

COMPARISON GUIDE

Do you know which is the best shipping container for your application?

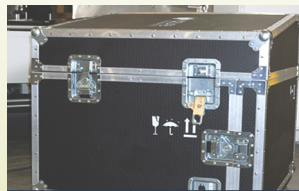
When shipping or storing valuable and sensitive high-tech equipment, how do you know whether you need a corrugated box, crate, ATA case, or molded shipping case? This guide can help you understand some of the differences between each type of product and focus on finding the right solution for your problem.



Corrugated Box



Wooden Crate







ATA Case



Molded Case

Corrugated Box vs. Crate vs. ATA Case vs. Molded Shipping Case

Container	Corrugated Box	Wooden Crate	ATA Case	Molded Case
Durability/Protection	•	•••	••••	••••
Weight Capacity	Up to 125 lbs.	125 lbs. – Unlimited	50 lbs. – 400+ lbs.	10 lbs. – 250 lbs.
No. of Trips	1	10	100	100
Up Front Cost	\$	\$\$-\$\$\$	\$\$\$\$	\$\$\$\$
Cost per Trip	(Flat) 	(Declines over time) 	(Declines over time) 	(Declines over time) 
Material Handling				
Ease of Use	Easy	Somewhat Difficult	Easy	Easy
Ease of Transport	Very Easy	Somewhat Difficult	Somewhat Difficult	Easy

Packaging Questions to Consider


- Protection/Safety – How sensitive or delicate is your equipment?
- Size/Weight/Uniqueness – How big is your item? How much does it weigh? Any odd-shaped components?
- Fragility – How sensitive is it to shock and vibration?
- Material Handling – Will it be carried or moved by a person? Does it require any special tools to use, load and unload?
- Ease of Use – Who will be loading/unloading your delivery? Will they have the right tools available to open it? How maneuverable should it be?
- Aesthetics – Is premium look or branding important to you? Does packaging need to make a strong impression or just get there and work?
- Reusability – How many trips does it need to make? Do you plan to reuse it? How many trips?
- Cost-Per-Package or Cost-Per-Trip – Do you want closed-loop logistics, or a one-way disposable solution?

 **Packaging Tip**

Once you've determined which packaging traits are most important to you, consult with your packaging provider to decide on a solution that works best for you.



Corrugated Box

Container	Corrugated Box
Durability	•
Weight Capacity	Up to 125 lbs.
No. of Trips	1
Up Front Cost	\$
Cost per Trip	(Flat) 
Material Handling	
Ease of Use	Easy
Ease of Transport	Very Easy

About this shipping container

- Most popular single-use packaging
- Made from corrugated fiberboard or plastic
- Can also include foam-cushioned interiors
- Different types of foam can be used

As the most popular type of packaging, a corrugated box is a hassle-free solution. No special tools are required to open it and using it is relatively straight-forward. Boxes are also easy to dispose of and can be recycled. It's easy to obtain bulk corrugated packaging while keeping inventory low since repeated [orders can be rapidly fulfilled on-demand.](#)

Corrugated is lightweight and versatile—it can be combined with other substrates to optimize for cost, weight, and performance. Because it is less expensive, it also offers the best protection-to-cost ratio of any outer packaging. However, it is limited in the amount of protection it provides.

Corrugated boxes are typically used for 1x shipments and for products that only need a minimal amount of protection in transit. For added support, a corrugated box [can be used as a cap on a pallet base](#), which reinforces stability while keeping costs low. Boxes can be custom designed for almost any application, and waterproof plastic corrugated is a great solution for medium-term storage in challenging environments (such as clean rooms, near water, etc.) or where multiple use is desired.



Comparative Drawbacks

Compared to other types of packaging, each shipping container has its own drawbacks. For corrugated packaging the following are true:

- Very limited amount of protection
- Lowest weight capacity of the packaging options
- Not designed to be reused for multiple trips*

*Plastic corrugated may last a few trips, but is generally designed for one use.



Wooden Crate

Container	Wooden Crate
Durability	• • •
Weight Capacity	125 lbs. – Unlimited
No. of Trips	10
Up Front Cost	\$\$-\$\$\$\$
Cost per Trip	(Declines over time)
Material Handling	
Ease of Use	Somewhat Difficult
Ease of Transport	Somewhat Difficult

About this shipping container

- Scientifically engineered wooden packaging
- More than just a plywood box
- Built to withstand external forces and shock
- Engineered and tested for precise standards

Wooden crates are highly customizable and sturdier than corrugated boxes. Most designs meet Mil-Spec and ASTM standards for quality and protection. Wooden crates can also be [reused and refurbished](#) to extend their lifetime, which can help make them more cost-effective. Since wooden crates are less expensive than ATA and polymer plastic cases like Pelican and SKB, they are attractive for situations where the number of trips needed to be used is relatively low and the amount of protection needed is high.

Wooden crates can always be constructed to handle more weight which is why there is virtually no weight limit. Thanks to [high engineering and testing standards](#), wooden crates can be built to withstand rough conditions and provide a high degree of protection to contents inside.

Wooden crates are typically used for moving heavy and delicate products and sensitive items that require special handling in transit. Examples include [server racks](#), medical equipment and robotic arms, and other types of awkward, heavy equipment. Large items that need engineered shock protection and support will usually require a wooden crate. Corrugated packaging can also be combined with wooden crates into a hybrid solution for cost-efficiencies where less than full-scale protection is needed. Wooden crates should be designed to last multiple trips with basic refurbishment.



Comparative Drawbacks

Compared to other types of packaging, each shipping container has its own drawbacks. For wooden crates packaging the following are true:

- Heaviest of shipping containers
- Difficult to handle and unload
- May require additional equipment and tools
- May have strict standards for international shipping



ATA Case

Container	ATA Case
Durability	• • • •
Weight Capacity	50 lbs. - 400+ lbs.
No. of Trips	100
Up Front Cost	\$\$\$\$
Cost per Trip	(Declines over time)
Material Handling	
Ease of Use	Easy
Ease of Transport	Somewhat Difficult

About this shipping container

- Fully customizable shipping cases
- Can be assembled using three different materials:
 - Hexagrip
 - High Impact ABS
 - Flight Panel Plastic

ATA cases are easy to use and move around, usually including handles and sometimes casters for moving around on four wheels. Additionally, they can be opened and closed with custom latches and include hinged lids for easy access to contents inside. ATA cases are sturdier than other types of packaging (such as corrugated) and are designed to be used over and over again. They are also very customizable and can be adapted easily for different functions and situations, including acting as a permanent outer “shell” for technology that never leaves the case (monitors, rack units, etc.). They are also very customizable and can be adapted easily for different functions and situations. ATA cases can be designed and manufactured to accommodate irregular sized objects and complex subassemblies that might require a drawer or additional storage inside the case. In addition, ATA cases are great for long-term storage, and with minor modifications, they can reduce or eliminate the need for material handling equipment.

Products that can be compactly stored and need durable protection often have need for an ATA case, particularly if transported frequently. Production and event companies typically use ATA cases to carry lights, electronics, and musical equipment that will be used on the road. When ease of use and transportation is a high priority for electronics and other types of gear that needs rigid protection, an ATA case will usually get the job done. Also, for events like tradeshow where a premium packaging look and aesthetic appeal are important for presentation, custom ATA cases can be ideal.



Comparative Drawbacks

Compared to other types of packaging, each shipping container has its own drawbacks. For ATA case packaging the following are true:

- More expensive than other containers
- Internal components difficult to repair



Molded Shipping Case

Container	Molded Case
Durability	• • • •
Weight Capacity	10 lbs. – 250 lbs.
No. of Trips	100
Up Front Cost	\$\$\$\$
Cost per Trip	(Declines over time)
Material Handling	
Ease of Use	Easy
Ease of Transport	Easy

About this shipping container

- Durable case molded from strong polymer resin
- Can be injection or roto-molded
- Includes many customization options

A molded shipping case, like Pelican or SKB, is designed to be highly protective and easy to use. It is ideal for items that are not as heavy, but require strong protection and ease of handling and storage. Pelican and SKB cases are resistant to many elements—weatherproof, dustproof, and have a lifetime guarantee. Since they are gasket-sealed, they are designed to keep out unwanted hazards like water and dust. Built to meet or exceed military specifications, these are some of the [toughest cases on earth](#).

Polymer plastic molded cases are designed for use in the field in a number of different industries, such as scientific and medical instruments, aerospace parts and avionics military weaponry and tools, deployment kits, platoon kits, and others. [Custom foam interiors](#) can be designed for internal protection against shock damage, making these cases ideal for equipment like thermal imaging, cameras and communications gear. Custom toolkits, medical supplies and first aid, law enforcement equipment and the like are often housed in Pelican or SKB cases that are lighter weight and provide crush-resistant protection. Systems and instruments can also be integrated into molded cases so they become part of the product themselves, such as rack cases, which turn into mobile units that are easy to transport and deploy.



Comparative Drawbacks

Compared to other types of packaging, each shipping container has its own drawbacks. For pelican case packaging the following are true:

- Limited size and shape options
- Not biodegradable
- Cannot be easily disassembled or rebuilt

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**“When your only tool is a hammer,
everything looks like a nail.”**

Consider this when you are thinking about packaging: are you working with a partner who specializes in more than just one type of packaging? Are they steering you in the right direction for your packaging needs? Larson Packaging Company (LPC) manufactures and customizes a range of solutions including custom corrugated, wooden crates, ATA cases, custom foam, molded shipping cases, and more to get you the optimal solution for your problem. Providing the most reliable packaging solutions to meet your specifications and schedule is a top priority. Our expertise and extensive resources make us capable of handling the most demanding jobs, even on short notice. LPC works with you as a partner, ensuring that the packaging for your product is reliable, cost-effective, and reflects the quality of your brand.

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