

Textile Material Handling Equipment Buyer's Guide

What to Know Before Choosing Material Handling Equipment

Material handling equipment plays a simple but important role in manufacturing: keeping materials **stored, organized, accessible, and moving through production**.

For textile and apparel manufacturers, that may include fabric rolls, garments, cut components, work-in-process, production supplies, or finished goods.

The right solution depends on what you're handling, how much it weighs, how often it moves, and where it needs to go.

This guide covers the main things to consider before choosing material handling equipment.

1. Start With What You're Handling

The material itself should be the starting point.

Consider:

Material type

Fabric rolls, garments, boxes, components, work-in-process, or finished goods.

Dimensions

Length, width, diameter, and overall size.

Weight

Both individual material weight and total loaded weight.

Quantity

How much material needs to be handled at one time.

These basic requirements quickly determine what types of equipment are realistic.

2. Storage, Staging, or Movement?

Determine what job the equipment actually needs to perform.

Storage

Material remains organized until it is needed for production.

Staging

Material is positioned near a production process waiting for the next operation.

Movement

Material needs to travel between departments or production processes.

A fixed storage rack may make sense for inventory, while a rolling rack may be more useful for work-in-process that regularly moves between departments.

Start with the job the equipment needs to perform rather than the equipment itself.

3. Follow the Material Through Production

Look at how material currently moves through your facility.

A textile operation might follow a path such as:

Receiving → Storage → Inspection → Cutting → Production → Finishing → Shipping

Look for areas where:

- Material piles up.
- Employees repeatedly move the same material.
- Production waits for material.
- Inventory is difficult to access.
- Work-in-process takes up valuable floor space.

Those areas often reveal the actual material handling problem.

4. Fixed or Mobile?

If material stays in one place for extended periods, fixed storage may be appropriate.

If it regularly moves between production areas, mobile equipment may reduce unnecessary loading, unloading, and handling.

For mobile equipment, consider the **fully loaded weight**, floor conditions, wheels, bearings, and how easily an operator can maneuver it.

A rack that moves easily when empty may perform very differently when fully loaded.

5. Consider How Material Will Be Accessed

Storage capacity isn't useful if employees can't easily retrieve what they need.

This is especially important with fabric rolls.

Consider:

How frequently is material accessed?

Does every roll or item need to remain individually accessible?

How will employees load and remove material?

How will materials be identified?

A high-density system may save floor space, but it shouldn't make everyday material retrieval unnecessarily difficult.

6. When Does a Fabric Roll Carousel Make Sense?

Fabric roll carousels can provide organized storage while allowing operators to bring individual rolls to an accessible position.

They may be worth considering when an operation has:

A large number of fabric rolls

Limited floor space

Frequent roll changes

A need for organized access to individual rolls

For smaller inventories or materials that are rarely accessed, a conventional storage rack may be the simpler solution.

The goal isn't to use the most sophisticated storage system. It's to use the one that fits the operation.

7. Think About Work-in-Process

Material handling doesn't stop after raw material leaves storage.

Components and partially completed products often need somewhere to go between production steps.

If material regularly accumulates between departments, dedicated staging or mobile racks can help keep work-in-process organized and ready for the next operation.

This is particularly important when one process operates faster than the next.

8. Consider Floor Space

Don't look only at the footprint of the equipment.

Look at how much space the **current material handling process** consumes.

Poorly organized rolls, carts, racks, and work-in-process can occupy production areas and aisles.

A properly designed storage or staging system may actually free production space even if the equipment itself has a substantial footprint.

9. Standard or Custom Equipment?

Many applications can be handled with standard equipment.

Others may involve:

Unusually wide or heavy material

Limited available space

Special mobility requirements

Unique production layouts

Unusual storage or staging requirements

In those situations, Custom Sizes or an application-specific design may make more sense than forcing the operation around standard equipment.

10. Consider Future Capacity

Size the system for normal production and reasonable growth.

Consider current inventory, peak inventory, expected production increases, and potential new products.

You don't need to design around every possible future scenario, but a system that's already full when installed doesn't leave much room for growth.

Questions to Answer Before Requesting a Quote

Before contacting a material handling equipment manufacturer, try to answer:

What are you storing or moving?

What are the material dimensions and weight?

How much material needs to be handled?

Is the equipment for storage, staging, movement, or a combination?

How frequently is the material accessed?

Does the equipment need to be mobile?

How much floor space is available?

Where does the material come from and where does it go next?

What isn't working about the current process?

Photos and basic measurements of the existing production area can also be helpful when evaluating an application.

Common Mistakes When Choosing Material Handling Equipment

Don't choose equipment based only on how much it can hold.

Consider **accessibility, loaded weight, mobility, available floor space, and how the equipment fits into production.**

Most importantly, identify the actual problem before choosing the solution.

If employees are constantly moving material out of the way, more storage capacity may not solve the problem. If production can't easily access inventory, fitting more material into the same space may actually make things worse.

Choosing the Right Material Handling Equipment

Start with the material, then follow it through the facility.

Understand **what you're handling, where it needs to go, and what's inefficient about the current process.** From there, you can determine whether a storage rack, rolling rack, fabric roll carousel, or custom solution makes sense.

At **Advanced Innovative Technologies**, we manufacture textile material handling equipment at our Ball Ground, Georgia facility, including **fabric roll carousels, steel storage racks, and custom material handling solutions.**

If you're dealing with a material storage, staging, or movement problem, show us what you're handling and how it currently moves through your operation.

We'll help you determine what makes sense for the application.

AIT Buyer Guide

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