

# Pneumatic Air Casters

Pneumatic air casters use a thin film of air to float heavy loads, enabling near-frictionless movement across smooth surfaces. These casters are ideal for applications where floor protection, low vibration, and omnidirectional movement are critical.



## ADDITIONAL IMAGES



## Product Overview

### Precision Heavy-Load Handling

Pneumatic air casters, also known as air bearings or air skates, are advanced lifting devices designed to move heavy loads with minimal effort. By utilizing a thin film of compressed air to create a cushion between the load and the floor, these systems enable frictionless, omnidirectional movement. This technology is ideal for industrial environments where precise positioning, floor protection, and vibration reduction are critical requirements.

## Technical Features

### Key Benefits

- Floor protection (no marking)
- Low floor pressure
- Millimeter-level positioning precision
- Reduced vibration
- Increased productivity

|                              |  |
|------------------------------|--|
| <b>Operating Principle</b>   | Compressed air inflation of flexible, donut-shaped diaphragms to create an air cushion |
| <b>Movement Capabilities</b> | Omnidirectional, Frictionless, Precise positioning                                     |

## System Components

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| Component            | Function                                 |
|----------------------|--|
| Air Casters (Skates) | Lifting and floating the load            |
| Air Control Console  | Regulating air pressure and distribution |
| Hoses                | Connecting console to skates             |

### Common Environments

Manufacturing Plants • Cleanrooms • Heavy Machinery Handling