

## Air Film Transporters



Since its acquisition of Hovair Systems, Movetech UK has continued in-house design and manufacture of standard and bespoke air film movement solutions. Movetech UK air film transporters are the ultimate solution for moving heavy loads. They are versatile enough to be used as basic materials handling equipment - moving loads from A to B or in production flow lines where build stages are required. Hovair transporters provide innovative and cost-effective solutions for manufacturing environments. Applications include:

- The safe handling of nuclear material
- The production of large aero-engines and wings
- Moving electrical transformers
- Refurbishing railway locomotives
- Transporting steel or paper coils



Hovair transporters allow loads to be moved in any direction, at any angle and can rotate on the spot like a turntable. They are ideal for hazardous environments as they are air powered and do not require an electrical supply. The air bearings are also an ideal alternative to wheels in clean environments, such as those required in a laboratory.

Hovair transporters float heavy loads on a film of air. Options range from lightweight aluminium transporters with handlebars, to more sophisticated units using multi-circuit pneumatic systems and low air consumption/high torque drive units.

Typical loads range between 1 and 100 tonnes, however any size and weight of load can be accommodated. Maintenance is minimal and Hovair air bearings have a normal working life of many years.

Typically, the transporter is a structural steel low profile platform fitted with Hovair air bearings and is designed to suit customer requirements.



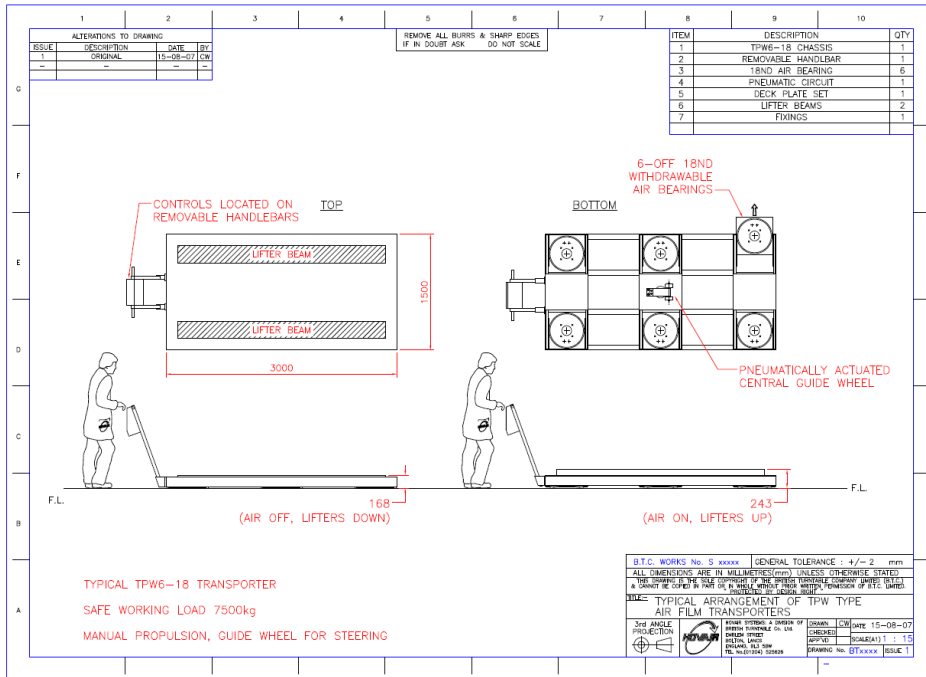
*A single operator moves an Aero Engine on an air film transporter*



*25,000kg fibre optic cable reels are accurately positioned on air*



## Typical Air Film Transporter Layout



Four or more air bearings are fitted to the underside of the transporter, the number, size and arrangement being dependent on the load. Using compressed air, the abrasion resistant urethane diaphragm inflates to lift the transporter clear of the floor; air escapes from the perimeter of the air bearing, creating a thin film of air to virtually eliminate friction.

Supplied with compressed air from a standard factory air main (6bar/90psi) the transporter can be moved in any direction with very little effort. Typically, 50 kg of horizontal force can move a 10,000 kg load.

In order to operate successfully, the transporter must have a paper-smooth floor to work on, free of steps and cracks. Typically, a smooth power-trowelled concrete floor or an epoxy resin screed is an ideal surface, allowing the transporter to move freely in any direction with minimum effort. Further information on floor specification is available on the Movetech UK data sheet 'Air Film Technology'.

Air film transporters offer the following features and options:

- Bespoke design to customer requirements
- Omni-directional movement including rotary
- Air-powered integral or external drives
- Guide wheels
- Pneumatic stillage pick-up systems
- Remote or hard-mounted controls