



# The Ultimate Guide to Material Handling Lifting Solutions



**75** Autoquip  
75th Anniversary



# Table of Contents

- 3** What is Material Handling?
- 4** Why You Need a Material Handling Lifting Solution
- 5** Lift Solution Categories
- 7** Custom Design Options for any Application & Industry
- 9** Frequently Asked Questions
- 11** Working with Autoquip



## What Is Material Handling?

Material handling is the efficient storage, movement, control, and protection of goods, products, or materials. This standard process is used across industries to support manufacturing, distribution, warehousing, assembly, logistics, and automation.

### **Material handling systems are needed in every industry**

- Aerospace
- Automotive
- Chemicals
- Construction
- Retail & eCommerce
- Food & Beverage
- Healthcare
- Manufacturing
- Materials Processing
- Oil & Gas
- Pharmaceutical
- Warehousing & Distribution
- Wood Production

At Autoquip, we understand industry-specific challenges better than anyone. From aerospace to retail, we are uniquely qualified to understand all of your challenges.

# Why You Need a Material Handling Lifting Solution

There is an increasing demand by manufacturing companies to provide their personnel with easier and safer methods to lift or relocate heavy materials, access hard-to-reach work areas, and protect employees from lifting injuries. We've seen numerous examples where the right lift system makes the difference between a successful and unsuccessful project.

## When you find the right material handling lift, you will

1. Reduce Operation Costs
2. Increase Production
3. Improve Efficiencies
4. Utilize More Vertical Space
5. Decrease Inventory Damage
6. Enhance Safety for Workers
7. Expedite Shipping & Delivery Times

## AUTOQUIP SOLVED

The Autoquip design library and engineering capabilities allow us to customize and meet your application challenges. No matter your challenge, we'll build the perfect lift you need.



## Custom Lift Solutions

There's a range of lifting equipment available, but the best fit depends on your application's unique demands. Whether you're starting with a standard lift and modifying it to meet your needs, or you require a solution built from scratch, Autoquip has a team of highly skilled engineers and technical experts to meet your challenge.

### Learn about the available lift solutions that can be used to lift you further.

- **Scissor Lift Tables:** Scissor Lifts are named for their lifting mechanism – heavy steel leg sets that work in a scissor-like manner to raise and lower the platform. These lifts are ideal for completing tasks at high elevations. Scissor lifts provide the most stable, dependable, and versatile method of lifting heavy loads. Because of their simplicity & few moving parts, maintenance-free bushings, and wide acceptance by customers - scissor tables provide many years of trouble-free operation for a relatively small capital investment.
- **Turn/Tilt Tables & Upenders:** Turn Tables provide a reliable and versatile method for rotating extremely heavy loads up to 360 degrees in one or multiple directions. Tilters, upenders, and turn tables are used for repositioning heavy equipment, containers, coil spools, parts, and more.
- **Vertical Reciprocating Conveyor (VRC):** Also known as Freight Lifts, VRC lifts are a safe and economical way to transfer high-capacity freight vertically between mezzanine levels, all within a small footprint.

## The Ultimate Guide to Material Handling Lifting Solutions

- **Work Platform Lifts:** Work Platform Lifts are high-travel industrial scissor lifts with large walking surfaces that allow workers to reach their work, whether they're order-picking, or assembling or repairing an aircraft. The operator is positioned with their tools and carts at the appropriate height, allowing them to complete the task with efficiency and effectiveness.
- **Bascule Bridges:** Bascule Bridges are hydraulically-operated drawbridges that temporarily span a traffic way, such as a railway spur, alleyway, or dock-to-truck loading platform.
- **Dock Lifts:** A dock lift is a stationary or portable scissor lift used in a dock to transfer loads from a fixed elevation to a vehicle. Most dock lifts are permanently installed in concrete pits, but some scissor-style lifts are portable. These lifts can be modified or customized to include conveyors, deck locks, accordion skirting, anti-skid platforms, and more.
- **Aperture Work Platform:** Autoquip is the leader in building custom work platforms with shuttles, extensions, sliders, and drawers, and with this vast experience, we launch a new design of what we call the "Aperture" design, which allows the platform to close 360 degrees around the product. A gear motor and 6 linear actuators drive the Aperture that will "open/shut" steel skin wedges around the cylindrical engine (from fully open at 66" diameter, down to 2" diameter when fully closed) to allow safe, "walk-on" access.





## Custom Design Options for Any Application & Industry

Standard lifts are great for straightforward projects, but many complex operations require more flexibility on the factory floor. At Autoquip, we offer a wide range of custom design options to go beyond the common limitations of standard lifts. From designing to application, we'll provide you with the right equipment to maximize efficiency and performance.

### Custom design options

- **Controls:** Our control stations are customized to streamline operations by performing and automating both simple and complex tasks.
- **Safety:** Add safeguards, such as Velocity Fuses, Travel Limit Switches, Safety Mats, and Bevel Toe-Guards to protect employees and products.
- **Mobility:** Wheels, casters, tires, and more increase mobility.
- **Platform Configuration:** For specialized tooling needs, get a custom-designed platform that shares the functional integrity of a standard model.
- **Platform Shuttle:** Extend your platform lift with multiple enders, sliders, or sides to meet your project's needs.
- **Tilt:** Incorporate a tilting system for specialized loads, products, and applications.
- **Turn & Rotate:** Available in either manual or powered modes, customized turntables increase the movement capabilities of your lift.

## The Ultimate Guide to Material Handling Lifting Solutions

- **Conveyors:** Make moving loads more efficient and effective with the implementation of a manual or powered conveyor.
- **High Travel & High Capacity:** High Travel lifts are specifically engineered to carry out tasks in high-reaching areas.
- **Automation:** Incorporate custom programming and automation of lifting equipment for improved productivity and workflow.
- **Actuation:** Apply Hydraulic, Mechanical, or Pneumatic Actuation to meet the needs of your environment and application.
- **Locking Pins & Devices:** Minimize lift deflection using locking pins or landing legs on your lifting system for best results.
- **Speed:** Alternate operation speeds with modifications to your lifts.
- **Materials, Surface, & Coatings:** Fabricate your lift with slip-resistance work surfaces, flow, and filtration or fluids, stainless steel, hot dipped galvanized, & more.
- **Power Units:** Although many standard lifts come with their own power unit, custom lifts may require a custom unit, which may be high speed, high capacity loads, multiple functions, and high cycle for your specific power units.
- **Gates, Enclosures & Guard Rails:** Increase the safety measures throughout the surrounding facility layout by adding Swing Gates, Sliding Gates, Vertical Acting Gates, VRC Enclosures, or Guard Rails.
- **Load Weighing & Measuring:** Monitor and weigh loads with load cells and industrial scales.

### AUTOQUIP SOLVED

When your project's requirements exceed typical demands, Autoquip is ready to help. While we have plenty of standard designs, our passion and what we have spent decades perfecting is our custom lift applications. We'll work alongside your team to create custom design options that will enhance your lift's functionality without sacrificing simplicity.



“We contacted Autoquip because we needed a lift system that was designed to our specification requirements. As a leading original equipment manufacturer of paint finishing equipment for industrial clients, we understood firsthand that a “one-size” does not fit all. We knew that Autoquip could build a lift made to fit our exact needs, and they did! The lift was easy to install, works great, and was built to last. Thanks again for a great product.”

- Mike Herman, Therma-Tron-X

## Frequently Asked Questions

### 1. What type of lifts are recommended for material handling use?

Depending on your industry and application, Autoquip can supply a wide range of lifts, including scissor lifts, work platform lifts, freight lifts, turntables, and tilters from our extensive design library. These lifts can be custom designed to handle assembly, precision positioning, high travel, pallet handling, high capacity, or other applications.

### 2. Do you design custom material handling solutions for my industry?

Yes. Autoquip has deep-domain expertise across a variety of industries. We appreciate that each business brings a unique set of challenges and specifications to the table. Designing custom solutions is where we excel!

### 3. Can Autoquip solutions be integrated with my existing automated equipment?

Yes. Our custom solutions can be configured to work with new or legacy systems. Our teams are well-versed in integration, programming, testing, and implementation, including conveyors and machine-fed applications.



#### **4. Can you incorporate load cells to create a weighing system?**

Yes. We can accommodate load cells for pallet loading, aerospace, logistics, oil & gas, or any industry or application where weight or measurement concerns. Load cells can be installed under a scissor lift platform, VRC carriage, or drive chains to create an industrial scale to monitor load capacity during the material handling process.

#### **5. Can Autoquip lifts be added to my smart factory?**

Yes. The Autoquip team can integrate our lifts into your existing smart factory environment. We offer innovative automation and technical solutions, including sensors, controls, communication platforms, and cloud-based software. Our controls division can work with you to establish connectivity to your system.

#### **6. What is AQ Connect, and how does it support material handling?**

AQ Connect is our intelligent control panel system. This programmable design option helps you streamline and monitor your material handling operations. The system provides safety alerts, remote monitoring, self-diagnostics, and onboard communication. AQ connect is a standard feature on our VRCs and can be added to our other lift products.

## Working with Autoquip

Material handling is at the core of manufacturing, and we understand the complexities. Autoquip has been delivering material handling solutions around the globe for over 75 years! Our customers succeed because we're committed to innovation, productivity, quality, and support. Let our team design a strategic lift plan that elevates your business.

**CONTACT US TODAY FOR A FREE QUOTE!**

**1058 W Industrial Rd.  
Guthrie, OK 73044**

**(888) 811-9876**

**[autoquip.com](https://www.autoquip.com)**