

Pneumatic Air Caster Load Moving System

Air casters are pneumatic devices used for moving heavy loads with ease. They create a thin layer of air, reducing friction and allowing for smooth movement of equipment.



System Overview

Industrial Load Moving Solution

The Pneumatic Air Caster Load Moving System is designed for the efficient transport of heavy mechanical devices and precision instruments. By utilizing a thin film of compressed air, the system virtually eliminates friction between the load and the floor. This frictionless interface allows operators to move heavy-duty equipment with significantly less force, often requiring only one-tenth the effort compared to traditional wheel-based systems.

Operating Principle

Pneumatic Lifting, Air Bearing Technology, Frictionless Movement, Thin-Film Support

Performance Metrics

Force Reduction

10 x less effort

Required Force Ratio

Key Applications

Industry Applications

- Precision instrument transport
- Large printing equipment movement
- Heavy industrial machinery
- Modular component positioning

Equipment Components

Included Components

- Multiple air bearings
- Central control unit
- Regulating valves and gauges
- High-pressure air hoses