

What is the difference between standard transport crates and custom solutions?

When choosing transport packaging, you face an important decision: do you opt for standard transport crates or customised packaging solutions? The difference between these two options goes far beyond price alone. Standard crates offer a uniform solution that may be sufficient in many cases, while customised packaging is designed specifically for your product and logistics chain. The right choice can contribute significantly to lower transport damage, more efficient logistics and a lower Total Cost of Ownership. In this article, we discuss the main differences and help you determine which solution best suits your situation.

What are the main differences between standard and customised transport crates?

Standard transport crates and customised solutions differ fundamentally in how they are designed and what they can be used for. Standard crates are pre-produced packaging in fixed sizes, materials and protection levels. They are readily available, cost-efficient and suitable for general applications. Customised crates, on the other hand, are specifically designed for your product and logistical challenges.

The main difference lies in the **materials and construction**. Standard crates are usually made from commonly used materials such as standard plastic, plywood or cardboard in predetermined thicknesses. Customised crates can be manufactured from specific materials that perfectly match your product, such as aluminium for lightweight applications, special plastics for extreme conditions, or wood with specific treatments for international shipping.

The **level of protection** also differs significantly. Standard crates offer a basic level of protection that may be sufficient for many products. Custom crates are designed with the exact level of protection your product needs. This can include specific shock absorption, watertightness, dustproofing, or protection against electrostatic discharge – all tailored to the vulnerability and value of the product.

Another crucial difference is the **adaptability to product specifications**. Standard boxes have a generic interior, often with foam that you have to adjust yourself. With customised boxes, the interior is designed precisely to support and secure your product perfectly. This provides better protection and makes it easier for your employees or customers to use.

How do customised packaging solutions affect the Total Cost of Ownership?

Customised packaging solutions have a significant impact on the Total Cost of Ownership (TCO), even though the initial investment often seems higher than for standard boxes. The TCO looks beyond the purchase price alone and includes all costs throughout the lifetime of the packaging. This calculation often shows that customisation is more cost-effective in the long term.

The **initial investment** for customisation is indeed higher because it involves engineering and design costs. Time is invested in analysing your product, transport route and usage situations. However, this investment translates into substantial savings in other areas.

One of the biggest savings comes from **reduced product damage**. Customised packaging is tailored precisely to the vulnerable points of your product, significantly reducing transport damage. Especially with

high-value products from, for example, the medical sector or defence, a single damaged item can exceed the cost of many customised crates.

More efficient logistics also contribute to a lower TCO. Customised crates can be optimised for your specific logistics chain. This means more efficient stacking on pallets, better utilisation of freight space, and lower transport costs per unit. If you ship products worldwide, these savings can quickly add up.

Another important aspect is **reusability**. Well-designed custom crates often last longer than standard solutions because they are precisely tailored to their use. In addition, they can be designed with repair and maintenance in mind, further extending their service life. This fits perfectly with circular packaging principles, which focus on reuse, repair and recycling.

When is a standard transport crate sufficient for your products?

Standard transport crates can be an excellent choice in a variety of scenarios. They offer a good balance between cost, availability and protection for products that do not have extreme protection requirements. For many companies, a standard solution is entirely sufficient.

Standard crates are particularly suitable when your **product characteristics** are not particularly fragile. Robust equipment, non-fragile parts or items without sensitive electronics can often be transported safely in standard crates. Even when your products do not require special climate control (such as protection against moisture or extreme temperatures), a standard solution is often sufficient.

The **transport conditions** also play a role. When transporting over short distances, within a single country or region, and with reliable transport partners, the risks are often limited. Standard crates then offer sufficient protection against the normal shocks and vibrations during transport.

From a **cost-efficiency** perspective, standard crates are ideal for lower-value products, where the cost of any damage does not outweigh the investment in customisation. A standard solution can also be more economical for single use or when the packaging is not returned.

Standard crates are also a good choice when **rapid availability** is important. They are available directly from stock, whereas customised crates have a development and production time. If you need to respond quickly or have unexpected transport needs, standard crates offer a practical solution.

How do customised transport solutions reduce the risk of Dead On Arrival?

Dead On Arrival (DOA) – products that arrive damaged at the customer's premises – is a costly problem that goes beyond just material damage. It leads to dissatisfied customers, reputational damage, additional administration and logistical costs for returns and replacements. Customised transport solutions significantly reduce this risk through a personalised approach to protection.

The **shock absorption** in customised crates is precisely tailored to the product. Instead of generic protection, each shock absorber and piece of foam is designed to protect specific components. The engineers analyse the forces that may occur during transport and design the interior accordingly. This absorbs vibrations and shocks more effectively than standard solutions.

Climate control also plays a crucial role in reducing DOA. Some products are sensitive to moisture, temperature fluctuations or static electricity. Customised boxes can be equipped with specific materials and seals that offer protection against these influences. For medical equipment or sensitive electronics, for example, this can make the difference between perfect operation and total failure.

Another important aspect is **product-specific fixation**. In customised cases, the product is supported and fixed at exactly the right points. This prevents movement within the packaging, which is one of the main causes of transport damage. Vulnerable components receive extra support, while sturdier parts are used to reinforce structural integrity.

Customised crates also offer the possibility of **modular construction**, whereby different parts of a product each receive their own specific protection. This is particularly valuable for complex systems such as medical equipment, measuring instruments or defence equipment, where different components have different protection requirements.

Which industries benefit most from customised transport crates?

Due to the nature of their products and operational requirements, certain industries benefit significantly more from customised transport solutions than others. These sectors are often characterised by high-quality products, strict regulations or extreme conditions of use.

The **medical sector** is one of the most important users of customised transport cases. Medical equipment often combines extreme precision with fragile components and high value.

In addition, there are strict regulations governing the transport of medical devices. Customised cases guarantee that this sensitive equipment arrives without damage or misalignment, which is crucial for patient safety and reliable operation.

The **defence industry** also has specific transport requirements that are perfectly suited to customised solutions. Military equipment often has to function in extreme conditions and is deployed worldwide. Transport cases must comply with strict military specifications (MIL-STAN) and must be able to withstand rough handling in the field. From sensitive communication equipment to drone parts, customised cases offer the robustness and reliability that defence applications require.

The **high-tech sector** also benefits greatly from customised transport solutions. Components for semiconductors, measuring equipment or R&D prototypes often represent huge investments in a compact format. These items can be extremely sensitive to vibration, electrostatic discharge or contamination. Customised cases with clean-room compatible materials and anti-static properties protect these valuable items during transport and storage.

Emergency services and security organisations also benefit from customised transport solutions. Their equipment must always work reliably, often in critical situations. From firefighting equipment to police gear, these items must be quickly accessible and function perfectly when needed. Customised cases combine robust protection with practical functionality, such as quick access and clear organisation of contents.

Finally, **companies with circular ambitions** benefit greatly from customised transport solutions. These can be designed with long-term reuse, easy repair and eventual recycling in mind. By investing in sustainable, reusable customised boxes, these companies reduce their environmental impact and achieve cost savings in the long term.

Conclusion: Finding the right balance between standard and customised

The choice between standard transport crates and customised packaging solutions is not black and white. For some products and situations, standard crates offer a perfect, cost-efficient solution. For other applications, especially in sectors with high-value or fragile products, customised crates offer indispensable advantages that more than recoup the initial investment.

The key lies in properly analysing your specific situation: the value and fragility of your product, the complexity of your logistics chain, the frequency of transport, and, of course, your budget. Often, a mixed approach is most efficient, using customisation for your most critical products and standard solutions for less risky items.

At Faes, we help customers from various sectors on a daily basis to find the optimal balance between standard and customised packaging solutions. Thanks to our expertise in industrial packaging and logistics solutions, we can advise you on the best approach for your specific situation, so that your products always arrive at their destination safely and in perfect condition.

Frequently Asked Questions

How do I determine whether my product requires customised transport packaging?

Evaluate the value, fragility and complexity of your product. Customisation is recommended if your product is expensive, has specific fragile points, is sensitive to environmental factors (moisture, temperature, shocks) or has irregular shapes. Also analyse your transport route – for international transport, frequent transshipment or rough transport conditions, customised packaging offers significantly more protection than standard solutions.

What are the most common mistakes when choosing transport packaging?

The biggest mistakes are: only looking at the initial purchase price without calculating the Total Cost of Ownership, underestimating transport risks, insufficient protection against specific environmental factors (such as moisture or temperature), and not testing packaging under realistic transport conditions. Return logistics are also often overlooked – how the packaging is returned and can be reused is crucial for sustainability and cost efficiency.

How can I maximise the lifespan of my transport crates?

Invest in high-quality materials that suit your application. Opt for modular designs where parts can be replaced individually. Implement a clear management system with regular inspection and maintenance. Train your staff in correct use and handling. Consider RFID tracking to prevent loss. For customised crates, we can incorporate specific wear elements that are easily replaceable, extending the life of the main structure.