

Air Skates



Since its acquisition of Hovair Systems, Movetech UK has continued in-house design and manufacture of standard and bespoke air film movement solutions. Hovair air film skates are robust, low profile, high capacity load-moving modules used in sets of four or more to enable large or heavy objects to be moved with ease. Suitable for use in virtually any industry, they have no moving parts and are consequently very low maintenance.

Compressed air and a smooth operating surface are all that is required to enable air skates to virtually eliminate friction. Unlike wheels, air skates provide omni-directional capabilities, meaning that a load can be moved in any direction without the need for complex turning manoeuvres.

Available in a variety of sizes and capacities, a set of four air skates can carry anything from 2 to 60 tonnes working at a floor pressure of 1kg/cm², and up to 240 tonnes working at higher floor pressures. Multiples of air skates can move thousands of tonnes.

The air skates are connected with a hose manifold and supplied with compressed air. With the air turned on, the flow to each air skate is regulated to accommodate the load and floor conditions, allowing the load to be lifted clear of the floor. A thin film of air can then escape from the periphery of a moulded diaphragm, creating a very small gap between it and the floor. This virtually eliminates friction, enabling the load to be moved with relatively little effort; a force of less than 5 kg can accelerate a 1000 kg load on air skates.



Finished machine beds are moved through a factory on Hovair AL22 air skates

Features and Benefits:

- Working load capacities of up to 100 tonnes and higher
- Choice of skate modules – steel or aluminium
- Move loads into restricted access areas where forklifts or cranes cannot reach
- Easy to set up with quick release couplings
- Powered by a regular workshop air supply of 5 to 7 bar
- Easy to use and cost effective
- Low floor pressures
- Modular capability giving ultimate versatility
- Accurate and repeatable positioning with omni-directional capability
- Low profile skate modules for ease of location underneath loads

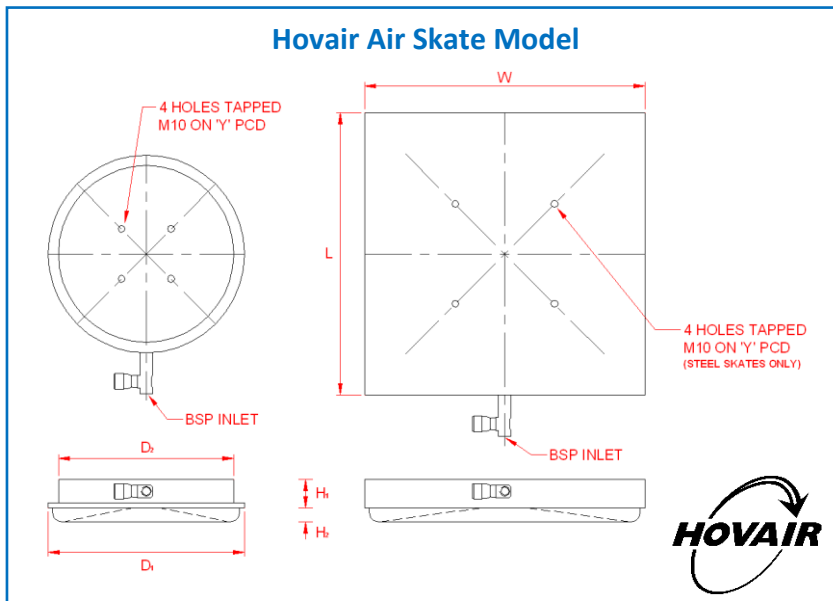


AS34 Steel Skate



Hovair Air Skate Specifications

MODEL		LOAD RATING PER SKATE		RISE HEIGHT	DIMENSIONS STEEL SKATES							DIMENSIONS ALUMINIUM SKATES			
STEEL	ALUM	NORMAL PRESSURE	HIGH PRESSURE	H2 (mm)	D1 (mm)	D2 (mm)	L (mm)	W (mm)	Y (mm)	H1 (mm)	WT (kg)	L (mm)	W (mm)	H1 (mm)	WT (kg)
AS12	AL12	500	1,000	8 – 14	306	272			153	62	9	320	320	51	5
AS16	AL16	1,000	2,000	10 – 16	406	372			153	63	15	425	425	51	8
AS18	AL18	1,250	2,500	12 – 18	457	422			153	63	18	460	460	51	10
AS22	AL22	2,000	4,000	12 – 20	560	527			153	67	29	610	629	51	14
AS28	AL28	3,000	6,000	12 – 20			800	800	600	95	92	762	768	57	25
AS34	AL34	5,000	10,000	11 – 19			960	960	800	100	140	914	914	57	34
AS40	AL40	7,000	14,000	11 – 21			1120	1120	800	100	177	1067	1067	57	39
AS44	AL44	9,000	18,000	15 – 27			1280	1280	800	100	230	1168	1168	57	51
AS4468	AL4468	15,000	30,000	12 - 27			1880	1280	800	100	390	1778	1232	57	82



Top: Air Skate Dimension Table

Left: Air Skate Dimensional Sketch

Bottom Left: Four AS22 skates are mounted onto a common plate to move 4,000kg ball valves

Bottom Right: 5,000kg Carding machines are moved through an assembly flow line on Hovair AS18 air skates

