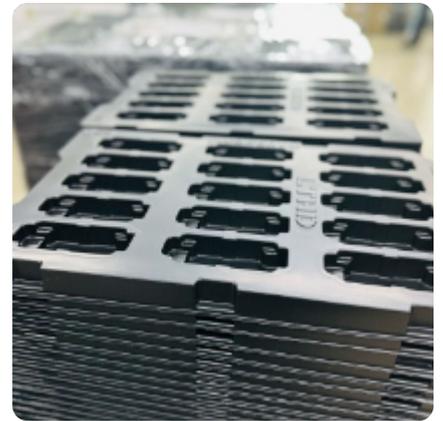
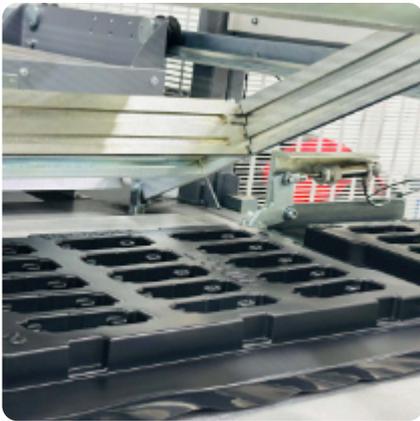


SMARTFRM PLASTIC Converting™ Solutions



SMARTFORM PLASTIC Converting™ Solutions

Our company specializes in providing high-quality thermoforming trays tailored to meet the specific requirements of the automotive, electrical and medical sectors. We understand the unique challenges faced by these industries and offer customized solutions that optimize productivity while ensuring utmost quality and safety standards. Our trays are designed to maximize space utilization and minimize material waste. By optimizing part placement and nesting, we help you achieve higher production yields and reduce overall costs.



CAD/CAM

CAD (Computer-Aided Design) has revolutionized the creation of thermoformed trays, offering precision and efficiency. CAD software allows designers to craft 2D and 3D models with meticulous accuracy, tailoring the trays to accommodate the specific needs of industries like automotive, electronics, and medical. Customization, cost savings, and streamlined prototyping are key advantages. CAD fosters collaboration among design teams, facilitating client feedback and ensuring a precise match to client requirements. Additionally, it aids in optimizing materials for sustainability, making CAD a vital tool in producing functional, eco-friendly thermoformed trays that meet the demands of diverse applications.



PROTOTYPING

Prototyping of thermoformed trays is a crucial phase in their development. During this process, a sample tray is created to validate the design and functionality before mass production. Using materials and techniques similar to the final product, prototypes help identify potential design flaws, ensure proper component fit, and assess structural integrity. This step reduces the risk of costly errors in the manufacturing phase. It allows for adjustments, refinements, and client feedback, ensuring the trays meet specific needs accurately. Thermoformed tray prototyping accelerates the development process, saves resources, and guarantees a high-quality final product for applications in various industries.



THERMOFORMING

The production of thermoformed trays involves a methodical process in which flat plastic sheets are heated, vacuum-formed, and trimmed to create custom-designed trays. Initially, the plastic sheets are heated until they become pliable, then placed over a mold, and vacuum-sealed to take on the desired shape. Once cooled and solidified, the trays are precisely trimmed and finished. This process ensures trays are tailored to their intended applications, offering protection, organization, and customization. Thermoforming is a cost-effective and efficient production method, widely used in industries such as automotive, electronics, and healthcare for the creation of durable and functional trays.



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MATERIALS

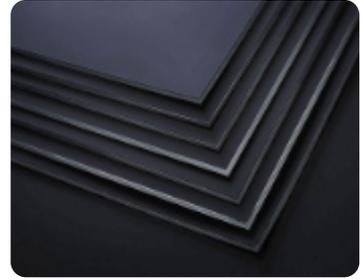
HIPS

High Impact Polystyrene (HIPS) is a widely used material in the production of thermoformed trays. HIPS combines the versatility of polystyrene with enhanced impact resistance, making it suitable for trays in various applications. During production, HIPS sheets are heated and vacuum-formed over molds to create durable, precisely shaped trays. These trays are particularly valuable in industries like healthcare, electronics, and retail, where a balance of strength and cost-effectiveness is essential. HIPS thermoformed trays offer excellent customization options, ensuring that they fit the specific needs of each application. Their impact resistance, rigidity, and affordability make them a popular choice in the thermoforming industry.



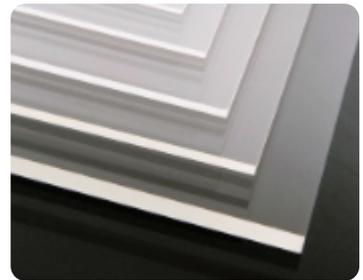
PET

Polyethylene terephthalate (PET) is a popular choice in the production of thermoformed trays, known for its exceptional clarity, durability, and versatility. PET sheets are heated and vacuum-formed over molds, resulting in trays that are transparent, lightweight, and resistant to moisture and chemicals. These characteristics make PET thermoformed trays ideal for various applications, such as food packaging, electronics, and retail displays, where product visibility and protection are essential. Additionally, PET is recyclable, contributing to its eco-friendliness. The combination of clarity, durability, and sustainability makes PET a valuable and widely used material in the thermoforming industry.



ABS

Acrylonitrile Butadiene Styrene (ABS) is a versatile thermoplastic used in the production of thermoformed trays. ABS combines the strength of acrylonitrile and butadiene with the rigidity of styrene, creating a material that offers both durability and impact resistance. In the production process, ABS sheets are heated, vacuum-formed over molds, and trimmed to create trays. ABS thermoformed trays are suitable for applications demanding robust and rugged containers, such as in the automotive industry for organizing and protecting components. They are also found in medical and industrial settings, thanks to their strength and resistance to chemicals. ABS trays are an excellent choice when durability is paramount.





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Achievable but **Relevant**, **Time-based**
industry solutions.



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