STD	21250	36.6	3/8"	550	7.1	14.2	17.75	21.3	28.4	35.5	13.5	11/16 to 1 3/8
36 STD	31250	36.8	1/2"	850	8.6	17.2	21.5	25.8	34.4	43	20.5	3/4 to 1 1/2
43	42000	35	1/2"	1200	10.3	20.6	25.75	30.9	41.2	51.5	26	11/16 to 1 3/4
48 STD	52500	35	1/2"	1500	11.8	23.6	29.5	35.4	47.2	59	31.5	11/16 to 1 7/8
54	63000	35	1/2"	1800	13	26	32.5	39	52	65	46	5/8 to 1 7/8
RACETRACK												
15x30	11000	33.3	33.3	330	6	12	15	18	24	30	10.5	9/16 to 1
20x31	15000	33.3	33.3	450	6.5	13	16.25	19.5	26	32.5	14	5/16 to 1 1/4
28x38	26000	34.7	34.7	750	8.3	16.6	20.75	24.9	33.2	41.5	19	7/16 to 1 3/16
43x67	70000	35	35	2000	14	28	35	42	56	70	44	1/4 to 1 5/8
54x78	105000	35	35	3000	17	34	42.5	51	68	85	58	1/4 to 1 3/4
<i>Typical Range</i>												

Important Notes

"Lifting capacity" is based on "Good" floor conditions. Off center loads must be accounted for in system design. "Pressure at Capacity" is internal bearing pressure. Supply pressure is higher and must account for line losses. "Estimated Air Flow" is based on the floor surface. Refer to the AirFloat flooring specification for guidelines. SCFM = Standard Cubic Feet Per Minute at 60 Degrees Fahrenheit and 14.7 psi absolute pressure. "Standard" notes that those sizes are standard for AirFloat. "Hop Chamber Volume" does NOT take into account special circumstances that require additional volume, such as high center of gravity loads. For high center of gravity loads, the Hop Chamber Volume should be at least greater than 3 times the bearing volume. "Cavity Height" = the minimum height required for an uninflated air bearing. Rest bars of this height should support the load. "Tray Height Adder" + "Cavity Height" = Rest bar height, for Tray Mounted Air Bearings. (Using the Standard 1/8" thick tray) "Estimated Lift Height" must be reduced by the "Tray Height Added for Tray Mounted Air Bearings. High Lift style air bearings may require additional cavity height. STD = STANDARD

AirFloat produces many custom bearings with differences in performance for capacity, floor conditions, material requirements and more. Please consult a factory representative before applying these ratings to any existing equipment with bearings that are not of the part number format listed above.



AIR SUPPLY HOSE DIMENSIONS

PRESSURE (SOURCE)	FLOW	50 FT HOSE	50-150 HOSE
80 PSI	50 SCFM	1/2" ID	3/4" ID
80 PSI	75 SCFM	3/4" ID	3/4" ID
80 PSI	100 SCFM	3/4" ID	3/4" ID
80 PSI	150 SCFM	1" ID	1" ID
80 PSI	200 SCFM	1" ID	1" ID
80 PSI	300 SCFM	1-1/4" ID	1-1/4" ID

HOSE FLOW & SIZING

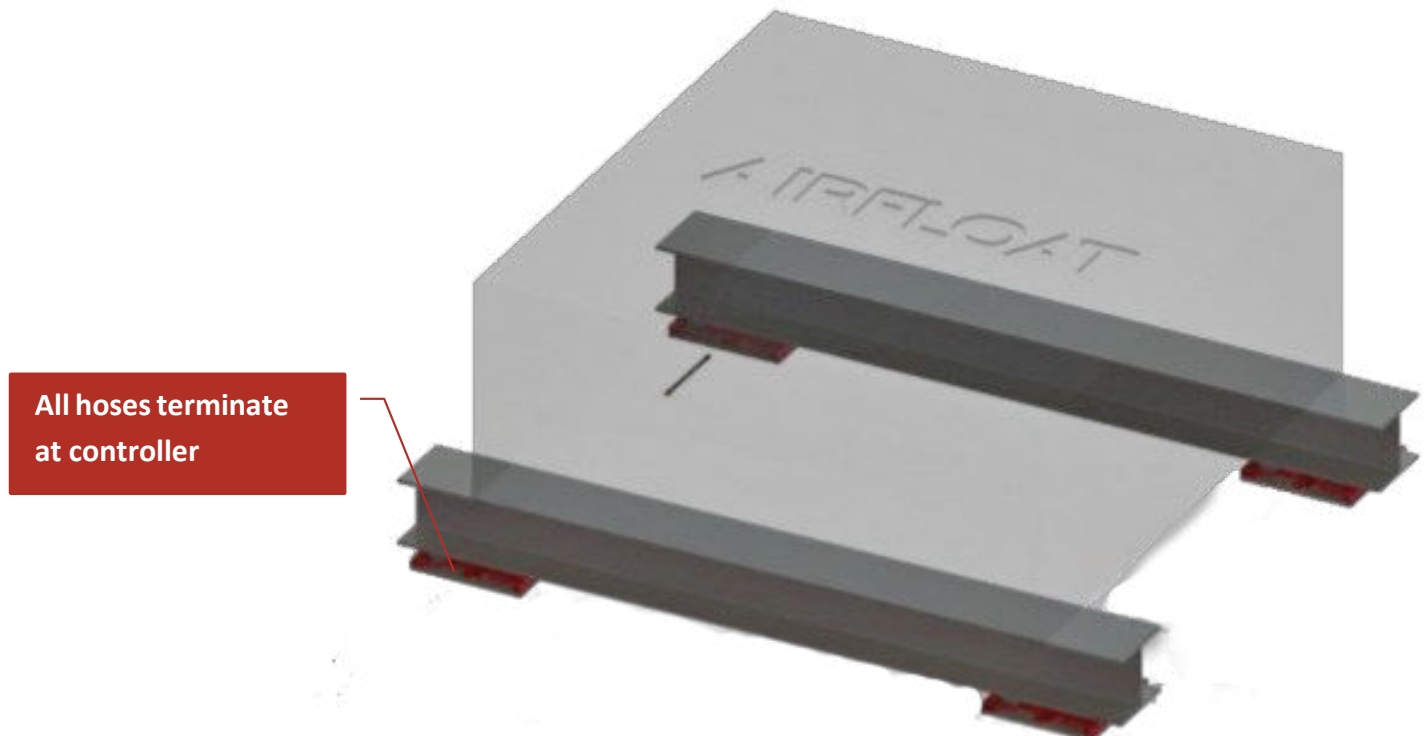


AIR HOSE FRICTION LOSS...

Approximate pressure loss in psi through 100 foot hose lengths complete with couplings.

I.D OF HOSE	GAUGE PRESSURE (PSI)	CUBIC FEET OF AIR PER MINUTE (SCFM)											
		40	50	60	70	80	90	100	110	120	130	140	150
1/2	50	20.2	36.2										
	60	16.8	29.6	46.8									
	70	14.0	24.8	40.0	56.8								
	80	12.0	21.6	34.8	50.4	69.2							
	90	10.8	19.0	29.6	44.0	61.0	82.0						
	100	9.6	16.8	26.6	38.6	54.4	73.3						
	110	8.6	15.2	24.0	35.2	49.2	66.6	89.0					
3/4	50	3.0	4.8	7.0	8.8	13.0	17.0	22.8	28.4				
	60	2.4	3.8	5.6	7.6	10.4	13.6	17.2	22.4	28.2			
	70	1.8	3.0	4.6	6.4	8.4	11.0	14.0	17.6	22.0			
	80	1.6	2.6	3.8	5.6	7.2	9.4	11.6	14.4	17.6	21.2		
	90	1.4	2.2	3.2	4.6	6.2	8.0	10.0	12.4	15.0	18.0	21.6	
	100	1.2	2.0	2.8	4.0	5.4	7.0	8.8	10.8	13.2	15.8	18.8	22.2
	110	1.0	1.8	2.6	3.6	4.8	6.2	7.8	9.8	11.8	14.2	16.8	19.8
1	50	0.6	1.0	1.6	2.2	3.0	4.0	5.2	7.0	9.6	14.0		
	60	0.6	0.8	1.2	1.6	2.4	3.0	4.0	5.2	6.6	8.2	11.0	14.4
	70	0.4	0.8	1.0	1.4	2.0	2.6	3.2	4.0	5.0	6.2	7.6	9.4
	80	0.4	0.6	1.0	1.4	1.6	2.2	2.8	3.4	4.0	4.8	5.4	7.0
	90	0.4	0.6	0.8	1.2	1.4	1.8	2.4	2.8	3.4	4.0	4.8	5.6
	100	0.4	0.4	0.8	1.0	1.2	1.6	2.0	2.4	3.0	3.6	4.2	4.8
	110	0.4	0.4	0.6	0.8	1.2	1.4	1.8	2.2	2.6	3.0	3.6	4.2
1 1/4	50		0.4	0.4	0.6	0.8	1.0	1.4	2.0				
	60		0.2	0.4	0.6	0.6	1.0	1.2	1.6	2.0	2.4	3.0	
	70			0.4	0.4	0.6	0.8	0.8	1.2	1.4	1.6	2.0	2.6
	80			0.2	0.4	0.6	0.6	0.8	1.0	1.2	1.4	1.6	2.0
	90				0.4	0.4	0.6	0.6	0.8	1.0	1.2	1.4	1.6
	100				0.2	0.4	0.4	0.6	0.8	0.8	1.0	1.2	1.4
	110				0.2	0.4	0.4	0.6	0.6	0.8	0.8	1.0	1.2
1 1/2	50					0.4	0.4	0.4	0.6	0.8	0.8	1.0	1.2
	60					0.2	0.4	0.4	0.4	0.6	0.6	0.8	1.0
	70						0.2	0.4	0.4	0.6	0.6	0.6	0.8
	80							0.2	0.4	0.4	0.4	0.6	0.8
	90								0.2	0.4	0.4	0.4	0.6
	100									0.4	0.4	0.4	0.4
	110									0.4	0.4	0.4	0.4

Typical Arrangement



A. Care should be taken so that capacities of individual air skids are not exceeded (see sizing chart on [p.5](#) for air skid capacities). Although a set of skids may have a combined capacity to carry a load, if the load is not distributed equally (i.e., one end is heavier than the other), the capacity of individual air skids may be exceeded.

Where possible, position the air skids under the load to balance weight distribution to each air skid. If equal weight distribution is not possible, this can be compensated for by increasing or decreasing individual flow control valves until approximately the same amount of lift is attained at each air skid. See [pg.8](#) for more information.

B. For bolted attachment of skids to load, use mounting holes provided or use an adapter plate for simple placement under load, check specifications section to verify that load contact with skid meets or exceeds minimum.

C. ⚠ CAUTION: DO NOT DRILL HOLES IN THE TUBE FRAME OF THE STEEL SKIDS. These are as act as damping chambers to prevent vertical “hop” in the air casters when air flow is high and the load is light.

AIR SKID SYSTEM AND THE LOAD



When an adapter plate (by customer) as illustrated, ensure that minimum pad size as specified in the specification chart.



Load support beams should have the same minimum specified width per chart if an adapter plate is not used.



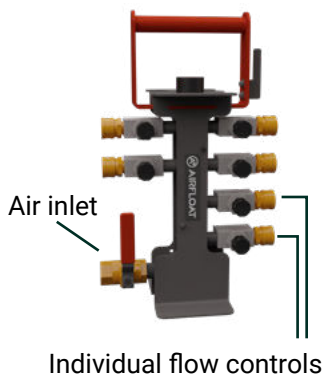
OPERATING INSTRUCTIONS



A. It is important that an adequate volume of air be supplied to the air skids. The table below shows the volume required for operation on a smooth surface, and the recommended “supply” hose size required for that flow.

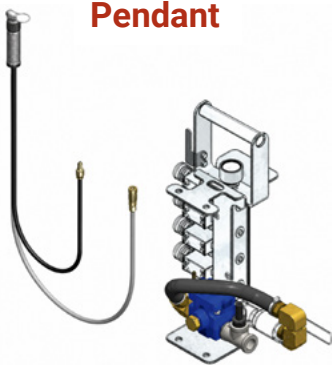
Air Caster Size	Average Air Flow (SCFM) Set of Four (4)
12	44
17	64
20	72
24	88
30	112
36	140
48	188

Air Skid Controller



Note: Air flow requirements for air casters vary greatly with the quality of the floor. Under excellent conditions, it may be possible to use one hose size smaller than shown. If unsure of compressor capacity, multiply compressor horsepower x 4 to obtain an approximate capacity (SCFM). For detailed air flow data, refer to the Hose Flow & Sizing section on [pages 10-11](#).

Deadman Control Pendant



A. Connect main air supply to control package or manifold assembly. NOTE: OSHA requires a safety excess flow check valve for hoses larger than ½” I.D. The check valve will shut off air flow in the event of a severed hose. Consult factory if required.

B. Connect all hoses to the air skids.

C. To float the load, first set each of the individual flow control valves approximately ½ of a turn open.

1. If a pressure regulator is used, set the regulator at zero and fully open the main on/off ball valve. Slowly increase pressure at the regulator until the load floats freely. If the load becomes unstable, reduce the air pressure until the load stabilizes. Loads not centered may cause variations in the lift height of individual skids. Increase or decrease the air flow at the individual flow control valves to approximately equalize lift.

2. If a pressure regulator is not used, slowly open the main valve until the load is floating freely. Increase or decrease the air flow at the individual flow control valves to approximately equalize lift.

D. If the load is very tall and/or the air skids must be positioned close together, greatest stability can be achieved when individual flow controls are opened completely and the main regulator or main valve is throttled. This setting, however, will not work with off-center loads.

FLOOR REQUIREMENTS



The floor condition is an essential and integral part of any successful air film transport system. New installation or existing floor repair methods for air caster use are generally different from those found in a typical plant or warehouse. Airfloat designs, manufactures, and tests our air casters to the floor requirements listed below. Compliance to these floor requirements will ensure that your air caster system operates at its optimum performance levels for which it was designed.

Flatness

Floor flatness refers to the length and amplitude of waviness, humps, bulges, ridges, gullies, troughs or depressions. Floor undulations considered here must be non-abrupt with well rounded edges. Abrupt floor irregularities must be repaired or avoided. Ways to navigate cracks, expansion joints, holes, seams, etc. are discussed further below in this manual. Airfloat air caster equipment is engineered to operate on floors that meet the following flatness specification:

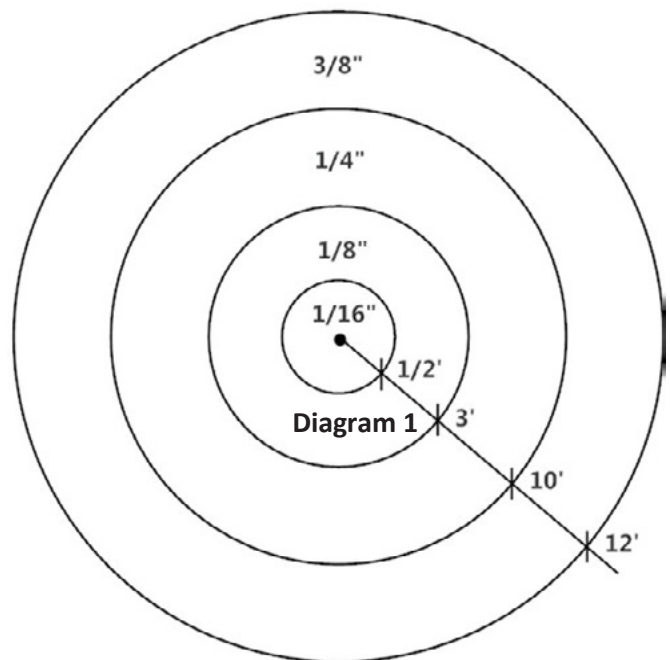
Chart 1

Deviation under straight edge (inches)	1/16	1/8	1/4	3/8
Length of straight edge (feet)	1/2	3	10	12

Chart 1 (above) lists allowable depression deviations under various lengths of straight edges laid anywhere on the floor surface where the air caster transportation system is intended to operate.

Diagram 1 (below) illustrates the relative floor flatness of any given location in the air caster equipment operating area.

AIRFLOAT AIR CASTERS ARE DESIGNED TO OPERATE ON SMOOTH, MACHINE-TROWELED CONCRETE FLOORS, OR OTHER FLOOR TYPES WITH BETTER OR LIKE FINISHES.



Levelness

The levelness of a floor does not affect the air film produced by an air caster and therefore does not degrade its performance. Floor levelness is only considered within the context of the overall control and maneuverability of the air caster transport system.

For manually operated equipment, it is recommended that the floor not exceed a slope of .1% in any 10 foot run (a total of 1/8 inch rise in any 10 feet). For power driven or assisted equipment, it is required that the floor not exceed a slope of .2% in any 10 foot run (a total of 1/4 inch rise in any 10 feet). See Diagram 2 in which A = rise and B = run.

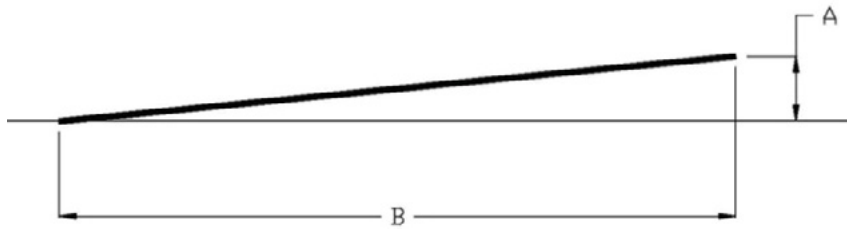


Diagram 2

Please note that unleveled floors will allow an air caster transport system to drift along the floor grade if a guide wheel or power drive is not provided.

Surface Texture

Air casters operate with a paper-thin film of air between the air caster diaphragm and the floor. The degree of floor surface smoothness is of paramount importance. Airfloat air casters are designed to operate on smooth, machine-troweled concrete floors, or other floor types with better or like finishes.

Porosity

Our equipment is designed for efficient operation on non-porous floors. Air casters make a floating pressure seal with the floor. A porous floor wastes air through the pores of the floor surface which degrade the pressure seal.

Cracks and Expansion Joints

Hairline cracks are generally acceptable for air caster use. As cracks widen, they must be filled and sealed to avoid air loss.



If at all possible, expansion joints should be avoided in the path of air caster movement. If unavoidable, the joint should be filled with a backer rod, finished with a flexible epoxy and sanded flush to blend with the rest of the floor.

Projections

Any floor projections such as anchor bolts or cover plates should be finished flush with the floor surface. Blind holes with a diameter less than $\frac{3}{4}$ " will work acceptably with aircaster systems, but should be filled if not used.

Bridge and Ramp Transitions

A bridge or ramp can be used to transition from one surface to another or navigate over obstacles. Typically only light gauge sheet metal is needed to bridge seams, cover floor grating, or ramp to differing floor materials.

Please note that bridge and/or ramps must be longer than the diameter of their caster so that the caster only transitions over one edge at a time. It is recommended that a very slight break be placed two inches behind the leading and trailing edges of the sheet metal to help keep the edges in uniform contact with the floor.

Sheet Material Overlays

Overlays are typically used in temporary rigging moves as they are the most cost effective way to achieve floor compliance over rough or porous floor surfaces. The most common materials used for overlays are sheet steel, plastic, hard tempered Masonite, and non-textured linoleum. The overlay material thickness should not exceed $\frac{1}{32}$ " to ease transition on to the overlay. When thicker overlay materials are required, they may necessitate the use of a ramp, which can be created by breaking the edge of the overlay material or by taping the leading edge with a thinner material. Overlay selection needs to consider subsurface conditions. Please consult with the factory.

Please note that in some instances, Airfloat may have the ability to design air caster transport systems which can be specially engineered to operate on floor conditions outside the parameters of the requirements listed in this manual. Again, please consult with the factory for more information.

A. Cleaning and Inspection

Air skids require very little maintenance. The air casters should be periodically inspected for tears and dirt build up. The air casters should be thoroughly cleaned before inspection. Dirt build up on the air caster diaphragm will cause the air caster to produce high drag forces. The air casters may be cleaned with any household cleaner. If the use of a solvent is required, either mineral spirits or naphthalene may be used.

If the air skid is provided with tray mounted air casters (steel skids), the casters may be removed for inspection and cleaning without lifting, inverting or removing the load from the skid. Simply remove the two ¼"-20 tray retainer bolts located just under the lifting handle. Loosen the worm gear hose clamp on the hose connected to the skid frame inlet tube. Pull the hose from the inlet tube. A quick twist of the hose on the tube helps to break the hose loose for easier removal.

The air caster and tray assembly should now be free to slide out from under the skid. The air caster diaphragms should be carefully inspected for cuts, tears or punctures. Often a cut in the air caster diaphragm is not very obvious.

Cuts around the outer perimeter of the air caster are the most detrimental. This location of cut will cause the air caster to waste air, lose lift height and prevent movement. The air caster must be replaced.

However, if the cut is away from the air caster footprint, duct tape sometimes works as a temporary repair to get by. If the cut is under the air caster, the air caster will most likely still function, but may have some stability problems. The air caster should still be replaced.

B. Air Caster Replacement

Air casters on steel skids are replaced by first unscrewing the two bolts that retain the tray to the skid. Simply remove the two ¼"-20 tray retainer bolts located just under the lifting handle. Slide the tray outward as illustrated below. The air caster center bolt and washers are then removed. The air caster is then free to be lifted off of the caster tray. If the inlet seal remains in the old air caster, it will need to be switched to the replacement air caster.



Step 1: Slide out air caster and tray assembly from skid frame.



Step 2: Remove air caster and inlet plumbing from tray.



Problem: Load doesn't lift or is hard to move

Q: Why is the load not lifting or difficult to move?

A: This issue is typically caused by a restriction or mismatch somewhere in the air supply system, or by the load or surface conditions. Check each of the following:

- Supply hose quick disconnect is too restrictive – Increase the size of the quick disconnect used on the system.
- Supply hose is too small for its length – Increase the hose diameter. See hose sizing recommendation sheet
- Load is too heavy – Reduce the load weight and retry.
- Surface is too rough for sufficient air flow – Test on a smooth, flat surface to verify.

Problem: One corner of the load is low or drags

Q: Why is one corner riding lower or dragging on the floor?

A: Uneven lift across casters is usually caused by restricted airflow to one caster, a damaged component, or an unbalanced load. Inspect the following:

- Too much restriction to that caster – Increase the flow control valve setting for the low corner.
- Torn or damaged diaphragm – Replace the affected caster.
- Dirt or debris clinging to the diaphragm – Inspect and clean the diaphragm surface.
- One corner is more heavily loaded than others – Increase airflow to the low corner or reduce flow to the other corners.

Problem: Skid tips or grounds out on one edge

Q: Why does the skid tip or ground out on one side?

A: Tipping is caused by an imbalance between the skid position and the load's center of gravity, or by insufficient support area. Check the following:

- Skid is not centered under the load contact surface – Re-center the skid directly beneath the load.
- See contact area drawing – Use a skid with a larger footprint or add additional casters.
- One corner is more heavily loaded than others – Redistribute the load evenly across all casters.



TERMS

- **COLLECT** - company account (information required at time of order) or,
- **PREPAID and ADD** - must be noted on Purchase Order or,
- If **customer arranges freight shipping**, then our terms are as follows;

Proposal does not include shipping costs. Shipping terms are Ex Works (EXW) Airfloat dock, Decatur, IL (loading included). Airfloat will notify your carrier of the weight and size of the designated load. We will assist your carrier in the loading of the equipment at our facility.

If you change to PREPAID and ADD at a later date:

Change fee of \$200 will apply. Purchase Order must be revised to reflect change or **Airfloat** change order form signed.

Payment Terms

Our proposal is based on the following milestone progress payments:

- i. A down payment of fifty percent (50%) of the order value must be received at the time of order.
- ii. Final payment shall be due thirty (30) days after shipping from our dock.

• **Domestic Orders Greater than \$50,000**

- i. An earned deposit equal to twenty percent (20%) of the order value to be invoiced upon sales order confirmation payment due net 10 days from date of invoice.
- ii. Upon signature of approval drawings by customer, for manufacturing of the product, an additional earned payment equal to thirty percent (30%) of the order value to be invoiced, payment due net 10 days from date of invoice.
- iii. Upon completion of fabrication, an additional earned progress payment equal to thirty percent (30%) of the order value will be invoiced, with payment due net 10 days from date of invoice.
- iv. Final payment shall be due thirty (30) days after shipping from our dock. Failure to pay within these guidelines may delay progress in production of equipment, and eighty percent (80%) of order value must be received prior to releasing product for shipping. Any delays in manufacturing will not be made up by Airfloat, unless Airfloat schedule permits.

• **International Orders**

- i. A down payment of fifty percent (50%) of the order value must be received at the time of order.
- ii. Remaining fifty percent (50%) of the order is due upon delivery to our dock (Decatur, IL) and must be received prior to shipping. We must receive a wire transfer in the amount of one hundred percent (100%) of the order value before releasing the order for shipping on all international orders.
- iii. Remit all payments to:

Airfloat
 LLC 424 South
 Woods Mill Rd.
 St. Louis, MO 63017

For wire transfers:

PNC Bank
 Routing: 041000124
 Credit Account: 4766664618
 N/O Align Production
 Systems, LLC 424

Engineering Change Orders:

Any changes to order after processing of purchase order and sales order confirmation will require engineering change order (ECO) form to be processed with potential for charges and fees associated with requested change. To proceed with any changes to scope, the ECO will need to be signed with corresponding change to purchase order and or new purchase order issued. In addition, the lead-time can be affected based on scope of ECO requested.



STANDARD TERMS AND CONDITIONS

1. Warranty

1.1 Standard Warranty

Airfloat provides its standard one (1) year warranty for all equipment supplied. The warranty period begins on the date of delivery. The full terms of the Airfloat standard warranty are available at: <https://alignprod.com/warranty>.

1.2 Warranty Disclaimer

Except as set forth in the Airfloat standard warranty, Airfloat makes no other warranties, whether express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, or non-infringement, all of which are expressly disclaimed.

1.3 Warranty Claims

Airfloat will not be liable for breach of warranty unless:

- You provide written notice of the defect during the warranty period.
- Airfloat is given a reasonable opportunity to inspect the components.
- Airfloat verifies, in its reasonable discretion, that the components are defective.

If a site visit is requested, Airfloat will provide a proposal for travel expenses, and a purchase order must be issued before departure. If the claim is valid, Airfloat will bear the travel costs. If invalid, Airfloat will invoice travel costs against your PO.

1.4 Remedy Timeline

Airfloat will address valid warranty concerns in a timely manner, consistent with the work required and availability of components necessary to complete the remedy.

2. Agreement & Terms

2.1 Entire Agreement

These terms, together with the proposal and any referenced attachments not superseded, form the entire agreement between you and Airfloat. No additional or conflicting terms in purchase orders or other documents shall apply unless expressly agreed in writing by Airfloat approved officer.

2.2 Purchase Orders

All purchase orders must reference the Airfloat proposal number and final revision, include customer contact information, Bill To, and Ship To details. Airfloat accepts electronic purchase orders as valid and binding.

2.3 Governing Law & Jurisdiction

This proposal is governed by the laws of the State of Illinois. Any cause of action shall be brought exclusively in the United States District Court for the Southern District of Illinois or the state courts of Saint Clair County, Illinois.

2.4 Severability

If any provision of these terms is invalid or unenforceable in one jurisdiction, it shall not affect the validity or enforceability of the remaining provisions or in other jurisdictions.

3. Liability

3.1 Limitation of Liability

Neither party shall be liable for special, indirect, incidental, or consequential damages, including loss of profits, revenues, use, downtime, or third-party claims, whether arising in contract, tort, or otherwise. Airfloat's total liability under this proposal shall not exceed the fees actually paid to Airfloat.

3.2 Exclusions

Nothing in this section limits liability for gross negligence or willful misconduct.

3.3 Force Majeure

Airfloat shall not be liable for any delay or failure due to causes beyond its reasonable control, including but not limited to natural disasters, war, civil unrest, terrorism, labor disputes, fire, equipment failure, pandemics, material shortages, carrier delays, embargoes, or governmental regulations (whether valid or invalid), including priority, requisition, allocation, or price control.



STANDARD TERMS & CONDITIONS

4. Orders & Pricing

4.1 Payment Terms

Payments are due from invoice date according to the net terms agreed upon. Past-due balances incur a service fee of 1.5% per month. Airfloat reserves the right to suspend performance for non-payment. All payments are in U.S. dollars unless otherwise agreed in writing.

4.2 Taxes

Prices exclude sales, use, excise, privilege, VAT, GST, or other taxes. If Airfloat is required to pay such taxes, the customer shall reimburse Airfloat upon demand.

4.3 Specification & Compliance Disclaimer

Unless specifically noted, all pricing and scope are based on Airfloat standard specifications. Compliance with local, state, national, or customer-specific codes, standards, or specifications is excluded unless expressly identified in writing. Customers must provide all compliance requirements prior to proposal submission. Additional charges apply if compliance is required after proposal acceptance without prior acknowledgment.

4.4 Component Minimums

If suppliers require minimum purchase quantities that create excess components Airfloat cannot use, Airfloat may pass these costs to the customer, with reasonable notice provided before charges are applied.

5. Shipping & Delivery

5.1 Shipping Terms

Unless otherwise noted, shipping terms follow Incoterms (EXW – Airfloat dock, Decatur, IL, loading included). Risk of loss passes to the customer upon carrier pick-up.

5.2 Export Compliance

Airfloat exports in accordance with U.S. Export Administration Regulations (EAR). Customers are responsible for obtaining all required import licenses or authorizations.

5.3 Tariffs, Duties & Import Fees

All tariffs, duties, import fees, and related charges are the customer's responsibility unless expressly included in the proposal. If Airfloat agrees to cover such costs, coverage applies only to rates effective at the time of purchase order. Any subsequent increases or decreases are the customer's responsibility.

5.4 Delays, Storage & Termination

- If delivery is delayed <90 days at customer request, Airfloat may charge for storage, incidental costs, and rework.
- If shipment is ready but delayed for reasons beyond Airfloat's control, Airfloat may invoice the balance due.
- If performance is delayed >90 days at customer request, Airfloat may treat it as termination for convenience and charge as follows:

a. Prior to approval drawings: 15% of contract value.

b. After approval drawings: 15% + engineering (\$150/hr)

- After engineering completion: 20% + engineering (\$150/hr).

c. After release of engineering & material procurement: 50% + labor (\$150/hr), not to exceed full contract value.

d. Once 50% of build is complete, Airfloat may, at its discretion, deem the contract non-cancellable.

6. Changes to Scope

Customer-requested changes must be approved in writing by Airfloat before implementation. Price, schedule, and contract terms shall be adjusted accordingly. Airfloat is not obligated to proceed with changes until such agreement is executed.

7. Intellectual Property & Confidentiality

7.1 Intellectual Property

Airfloat retains all rights in its designs, engineering, drawings, data, and other materials. Customers are granted a limited license to use deliverables solely for operation and maintenance of the equipment.

7.2 Confidentiality

Customers shall keep Airfloat proprietary information confidential and not disclose it to third parties without prior written consent. Confidentiality obligations remain in effect for five (5) years after disclosure.

8. Marketing & References

Airfloat retains the right to use its work and designs for future projects, marketing, and resale. With customer consent (not unreasonably withheld), Airfloat may use testimonials, case studies, or references in its marketing materials.

9. Corporate Identity

Airfloat, LLC does business as Airfloat, Airfloat, and Hedin USA.



GENERAL CLARIFICATIONS

1. Proposal Validity & Pricing

All prices are quoted in U.S. dollars and are valid for thirty(30) days from the date of the proposal, unless specifically noted otherwise. This proposal is subject to change or withdrawal by Airfloat at any time prior to acceptance and/or receipt of the initial payment or deposit.

2. Lead Times & Shipping Dates

Proposed lead times and shipping dates are estimates based on Airfloat production capacity and order backlog at the time of proposal. Upon receipt of order and deposit, Airfloat will review quoted lead times and reserves the right to coordinate and adjust with the customer based on workload, backlog, or long-lead component availability.

3. Codes & Standards

All equipment is designed, manufactured, and assembled to Airfloat standard specifications unless noted otherwise. Airfloat designs generally adhere to:

- a. American Iron and Steel Institute (AISI) – steel shapes and standards
- b. American Society for Testing and Materials (ASTM) raw material properties
- c. American Welding Society (AWS D1.1) – welding steel structures
- d. National Electric Manufacturers Association (NEMA 1) – electrical wiring
- e. National Fire Protection Association (NFPA 70) – electrical wiring

4. Data Collection

Any data collected by Airfloat personnel while on-site or through interviews is for use in preparing this proposal only and must be reviewed and validated in writing by the customer. Issuance of a purchase order constitutes confirmation that all data used in this proposal is accurate.

5. Approval Drawings & Buy-Off

Airfloat will submit approval drawings per the quoted lead time after receipt of order and deposit. Approval drawings are expressly incorporated into this proposal. Prompt authorization and return of drawings is required for timely manufacture. For equipment requiring signed approval drawings, in-person buy-off at Airfloat's manufacturing plant is required. If the customer elects not to attend:

- a. Any modifications after shipment will require return shipment at the customer's expense.
- b. Airfloat can provide in-field modifications at its standard service rates.
- c. All payments under the original invoicing schedule remain due.

6. Documentation

This proposal includes one (1) electronic PDF copy of the Owner's Manual (if applicable), provided in English only. The manual will be transmitted electronically prior to delivery when possible.

7. Paint & Finish

Unless otherwise noted, all equipment will be painted to Airfloat specifications using standard brand colors and an air-dried enamel finish.

8. Packaging & Crating

Airfloat will provide adequate, standard packaging for outgoing equipment. If special packaging is required, Airfloat will quote and provide these materials at additional cost.

9. Flooring Requirements

For Airfloat equipment, performance is conditioned on the customer meeting Airfloat flooring specifications.

See: [AirfloatFlooringSpecs.pdf](#).

For Airfloat and Hedin USA equipment, performance is conditioned on the customer meeting Hedin USA flooring specifications. **See: [HedinUSAFlooringSpecs.pdf](#).** Airfloat does not guarantee performance on non-compliant floors unless expressly documented.

10. Environmental Conditions

Airfloat does not guarantee performance of its equipment under environmental conditions outside its reasonable control, including but not limited to dust, water, grease, oil, extreme temperatures, corrosive substances, or poor floor conditions.

11. Scope Exclusions

Unless otherwise noted, Airfloat is not responsible for:

- a. Field installation or commissioning services at the customer's site.
- b. Integration of Airfloat equipment into larger systems or facilities, unless Airfloat has been specifically contracted to provide such engineering. Customers are responsible for proper integration and safe use of Airfloat equipment.

Airfloat LIMITED WARRANTY POLICY

Applies to All Airfloat-Engineered and Manufactured Products

1. Warranty Coverage

Airfloat (“Airfloat”) warrants that Airfloat-manufactured equipment (“Products”) will be free from defects in material and workmanship for a period of one (1) year from the Warranty Start Date, or 2,000 operating hours, whichever occurs first (“Warranty Period”).

Warranty Start Date

The Warranty Period begins thirty (30) days after the Product ships from Airfloat, regardless of installation schedule, commissioning activities, or customer readiness. This Limited Warranty applies only to the original end-user purchaser and is **nontransferable**.

2. Supplier Components

Airfloat warrants third-party components and subsystems only to the extent that the original supplier provides warranty coverage and approves the claim. Airfloat does not extend or modify supplier warranty obligations.

3. Authorized Parts Requirement

To maintain warranty coverage, the customer must use Airfloat-supplied or Airfloat-approved replacement parts, components, consumables, firmware, and software. Use of non-Airfloat parts, or modifications without Airfloat written authorization, voids all warranty coverage.

4. Warranty Claim Procedure

To initiate a warranty claim, the customer must:

1. Submit written notice of the alleged defect to Airfloat within the Warranty Period.
2. Obtain a Return Goods Authorization (RGA) number from Airfloat.
3. Provide Airfloat with all requested documentation, operating history, photos, or error reports.
4. Return the item to Airfloat’s facility in Decatur, Illinois, freight prepaid, for inspection and evaluation.

Airfloat will determine, at its sole discretion, whether the failure is covered under this Limited Warranty.

5. Replacement Parts and Purchase Order Requirement

If Airfloat determines that replacement components may be required:

- The customer must issue a Purchase Order (PO) for all replacement parts prior to shipment.
- If Airfloat approves the claim as warranty-covered after evaluation, Airfloat will credit the cost of the approved replacement parts.
- If Airfloat determines the failure is not warranty-covered, the customer remains responsible for all associated costs. Airfloat may repair, replace, or return parts at its discretion.

6. Field Service, Travel, and Labor Charges

If onsite evaluation or repair is required:

- The customer must issue a PO covering Airfloat’s labor, travel time, mileage or airfare, lodging, and per diem.

Airfloat LIMITED WARRANTY POLICY

- If Airfloat determines during onsite evaluation that the failure is covered under warranty:
 - Labor associated with the warranty repair will be credited.
 - Travel expenses, lodging, per diem, mileage, and airfare are not refundable and remain the customer's responsibility.
- If the failure is not covered, all charges remain billable.

7. Warranty Exclusions

This Limited Warranty does not apply to any failure, defect, or damage resulting from:

A. Improper Installation or Commissioning

- Installation not in accordance with Airfloat instructions
- Incorrect anchoring, alignment, leveling, or foundation preparation
- Improper electrical power supply, grounding, or integration
- Inadequate or unsafe site conditions

B. Unauthorized Modifications

Any modification without Airfloat approval, including:

- Structural changes, drilling, cutting, welding
- Substitution of non-Airfloat parts
- Alteration of electrical, safety, control, PLC, HMI, or AGV programming
- Firmware changes or safety system overrides

C. Environmental Conditions

- Exposure to water, condensation, corrosive chemicals, metal dust, or contaminants
- Use outside temperature, humidity, incline, or vibration specifications
- Any outdoor use not expressly approved by Airfloat in writing

D. Improper Use or Overloading

- Exceeding rated capacity or duty cycle
- Negligence, misuse, abuse, collision damage, or operator error

E. Maintenance-Related Failures

- Failure to perform scheduled maintenance
- Improper lubrication
- Use of incorrect service parts or consumables
- Inability to produce maintenance records upon request

F. Consumables

Consumables and wear items are excluded from warranty coverage, including but not limited to:

- Air bearings, air bags, wheels, rollers, tires
- Filters, fuses, seals, lubricants, wear pads
- Batteries and charging components

G. Electrical or Controls Issues

- Improper customer wiring

Airfloat LIMITED WARRANTY POLICY

- Power supply issues, electrical noise, harmonics, or grounding problems
- Improper lockout/tagout procedures

H. Cybersecurity or Network Exposure

- Viruses, ransomware, malware, unauthorized access, or misconfiguration of customer networks

I. Shipping, Handling, and Storage

- Freight damage (customer must file claim with carrier)
- Damage during rigging, unloading, or internal relocation
- Improper or prolonged storage before installation

8. Start-Up, Commissioning, and Multi-Phase Projects

Delays in customer readiness do not extend the Warranty Period. For multi-phase or multi-unit projects, each shipment carries an independent Warranty Start Date.

9. Global Deployments

For equipment deployed outside the continental United States:

- Response times may vary.
- The customer is responsible for all duties, customs fees, freight, visas, travel logistics, and any costs associated with international service.
- Airfloat is not responsible for delays caused by customs or regulatory requirements.

10. Warranty Support Response Times

Airfloat will:

- Provide warranty support during regular business hours via phone and email.
- Acknowledge receipt of a warranty request and provide a preliminary action plan within forty-eight (48) hours. A preliminary response does not imply immediate repair, dispatch, or resolution.

11. Exclusive Remedy

If Airfloat determines that a defect covered by this Limited Warranty exists, Airfloat will, at its sole discretion::

- Repair the defective item;
- Replace the defective item; or
- Provide a credit covering the defective portion of the Product.

This remedy is the customer's sole and exclusive remedy under this Limited Warranty. Airfloat is not responsible for removal, reinstallation, downtime, lost production, or any customer-incurred subcontractor costs.

12. Warranty Disclaimer

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ALL OF WHICH ARE EXPRESSLY DISCLAIMED.

13. Limitation of Liability

IN NO EVENT SHALL Airfloat BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, OR CONTINGENT DAMAGES, WHETHER OR NOT Airfloat HAS BEEN ADVISED OF THEIR POSSIBILITY. Airfloat's total liability shall not exceed the purchase price of the Product giving rise to the claim.

14. Entire Agreement

This Limited Warranty constitutes the complete, final, and exclusive statement of Airfloat's warranty obligations and supersedes all prior or contemporaneous representations, agreements, or understandings relating to warranty coverage.



Trouble Shooting - Cont.

Problem: Load rocks during operation

Q: Why is the load rocking back and forth?

A: Rocking is almost always a sign that the individual flow controls are too restricted, causing uneven or cycling pressure across the casters. Open the individual flow controls and reduce the inlet supply pressure to bring the system into balance.

Problem: Load hops or bounces

Q: Why is the load hopping off the floor?

A: Hopping occurs when excess air is being supplied to the system. Verify by reducing the inlet pressure, trying a lighter load, or testing at a different floor location to rule out surface irregularities.

Air Skid Model	Replacement Air Caster No.
AF01012-1	H-0012
AF01017-1	H-0017
AF01020-1	H-0020
AF01024-1	H-0024
AF01030-1	H-0030
AF01036-1	H-0036
AF01048-1	H-0048

To reorder a part, please call 1-800-888-0018 and ask for the Parts Department. If possible, please have your Airfloat serial number handy for reference.

AIR SKIDS-SINGLE SKID



MODEL NO.	CAPACITY (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	AVG FLOW (CFM)	PRESSURE REQ'D (PSI)	SUPPLY LINE SIZE (IN)	MOUNTING HOLE (NPT)	MIN LIFT (IN)
AF01012A-1	3,000	13.25	13.25	3	11	80	1/2"	3/8"-16	1/4"
AF01017A-1	6,250	18.5	18.25	3	16	80	3/4"	3/8"-16	3/8"
AF01020A-1	8,250	21.5	21.25	3	18	80	3/4"	3/8"-16	3/8"
AF01024-1	12,500	25.75	25.25	3.5	22	80	3/4"	3/8"-16	3/8"
AF01030-1	21,250	31.75	31.5	3.5	28	80	1"	1/2"-13	3/8"
AF01036-1	31,250	37.75	37.5	4	35	80	1"	1/2"-13	1/2"
AF01048-1	52,500	50	49.5	5	47	80	1"	1/2"-13	1/2"

AIR SKIDS-4 KIT



MODEL NO.	CAPACITY (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	AVG FLOW (CFM)	PRESSURE REQ'D (PSI)	SUPPLY LINE SIZE (IN)	MOUNTING HOLE (NPT)	MIN LIFT (IN)
AF01012-4	12,000	13.25	13.25	3	44	80	1/2"	3/8"-16	1/4"
AF01017-4	25,000	18.5	18.25	3	64	80	3/4"	3/8"-16	3/8"
AF01020-4	33,000	21.5	21.25	3	72	80	3/4"	3/8"-16	3/8"
AF01024-4	50,000	25.75	25.25	3.5	88	80	3/4"	3/8"-16	3/8"
AF01030-4	85,000	31.75	31.5	3.5	112	80	1"	1/2"-13	3/8"
AF01036-4	125,000	37.75	37.5	4	140	80	1"	1/2"-13	1/2"
AF01048-4	210,000	50	49.5	5	188	80	1"	1/2"-13	1/2"

AIR SKIDS-6 KIT



MODEL NO.	CAPACITY (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	AVG FLOW (CFM)	PRESSURE REQ'D (PSI)	SUPPLY LINE SIZE (IN)	MOUNTING HOLE (NPT)	MIN LIFT (IN)
AF01012-6	18,000	13.25	13.25	3	66	80	3/4"	3/8"-16	1/4"
AF01017-6	37,500	18.5	18.25	3	96	80	3/4"	3/8"-16	3/8"
AF01020-6	49,500	21.5	21.25	3	108	80	1"	3/8"-16	3/8"
AF01024-6	75,000	25.75	25.25	3.5	132	80	1"	3/8"-16	3/8"
AF01030-6	127,500	31.75	31.5	3.5	168	80	1"	1/2"-13	3/8"
AF01036-6	187,500	37.75	37.5	4	210	80	1"	1/2"-13	1/2"
AF01048-6	315,000	50	49.5	5	282	80	1-1/4"	1/2"-13	1/2"