

# RotoTrends

*Exploring the potentials of  
rotational moulding in design*

*Issue 13*



**ARMO**  
AFFILIATION OF ROTATIONAL MOULDING ORGANISATIONS

## Introduction

*The evolution that has distinguished rotational moulding in recent decades is intimately related to the development of awareness of rotomoulding in the design world.*

*In other words, as the potential of rotomoulding becomes “common knowledge” amongst designers and producers the sophistication of their projects using our technology for industrial applications grows. RotoTrends explores the different potentials of rotational moulding showing case-histories where the roto technology is able to open new markets, developing innovative products and working successfully in new niches.*

*The projects developed in partnership with international design institutes, and the selected industrial products produced a faithful portrait of an industry constantly hungry for new ideas, eager to experiment with new shapes and new materials, sensitive to the international richness of globalization.*

*Rotomoulding is strategically placed as one of the key technologies for rethinking the industry according to today’s needs for technology and performance.*

## Go Kart Market Overview

Go Kart also known as Kart is an open-wheel, compact, small-size sports car with a smaller height. This car is powerful to gain high speed in a shorter time period and come up with a variety of shapes and forms. They are available in many styles, from motorless models to highly-powered racing vehicles with high-performance motors. They are used for competitive racing, ranging from local amateur races to professional championships among youngsters.

Go-kart is used for karting purpose which means a type of racing (kart racing) in which the go-kart is used. The engines in the go-kart consist of two-stroke and four-stroke internal combustion engines in which the power is transmitted with the help of chains(belts) from the engine to the rear axle. Gas-powered go-karts were first used in the sport, but electric karts have since made an appearance, primarily at indoor facilities where extensive ventilation systems are otherwise required to dissipate engine fumes.

### A Sector with Growing Opportunities

Go-kart is one of the most popular motorsports among millennials. The popularity is increasing day by day as the number of racers is rising over the years. It has also been observed that some of the world-renowned F1 (Formula 1) racers have started off with casual karting at a very young age. They then moved on to take part in competitive races before joining the world of auto racing and Formula 1.

Further, karting involves a wide array of go-karts, including off-road, racing, pedal, electric, and even drift karts. Each of these go-karts has a different application made by various go-kart manufacturers. The availability of indoor and outdoor karting further enhances its demand as there is no barrier to the weather while enjoying karting because of its indoor facility also. Nearly 35 million Americans participate in the sport of go-karting every year. After the pandemic recovery, participation in karting championships has increased dramatically.



## Blastacars

### The World's First Drift Kart

production Blastacars, New Zealand  
moulding Rotational Plastics, New Zealand  
graphics PSI Brand, New Zealand

*Blastacars is a New Zealand brand specializing in the production of drift karts that combine a metal chassis with roto-molded components to offer a high level of aesthetic value. The Blastacars collection is the result of decades of experience in the drift karting industry and offers a unique experience for adults and children alike. The karts produced by Blastacars are an interesting example of the potential of rotational molding: initially made of fiberglass, karts presented a series of problems, such as frequent structural breakages due to impacts and general wear of the body, resulting in scratches and chips. The transition from fiberglass to rotational molding allowed the introduction of a polyethylene body, which has proven extremely resistant to impacts and the main stresses to which every vehicle is subjected. Furthermore, the application of decals to protect the rotationally molded parts from harsh and abrasive conditions has allowed for a customized bodywork that guarantees high durability.*

*Blastacars' innovation has been recognized at the New Zealand Business Awards for marketing, business leadership, and product innovation.*

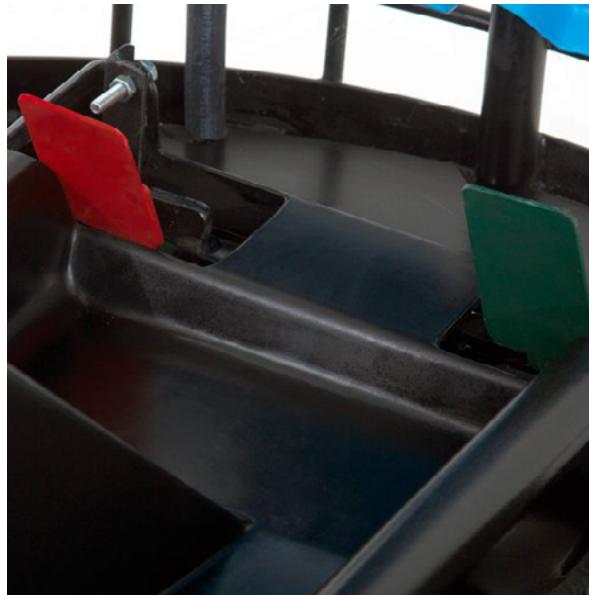
[www.blastacars.com](http://www.blastacars.com)





> Drifting is the fastest growing motorsport in the world. Its origins stem from Japan in the 1970's and has spread globally over the last 40 years.

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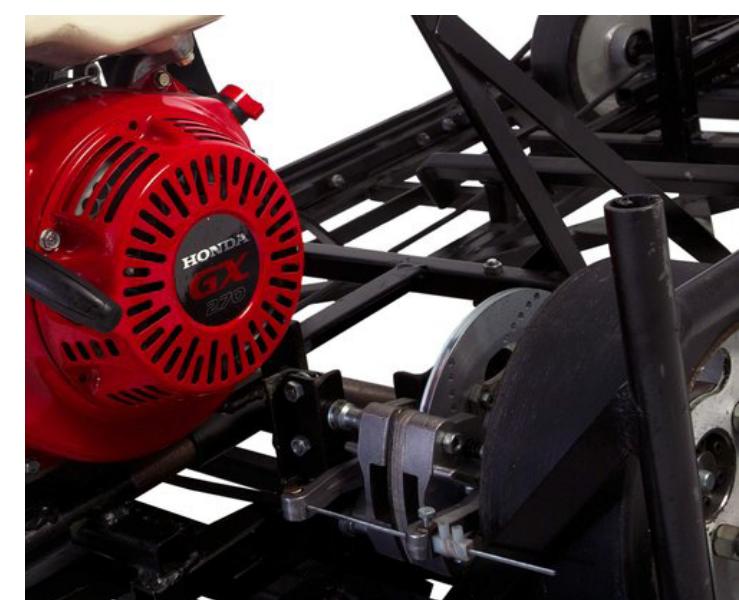
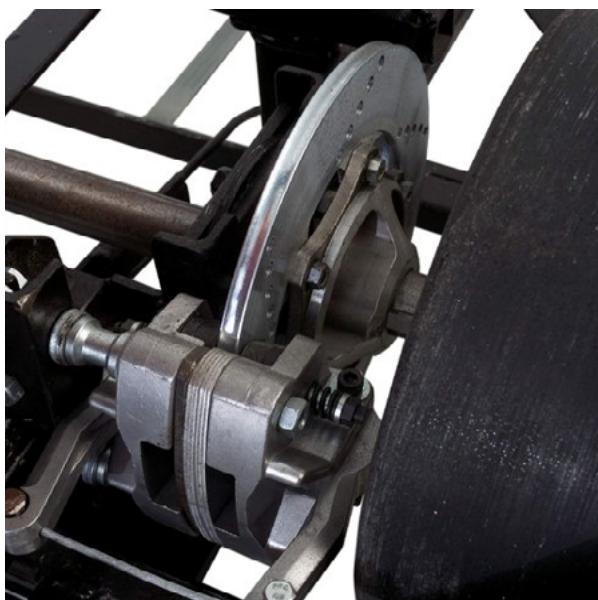
> The Kart has a metal frame on which the engine and the rotomolded body are fixed.

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> Thanks to the use of special abrasion- and impact-resistant graphics, the bodywork can be customized in a variety of colors and shapes.

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> The adoption of rotomolded components in place of the previous fiberglass parts has made it possible to obtain a vehicle resistant to impacts and mechanical stress.

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## Outdoor Bathtub Market Dynamics

The outdoor bathtub market has been experiencing significant growth, driven by changing consumer lifestyles, increasing disposable incomes, and a growing awareness of the health benefits associated with relaxation and wellness. The market encompasses a wide range of products designed to provide therapeutic benefits and leisure experiences, catering to both residential and commercial sectors.

According to the National Spa Association, the wellness economy, which includes spas, wellness tourism, and personal care, is valued at approximately \$4.5 trillion, highlighting the potential for related markets like outdoor spas and massage bathtubs.

This growth trajectory can be attributed to the increasing inclination of consumers towards self-care and outdoor leisure activities. In this context, the concept of luxury outdoor living has gained traction, merging the realms of comfort, style, and wellness in outdoor spaces. This trend aligns with consumers' desire for enhanced outdoor experiences, ultimately driving demand for sophisticated spa and massage products.

## Main Market Drivers

One of the primary drivers of the outdoor spa and massage bathtub market is the rising focus on health and wellness. As individuals become more health-conscious, the demand for relaxation products that promote physical and mental well-being has surged. Additionally, the growing trend of home improvement projects has led homeowners to invest in outdoor amenities that enhance property value and provide relaxation spaces. According to the American Institute of Architects, over 60% of homeowners are prioritizing outdoor spaces, further fueling the market.

The market presents numerous opportunities, particularly in innovation and sustainability. Manufacturers are increasingly focusing on eco-friendly materials and energy-efficient designs to cater to the environmentally conscious consumer. The introduction of smart technology, such as app-controlled features and integrated sound systems, also opens up avenues for differentiation in a competitive landscape. Moreover, the rising popularity of wellness tourism creates potential partnerships between manufacturers and resorts or spas, further expanding market reach.



## **Gardentub** Outdoor Bathtub

production Gardentub, Netherlands

*Gardentub offers a new bathtub concept through rotational molding. This large tub can be placed both indoors and outdoors and is suitable for multiple uses. It can be filled with ice for refreshing outdoor baths or transformed into a small paddling pool for children. It comes with a variety of accessories, including a shower and built-in faucets.*

*The tub's design combines elegance and safety: the wide rim provides a comfortable armrest, while the protruding feet ensure stability even on uneven surfaces.*

[www.gardentub.com](http://www.gardentub.com)





> The tub can be filled with ice for a refreshing summer soak.

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> The shower and faucets allow the tub to be used in multiple ways in outdoor spaces.

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> Gardentub represents a furnishing element for outdoor environments that helps to elegantly characterize gardens and public spaces.

## Pet Grooming Service Industry Analysis

The primary catalyst for the Pet Grooming Service Market is the rapid elevation in pet ownership and spending power, where approximately 62% of owners prioritize grooming for health reasons. This driver is further amplified by a 40% increase in awareness regarding pet hygiene and its correlation with preventing zoonotic diseases, leading to higher service frequency.

A critical barrier detailed in the Pet Grooming Service Industry Analysis is the labor crunch, where the ratio of pets to qualified groomers has widened by 40% in the last three years. The physical demands of the job lead to a high burnout rate, with industry turnover hovering around 25% annually. This restraint limits the Pet Grooming Service Market Share expansion for many businesses, as 35% of salons report having to turn away clients due to lack of staff. Furthermore, the cost of training and retaining skilled labor has increased operational expenses by 15%, squeezing profit margins for smaller independent operators.

## Pet Grooming Bathtubs Industry Dynamics

The global Pet Grooming Service Market is currently experiencing a dynamic transformation driven by the increasing rate of pet humanization, where approximately 67% of pet owners now view their pets as integral family members. This cultural shift has propelled the Pet Grooming Service Market Analysis to reveal that over 45% of pet owners are willing to spend more on premium hygiene and grooming services than they were five years ago.

The Pet Grooming Service Industry Report indicates that the frequency of professional grooming visits has increased by 15% year-over-year, with the average pet owner scheduling sessions every 4 to 6 weeks. Furthermore, the Pet Grooming Service Market Trends highlight a significant surge in demand for specialized treatments, with therapeutic baths and styling services accounting for nearly 30% of total service requests in urban centers.



## **AGC Bathtub**

### **Dog and Cat Grooming Tub**

production Grooming Access, France

Grooming Access produces a vast collection of professional dog and cat grooming products. The four-legged bath tub is made of rotomolded polyethylene and features a metal frame, available with wheels, fixed legs, or a mobile platform. The tub is composed of three essential elements: the water container and two removable partitions that allow the pet to enter and exit. The metal frame is completed by two chains to hold the dog in place. The rotomolded tub features a series of storage compartments for pet grooming accessories, such as shampoo, detergents, and various brushes. The choice of rotational technology for this product line was also based on the fact that plastic makes cleaning quicker and keeps the tub in perfect condition.

[www.grooming-access.com](http://www.grooming-access.com)





> A complete family of plastic accessories for professional grooming of dogs and cats.



> The bulkheads allow the animal to enter and exit the sling and contain its movements during bathing.

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> The tub is completed with various accessories such as the soap dish, the non-slip mat, the fastening chain, and the taps applied to the rotomolded lid.

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## Ball Rack and Hood System Key Trends

The Ball Rack and Hood System market, primarily linked to the booming Bowling Centers Market, shows positive forecasts (CAGR  $\sim$ 4-4.5% through 2029/2030) driven by family entertainment trends, tech integration (smart scoring, automation), and demand for better player experiences, with APAC and North America leading growth, though cost and integration challenges exist for high-tech systems.

The global bowling equipment market is experiencing growth as a result of the increasing popularity of recreational bowling, the proliferation of bowling centers in urban areas, and the upward trend in disposable incomes. Smart bowling balls, automated scoring systems, and mobile app incorporation are among the technological innovations that are improving the player experience and attracting both professional and casual bowlers.

Offering digital solutions such as cloud-based analytics, virtual tournaments, and AI-assisted mentoring, which can enhance engagement and loyalty, and developing eco-friendly, high-performance equipment are key opportunities.

## Bowling Equipment Market Forecast

The global bowling equipment market is projected to increase from USD 957.8 million in 2025 to USD 1,445.3 million by 2035, with a CAGR of 4.2% during the forecast period. Growth is driven by the increasing popularity of recreational bowling and the rise of bowling alleys in urban areas.

Advances in technology, including smart bowling balls and automated scoring systems, are attractive to both casual and professional players. Opportunities include introducing eco-friendly, high-performance equipment and offering digital experiences like virtual leagues. Challenges include high equipment costs, seasonal demand variations, and competition from alternative entertainment options such as gaming and fitness centers.

4.



## **Ball Rack and Hood System**

### **Ball Return System**

production A/E/C Solutions, USA  
moulding RotoDynamics, USA

*Bowling racks are typically made of fiberglass, a material that is heavy and expensive to produce. The introduction of rotational molding technology allows for product refinement and, at the same time, mass production at a reasonable cost. Furthermore, the rack can be customized on the sides and front to match the style of the venue in which it is installed.*

*The product offers a comprehensive ball rack and hood system designed to enhance the functionality and organization of the bowling center. The ball rack provides a convenient storage solution for bowling balls, ensuring that they are easily accessible for bowlers during their games.*

*The hood, on the other hand, serves as a protective cover for the ball rack, keeping the balls clean and safe from dust and other contaminants.*

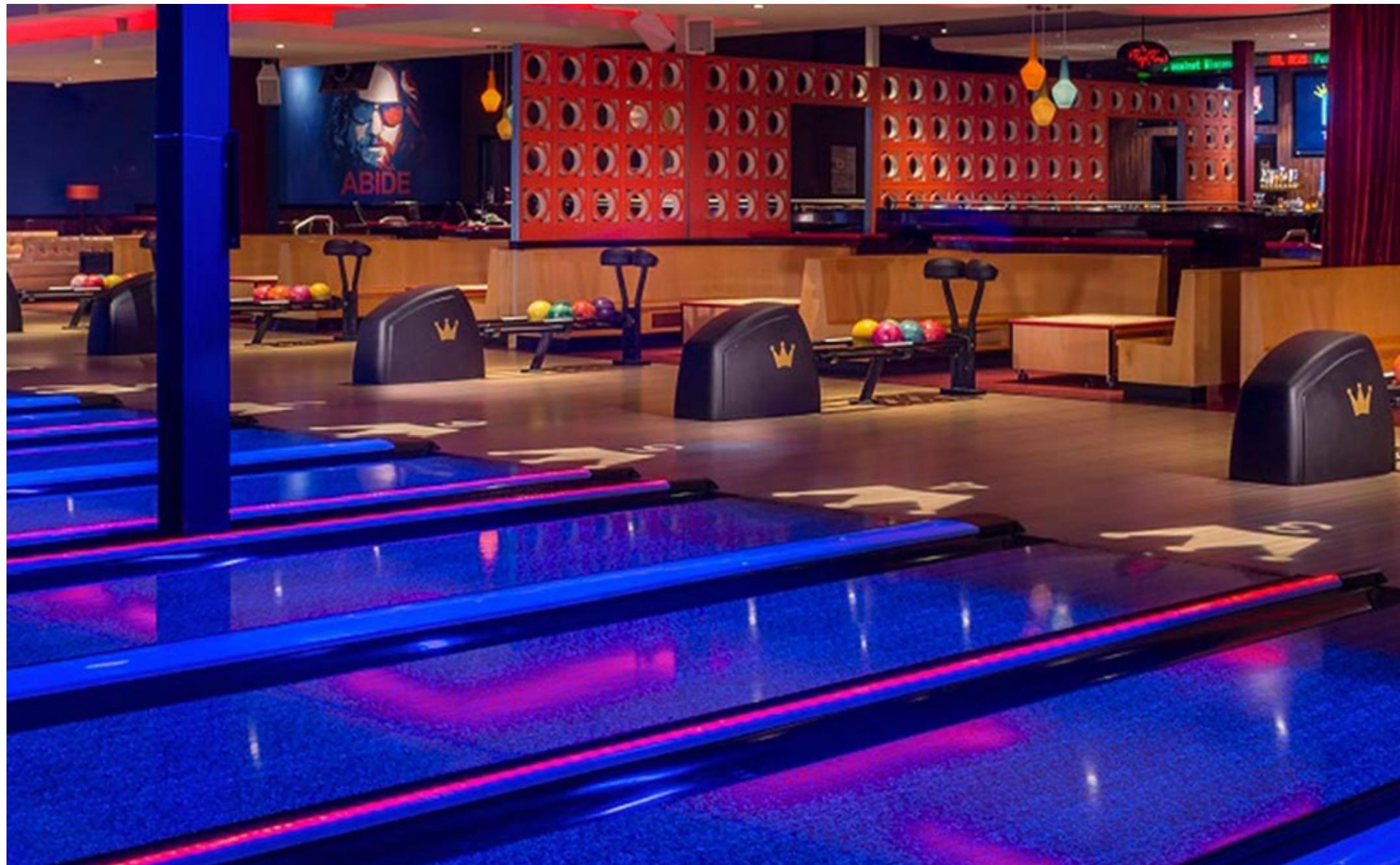
[www.rotodynamics.com](http://www.rotodynamics.com)





> Built to handle all ball weights, the system delivers smooth and reliable returns, ensuring an improved experience for bowlers.

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> This design refresh not only enhances lane appearance but also appeals to today's bowlers, creating a more inviting atmosphere.

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## Transport of Gas Cylinders

### Criteria for Safe Transport

#### Cylinder Preparation:

**Valve Protection:** Always ensure the valve protection cap is securely in place to guard against damage.

**Valve Position:** Valves must be fully closed.

**Labeling:** Contents must be clearly labeled and legible.

**Equipment:** Disconnect regulators and hoses before transport.

#### Handling & Movement:

**Use Proper Tools:** Use cylinder carts, dollies, or racks; never roll or drag cylinders horizontally.

**Secure:** Use straps or chains to prevent cylinders from tipping or shifting during movement.

**No Lifting by Cap:** Never lift cylinders by their valve cap.

## Design Parameters for Cylinder Transportation

- *Cylinder pen or bay*

For ease of load securing using tie-down straps, the delivery vehicle may be divided into cylinder pens or bays. The dividing panels for the bays should be designed to withstand a force not less than the full weight of the cylinders in the bay forward and rearward within a bay.

- *Side panels*

Side panels should be designed to withstand a force of not less than half of the full weight of the load sideways. The height of the side panel should be 20% higher than the center-of gravity of the bulk of the cylinders being handled.

- *Front panels*

Front panels should be designed to withstand a force not less than the full weight of the load forward. The height should be equal to the height of the bulk of the cylinders being handled.



## Gas Cylinder Container Cart for Safe Transport

production Cargas Ag Air Liquide, Switzerland  
moulding Gruetter, Switzerland

*The project stemmed from the customer's need for a reliable and safe container for transporting gas cylinders. The solution had to ensure easy handling for heavy gas cylinders, have an extendable handle, be able to be closed with a lid, and be able to negotiate stairs. Furthermore, the transport crate had to be stackable and stable for pallet handling. Design was also a key factor, as the carts needed to be aesthetically appealing and offer labeling options.*

*Gruetter supported Carbagas throughout the entire development process, from the ideation phase to prototyping and subsequent production.*

[www.carbagas.ch](http://www.carbagas.ch)





> The extendable metal handle allows for easy transport of the container equipped with wheels. The containers are stackable and can be stored in small spaces.

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## Reshaping the Portable Pool Lift Industry

The portable pool lift industry is at a pivotal juncture as demographic trends, aging user populations, and legislative mandates converge to drive demand for inclusive aquatic access solutions. Individuals with mobility challenges increasingly expect seamless entry and exit from swimming environments, prompting designers and manufacturers to elevate standards.

Transitional regulations and evolving best practices have set a higher bar for safety features, user guidance, and interoperability with various pool types. This shift is further underscored by facility operators seeking to enhance service quality and community well-being by adopting devices that marry ease of use with stringent compliance requirements.

At the same time, public pools, hotels, and community centers are investing in versatile lifts that accommodate diverse body types and usage scenarios. In consequence, industry players are refining design protocols to ensure reliability in both indoor and outdoor applications, thereby positioning portable pool lifts as an indispensable component of modern aquatic facilities.

## Emerging Paradigms in Aquatic Mobility Solutions

Advances in materials science have introduced lightweight yet durable composites and flexible, high-performance molding technologies such as rotational molding, while innovations in propulsion systems have expanded the feasibility of electric solutions in settings with limited infrastructure.

Battery-powered units now offer extended run times and rapid charge cycles, enabling uninterrupted operation in remote or underpowered locations. Hydraulic and manual systems remain relevant for environments with specific maintenance preferences or cost constraints, but they also benefit from refined actuation mechanisms and corrosion-resistant finishes.

Furthermore, modular design principles enable streamlined installation processes and simplified maintenance protocols. As a result, stakeholders are being forced to reevaluate legacy offerings in favor of next-generation configurations that offer consistent performance, improved safety, and intuitive control interfaces. As a result, the portable pool lift market is taking a more holistic approach that aligns user experience with operational efficiency.



## **Mobile Lift R37**

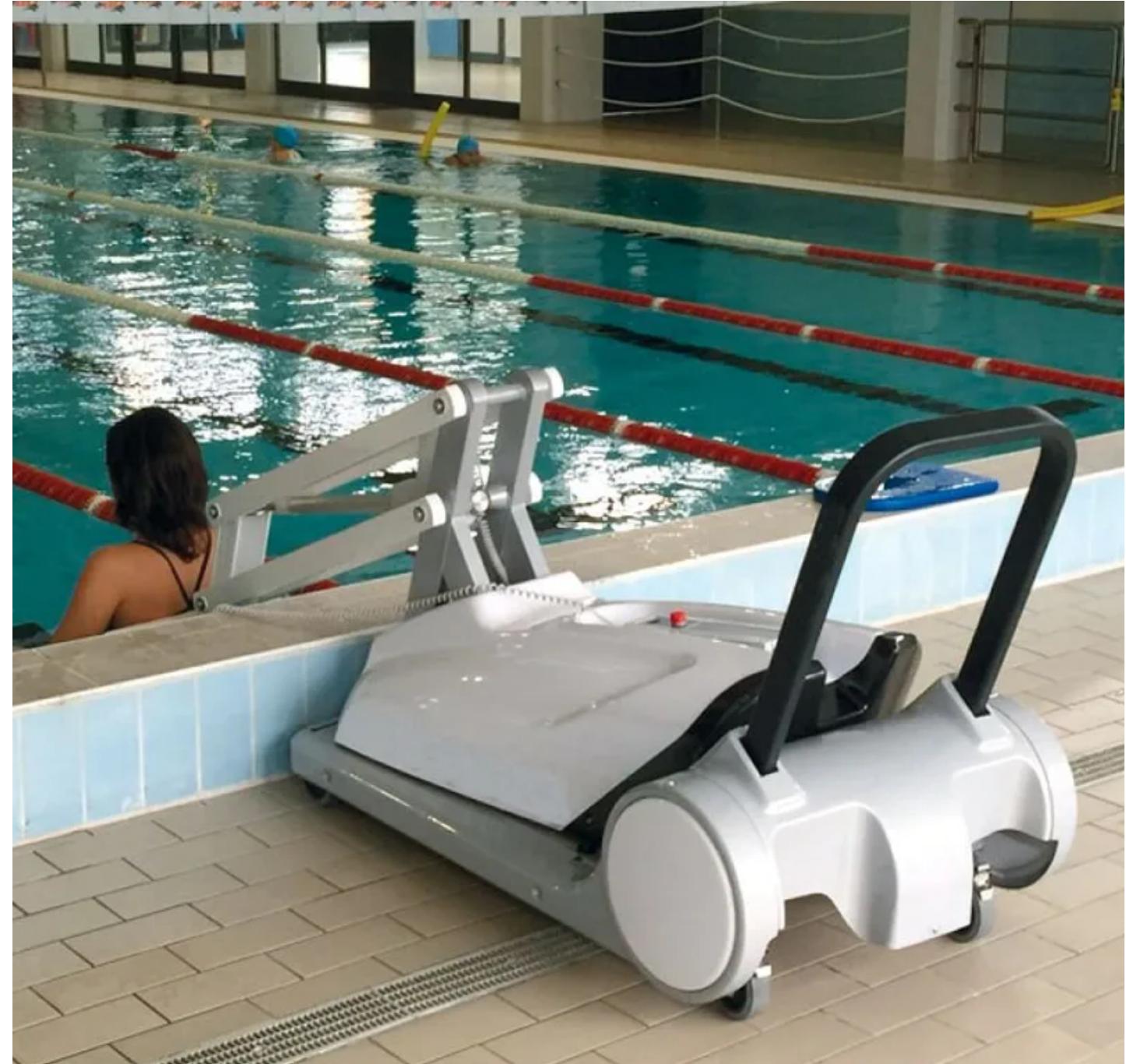
### Mobile Swimming Pool Lift

production Roigk, Germany

*The pool lift was designed as a support product for users unable to move in the water, allowing them to enter and exit the pool from a seated position.*

*The lift arm can be rotated sideways toward the pool edge so that the user can easily transfer from a wheelchair or shower chair. Using a remote control, the user can then enter and exit the water independently. Suitable for wheelchair users with a high degree of independence. The pool lift requires no additional fastening to the pool edge and can therefore be flexibly used in different areas of the pool. The product features a metal frame with a roto-molded polyethylene outer cover. It is equipped with a control panel that allows the user to control the device, while the base is equipped with a special braking system that ensures stability.*

[www.roigk.de](http://www.roigk.de)





> The user has the ability to remotely control the movement of the mechanical arm.

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> The base is equipped with metal brackets to allow better anchoring to the ground.

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> The lift is equipped with a large handle on the base that allows the operator to easily move it along the edge of the pool.

## Emergency Architecture Main Criteria

Post-emergency shelter design is critical to mitigating the impact of the many disasters that occur globally. Unfortunately, these shelters are often built without due attention to comfort levels and minimum standards for temporary shelter.

To minimize the negative effects of disasters and increase sustainability, it is essential to explore the feasibility of designing comfortable shelters despite numerous obstacles, such as the limited availability of low-cost materials and the lack of local labor skills.

Compactable emergency homes are rapidly deployable, temporary shelters like prefab modules, shipping containers, or specialized tents, designed for quick setup after disasters, offering durability, basic amenities, and resilience against harsh weather, crucial for immediate relief before permanent housing is arranged.

## Types of Compactable Homes

**Modular Shelters:** Factory-built units with steel panels, designed for rapid assembly and scaling to meet demand, offering security and cost-effectiveness.

**Shipping Container Homes:** Durable, weather-resistant, and easily transportable, suitable for medium to long-term emergency use or volunteer housing.

**Pop-Up/Foldable Shelters:** Lightweight, fabric-based structures with integrated frames that assemble in minutes, offering insulation and basic features.

**Dome Homes:** Can be built quickly from materials like soil-cement (SuperAdobe) or as pre-fab units, offering durable, customizable space.

**Military-Grade Tents:** Traditional yet essential, providing immediate, large-scale refuge.



## **ShelterPack** **Compactable Homes**

design Hakan Gürsu (Designnobis), Turkey

*If you look closely at the architecture, it's simply a series of vertical walls between the floor and the ceiling. If these walls were collapsible, the entire house would be no more than one meter thick. The ShelterPack is a disaster relief home that houses a bedroom (with four beds), a bathroom, a fully equipped kitchen, and a dining area (with furniture) in a single slab approximately 80 centimeters high. The entire apartment can be set up in just a few hours by raising the ceiling and positioning the rotomolded walls.*

*The ShelterPack is ideal for disaster-stricken areas. Once compressed, each package is small enough to be transported in a semi-automatic truck. A single shipment can therefore deliver a large number of modular homes ready for temporary occupancy.*

[www.designnobis.com.tr](http://www.designnobis.com.tr)





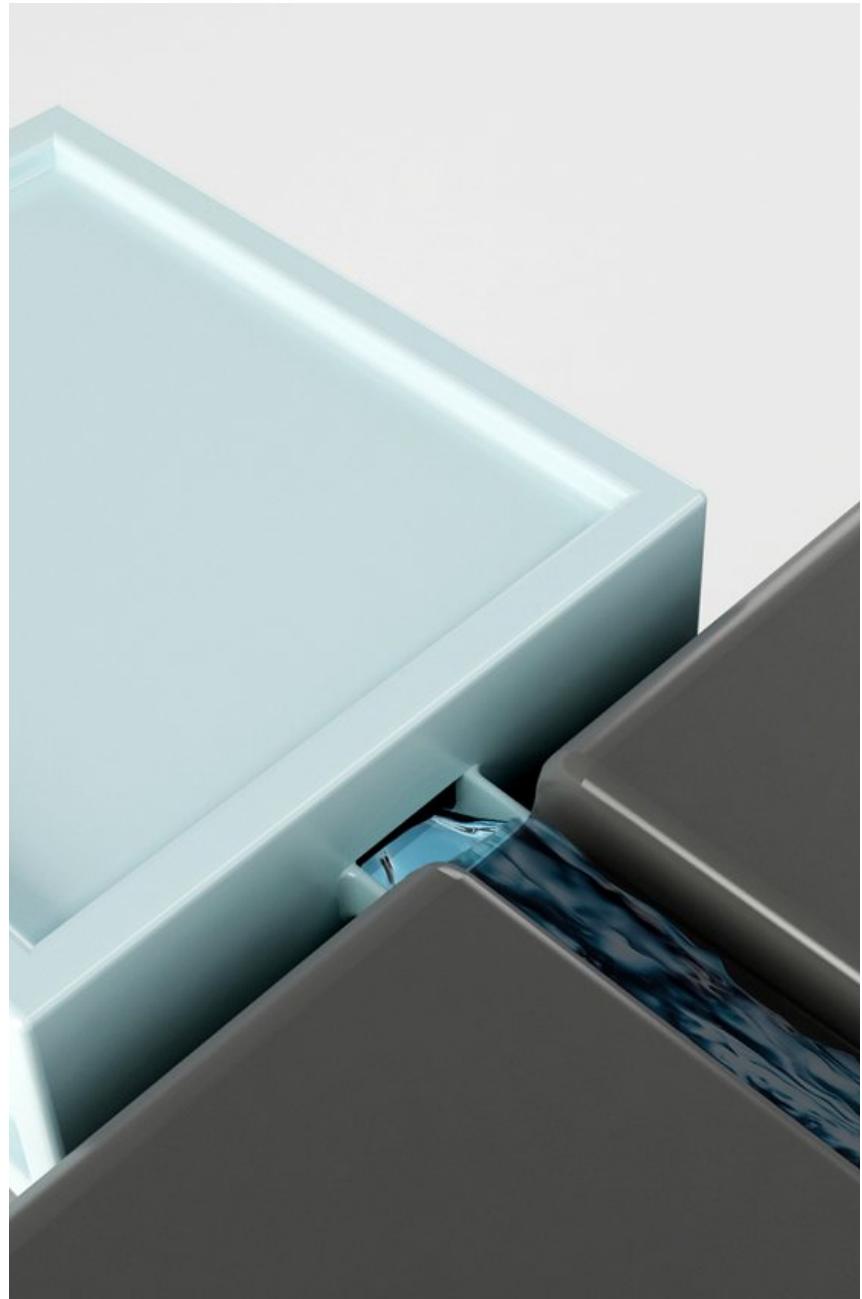
> The base is raised from the ground thanks to a series of metal feet that allow adequate ventilation of the building.

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> All the elements that make up the house are compacted inside the base and the top lid.

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> Once compacted, the houses can be transported by truck. The side tank collects rainwater.

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## Residential Poker Table Market Analysis

The residential poker table market is growing rapidly, driven by increasing end-user demand due to factors such as evolving consumer preferences, technological advancements, and greater awareness of the product's benefits. As demand rises, businesses are expanding their offerings, innovating to meet consumer needs, and capitalizing on emerging trends, which further fuels market growth.

One of the key growth factors propelling the poker table market is the surge in home-based entertainment and gaming activities. As more consumers seek to recreate the casino experience in the comfort of their homes, the demand for high-quality, aesthetically pleasing, and functional poker tables has grown significantly. This trend has been further amplified by the global pandemic, which encouraged families and friends to invest in home gaming setups.

The availability of various types of poker tables, including folding and convertible models, has made it easier for consumers to integrate these products into their living spaces, thereby driving market expansion.

## Poker Tables Design Criteria

Choosing the right poker table involves carefully considering various factors, including size, materials, features, and budget. Whether you're looking for a casino poker table experience at home, a versatile convertible poker dining table, or a compact option for smaller groups, there's a wide selection available to suit your needs. The most common shapes for poker tables are oval and round. Oval tables typically seat 8-10 players, while round tables seat 6-8 players.

Common materials for poker table playing surfaces include felt, speed cloth, and suited speed cloth. Each offers different benefits in terms of durability, smoothness, and resistance to stains.

When choosing a poker table frame, consider materials like solid hardwood, engineered wood, metal, or composite. Factors to weigh include durability, stability, aesthetics, and weight.

Folding poker tables and convertible poker dining tables are excellent options for small spaces or occasional use. They offer portability and easy storage.



## Lucky Seven Poker Table

production Granger Plastics, USA

*The poker table is a product type traditionally made of wood. In this case, the introduction of rotational molding allows the table's shape and functionality to be redefined, adding a series of key elements to the gaming table.*

*Each side has two chip holders, two drink holders—one for bottles, one for tall glasses or an ashtray—and a recessed card holder with a sloping slide for cards/chips. The wide base ensures stability during play.*

*Being completely rotomolded, the table is suitable for both indoor and outdoor use, whether in private or public spaces. The plastic surface also allows for easy cleaning, and its unique structure allows for quick disassembly and assembly.*

[www.lucky7pokertable.com](http://www.lucky7pokertable.com)





> The recessed compartments along the perimeter of the top allow you to store chips and various accessories.

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> The slots around the card slots allow you to free up the central space for playing cards.

## Travel Trailer Market Drivers

The global travel trailer market size was valued at USD 15.6 billion in 2025. The market is expected to grow from USD 15.9 billion in 2026 to USD 24.1 billion in 2035 at a CAGR of 4.7%, according to latest report published by Global Market Insights Inc.

The increasing popularity of road trips, camping, and local travel has led to an increased demand for travel trailers. Domestic trends within tourism are influenced by safety, convenience and flexibility. Therefore, families, couples and adventure travelers are using travel trailers as a cost-effective option compared with hotels and resorts.

As household income increases, so does consumers' ability to purchase recreational vehicles. Consumers now have higher disposable income which allows them to purchase lifestyle products like travel trailers. As a result of this increased purchasing power, both entry level and premium segments of the market are growing. Additionally, due to this increased purchasing power manufacturers are expanding their product lines to accommodate different price points within the market.

## Camping Trailer Design Parameters

Camping trailers come in various sizes and shapes, ranging from small teardrops to large fifth-wheel trailers. Designing a good camping trailer requires attention to several crucial criteria.

Firstly, it should be lightweight to make towing easy, but also durable enough to withstand various weather conditions and rough terrain.

Secondly, the trailer's layout should maximize the use of available space while providing adequate ventilation, privacy, and comfort for occupants.

Thirdly, the trailer should be easy to set up and pack down, with well-designed storage areas for camping gear, food, and personal belongings.

Fourthly, it should have adequate power sources, including solar panels, a generator, or a battery, to power appliances and devices.

Fifthly, the trailer should have safety features such as sturdy brakes, properly functioning lights and signals, and secure tie-downs for travel.



## **SylvanSport Go Trailer** Pop-up Camping Kit

production SylvanSport, USA

*American outdoor equipment company SylvanSport has designed a camping trailer that can be attached to almost any car and expanded into a pop-out shelter on arrival.*

*The Go trailer is designed to make camping easier and more convenient by accommodating a pop-up tent, storage space and a rack for bikes and boats within an easily towable package. The trailer has a four-part design, including a tent pod mounted between an equipment rack and an expandable gear deck, while a storage box at the front can be used to hold smaller accessories. The storage compartment, fenders and step are made using rotational moulding to ensure maximum durability combined with resistance to atmospheric agents.*

*To unfurl the tent, users must first expand the gear deck to its full height using a hand crank, at which point the tent can be pulled out from its hinged case. Its modular interior can be adjusted to accommodate either a king bed, twin beds or a dining area complete with a fold-out table.*

[www.sylvansport.com](http://www.sylvansport.com)





> The camper offers multiple sleeping and dining configurations. The awning offers an additional 3 square meters of outdoor living space.

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> Weighing just 375 kg and boasting a sleek aerodynamic profile, Go is the lightest and most efficient camper trailer for electric and hybrid vehicles, offering optimal range, handling, and performance.

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> The upper part of the trailer can be configured in various ways and offers a large cargo space.

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## Horse Hay Rack Forecast and Trends

The horse hay rack market, linked to the growing \$21.66 billion global horse feed industry (2030 projection), shows steady growth driven by rising horse ownership for sports/leisure, focus on equine nutrition, and e-commerce adoption, with key trends including demand for specialized/dust-free options, sustainable feed, and diverse distribution channels.

Key trends and opportunities in this sector are:

**Specialized Designs:** Demand for dust-free, slow-feed, and multi-access racks for various settings (stables, trailers, pastures).

**Sustainable and High-Quality Hay:** Increased focus on nutrient-dense hay (like alfalfa) for health creates a stable market for related equipment.

**Material Innovation:** Continued use of durable metal and plastic, with interest in weather-resistant options.

## Market Drivers for Horse Hay Racks

Market drivers for horse hay racks are the following:

**Equine Industry Growth:** Expansion in horse sports, recreational riding, and therapeutic uses boosts overall demand for equine supplies, including racks.

**Nutritional Focus:** Owners increasingly seek solutions to optimize horse health, driving demand for slow-feed nets and specialized racks that deliver consistent, high-quality forage like alfalfa.

**Convenience and E-commerce:** The fragmented hobbyist market is shifting online, favoring easy-to-buy, packaged products, influencing rack distribution.

**Feed Efficiency:** Racks reduce waste and improve feed hygiene, appealing to cost-conscious and health-focused owners.

**dura**poly



## Duropoly Hay Rack Crib for Rooming-in

production Horse Stop, France

*The Duropoly Horse hay rack represents an innovative solution for safely feeding horses. Designed with a focus on durability and practicality, this 4-section hay rack offers a sturdy, rust-proof alternative thanks to its rotomolded polyethylene construction. The unique design of this hay rack ensures exceptional impact resistance, ensuring longevity. Its clean, essential shape, free of sharp corners and edges, is designed to ensure optimal safety and comfort for the horse during use. Thanks to its ingenious Z-profile, this hay rack allows for significant hay savings, reducing waste while ensuring adequate nutrition. Its ease of assembly and disassembly makes it a practical choice for mobile use, allowing you to easily move it between paddocks or store it during the winter months.*

[www.horse-stop.com](http://www.horse-stop.com)





>The Duropoly hay rack blends discreetly into its surroundings thanks to its natural green color, ensuring harmonious integration with the pasture.

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> Available in different configurations to meet every specific need, including a roofless version or a 3-section model, this rack can hold hay bales of various sizes.

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> Thanks to its ingenious Z-profile, this hay rack allows for significant hay savings, reducing waste while ensuring adequate nutrition.

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> Its ease of assembly and disassembly makes it a practical choice for mobile use, allowing it to be easily moved between paddocks.

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## Market Drivers for Hanging Systems

The market for panels used for hanging objects, including picture hanging systems and wall hangers, shows strong growth, driven by home improvement trends, increased consumer spending on decor, and the demand for versatile, aesthetic solutions.

Forecasts predict significant growth, with specific segments like picture hanging systems expected to reach over \$1.5 billion by 2031 (8.3% CAGR) and general wall hangers potentially hitting \$4.1 billion by 2033 (6.1% CAGR).

Key drivers include smart home integration, eco-friendly materials, and a shift towards customizable, digital-friendly designs in residential and commercial spaces.

## Panels for Hanging Objects Design Criteria

Designing panels for hanging objects involves planning visual balance (rule of thirds/two-thirds, symmetry vs. asymmetry), ensuring proper scale, using consistent spacing, and considering eye-level placement for unified, impactful displays.

**Unified Group:** Treat multiple panels as one large artwork; find the center of the entire grouping.

**Proportion (Rule of Thirds/Two-Thirds):** The entire panel arrangement should ideally cover about two-thirds the width of the furniture below it, or fill significant wall space without feeling lost or squeezed.

**Spacing:** Maintain consistent gaps (2-4 inches/5-15 cm) between panels to keep them visually connected

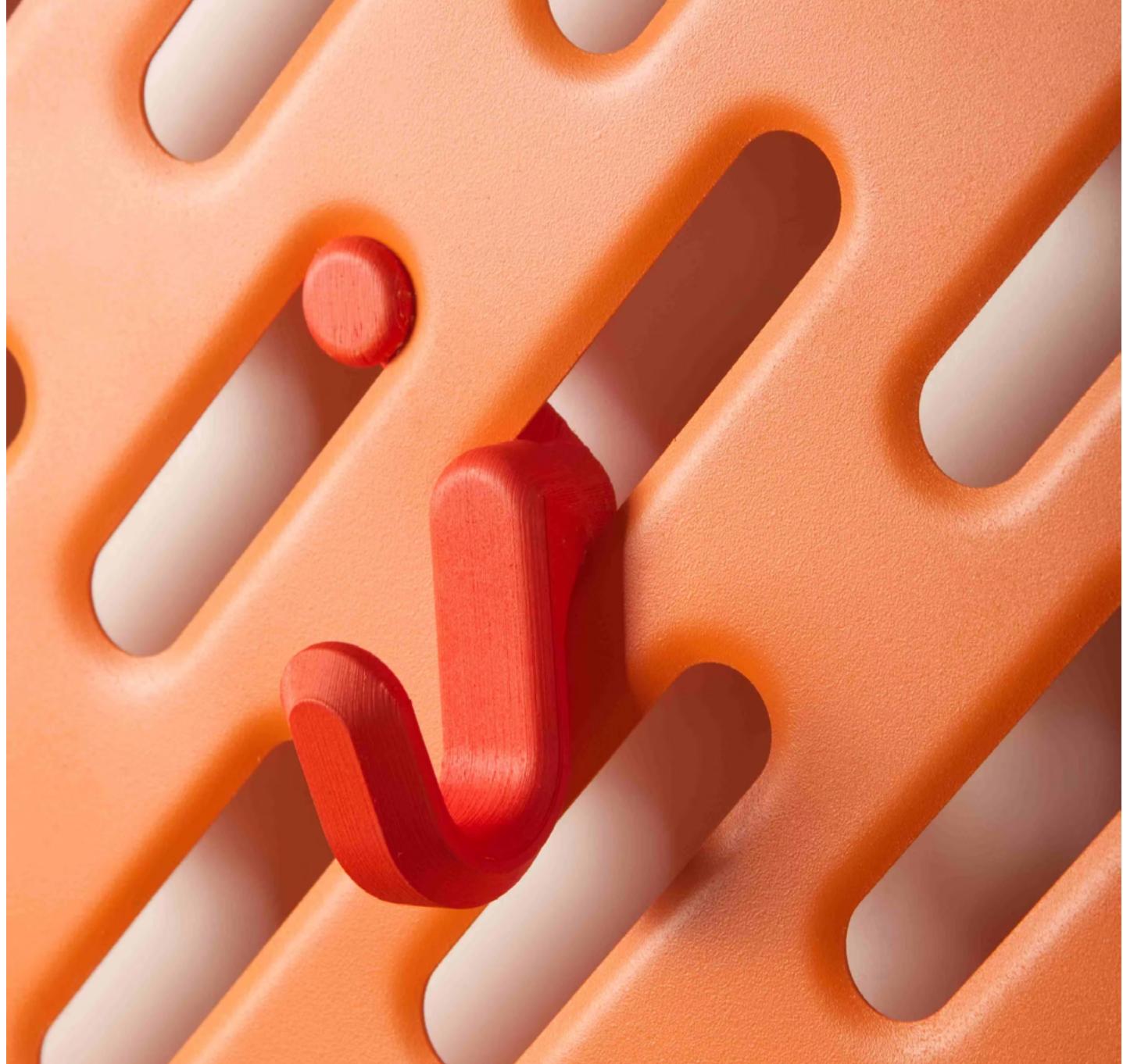
**Symmetry vs. Asymmetry:** Use symmetry for formal looks or asymmetry for dynamic, eclectic spaces, balancing sizes and shapes.

## Pegboard Panel with Hooks

design Lucas Pullirsch-Dussourd,  
Germany

*This project started with the idea of the interlocking rotation of the hooks through the 45 degree slanted holes. A chamfer has been created around the holes in the aluminium to stiffen the backboard. The chamfer has been created using a custom 3D printed tool and the dimensions of the hooks fine-tuned to offer an optimal fit. The holes create an interconnected and modular matrix for the positioning of the hooks and other accessories on the pegboard.*

[www.lucas-pullirschdussourd.com](http://www.lucas-pullirschdussourd.com)





> The wall panels completed with hooks allow you to hang multiple things with complete freedom.



> The hooks can be positioned in different configurations.

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## credits

Blastacars, *New Zealand*  
Gardentub, *Netherlands*  
Grooming Access, *France*  
RotoDynamics, *USA*  
Gruetter, *Switzerland*  
Roigk, *Germany*  
Hakan Gürsu, *Turkey*  
Granger Plastics, *USA*  
SylvanSport, *USA*  
Horse Stop, *France*  
Pullirsch-Dussourd, *Germany*

Cover Pictures  
*courtesy Euro3Plast, Italy*

Projects  
Bahçeşehir University, *Turkey*  
Ecal, *France*  
Istituto Europeo Design, *Spain*  
UDK, *Germany*  
Domus Academy, *Italy*  
SJB-Institute of Technology, *India*  
Seoul University, *South Korea*

Concept  
Studio Giovanetti, *Italy*

## affiliates



AFR - Association  
Francophone du Rotomoulage



ARM - Association of  
Rotational Molders



ARMA - Association of  
Rotational Moulders Australasia



ANIPAC - The Mexican Plastic  
Association



ARMSA - Association of Rotational  
Moulders Southern Africa



ARM-CE - Association of Rotational  
Moulders Central Europe



StAR - Society of Asian  
Rotomoulders



Nordic ARM - Nordic Association  
of Rotational Moulders



BPF - Rotational Moulders  
Group



IT-RO - Italia Rotazionale



RPC-CPPIA



Rotopol Association