

RotoTrends

*Exploring the potentials of
rotational moulding in design*

ARMO 2025 Edition





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Ravi Mehra, ARMO Board

From the Editor



We are delighted to bring you this special issue of RotoTrends on the occasion of ARMO 2025 – Global Roto Conference being held in Delhi, India.

The idea of RotoTrends was generated with the mission to bring forth innovative, creative, thought provoking real world applications of rotomoulding technology in the current world markets. In this issue market sectors covered are: Agriculture – Transport – Automotive – Furniture – Wellness – Gardening – Ecology – Industrial Equipment – Toys & Entertainment.

The idea here is related to the development of the awareness of rotomoulding in the design world. As rotomolding becomes more “common knowledge” amongst the designers, entrepreneurs, people seeking new ideas, places to grow their business, by bringing focus on the new markets, applications, conversions with innovative ideas rather than traditional thinking. Showcased here are a number of functional & formal innovations. These present a strong stimulus for growth seeking rotomoulders and entrepreneurs, by exploring the technology and potential offered by rotomoulding.

The main purpose of RotoTrends is to offer collection of timely and practical ideas to help stimulate the rotationalmoulding world to explore new markets and expansion into the existing ones. This is specially applicable to as yet developing regions such as India, where rotomoulding offers as many unknown avenues and opportunities for growth of the industry.

In this special issue of RotoTrends for ARMO 2025 developed by Riccardo Giovanetti Design Studio in Italy, the curator, drawing on his vast experience gained over the years, has once again produced an outstanding publication. Riccardo and his team are the authors of the RotoTrends series promoted in recent years by ARMO – the Affiliation of Global Organisations, which explores the most innovative applications of rotational technology in multiple industries.

You will find it interesting to know that Riccardo works as a designer for several companies in India and has substantial knowledge of rotomoulding and other general scenarios in India. He is well aware of the potential offered by technology and relates to the uniqueness of India. You can learn more about his knowledge and special insight during the design seminar scheduled for 12 February during the conference. This year, the Board of Directors of ARMO has appointed Riccardo Giovanetti Design Studio to develop the platform and communication of ARMO as a whole; this important evolution will include several activities, starting from the new website to the publication of a new international magazine WeRoll that will tell the whole world of rotational moulding through numerous unpublished contributions. You can find out more from his speech at the conference.

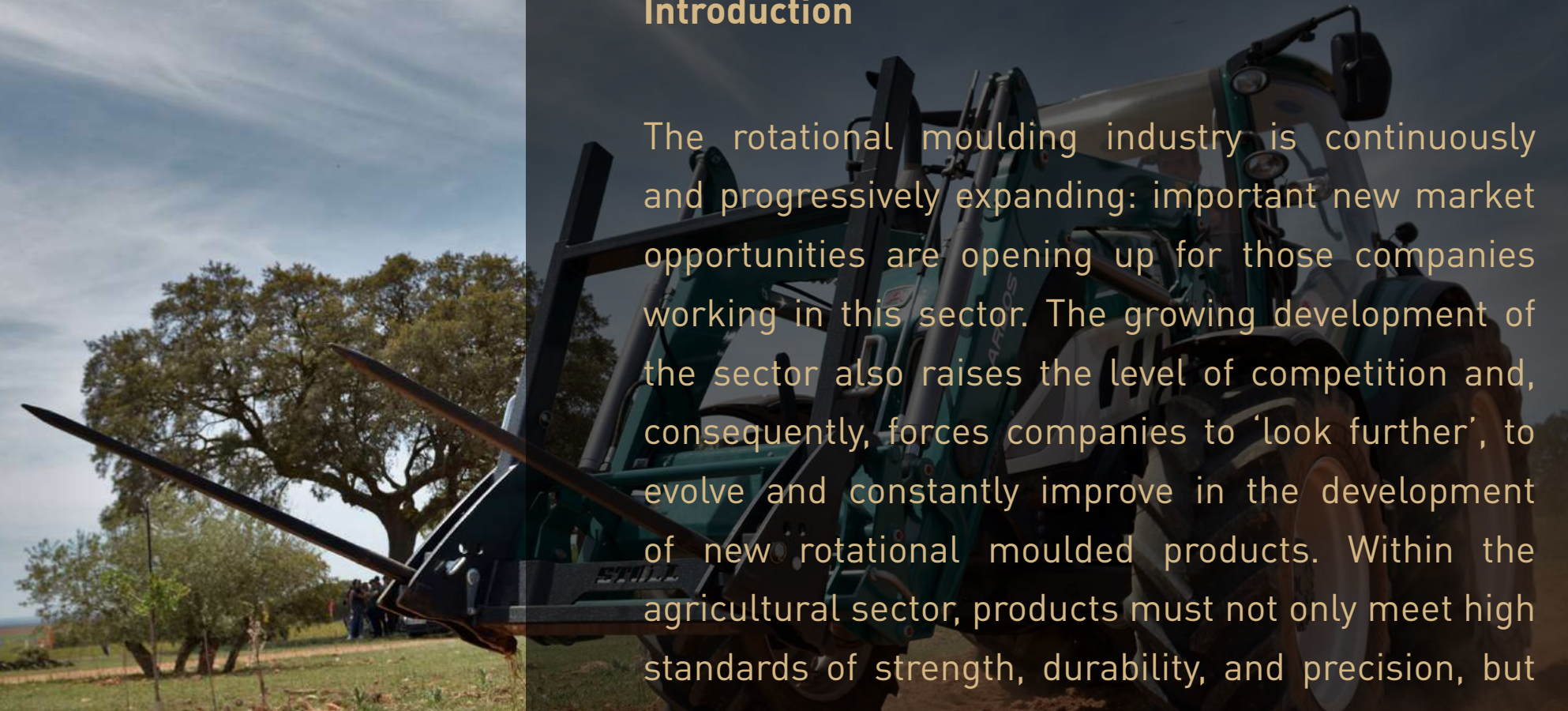
Stay connected!

1. Agriculture



Introduction

The rotational moulding industry is continuously and progressively expanding: important new market opportunities are opening up for those companies working in this sector. The growing development of the sector also raises the level of competition and, consequently, forces companies to 'look further', to evolve and constantly improve in the development of new rotational moulded products. Within the agricultural sector, products must not only meet high standards of strength, durability, and precision, but also be lightweight. This combination of requirements increases complexity and thus forms the core of the tension field.



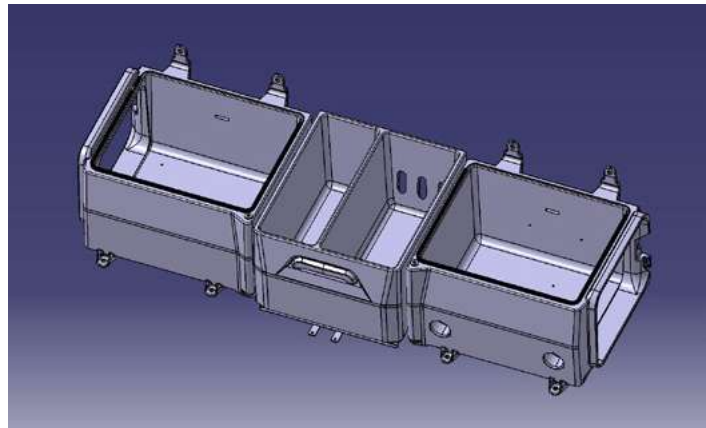
Arbos Tractor

Innovation through the Tandem tank

production Arbos, Italy
moulding Rototech, Italy

For years, metal tanks had a regular, cubic or rectangular shape. With rotomoulded plastic, it was possible to switch to more complex shapes, thus increasing the volumetric capacity of the tank and optimising the layout. The Tandem tank for trucks and other applications means a pair of tanks: diesel and DEF. The project was realised by Rototech for Arbos, a leading manufacturer of tractors and agricultural vehicles. The Rototech engineering team studied and utilised every available centimetre on the vehicle, including the space between a wheel and the bodywork. The Tandem tank consists of a fuel tank (140l) and a DEF tank (25l) and features steps and a handle integrated into the fuel tank body. In addition, the fuel tank is contoured to accommodate and support a DEF tank without additional fixing brackets; this allows convenient refuelling for the end user from one side of the vehicle with the integration of the fuel filler neck and level sensor. This set of innovations has resulted in a significant increase in the useful capacity of the tank, a consequent reduction in the number of components and the absence of rust in the vehicle.

www.arbos.com



> Arbos tractors are equipped with a Tandem fuel tank (140l) and a DEF tank (25l). The tractor features steps and a handle integrated into the fuel tank body.

Modular Greenhouse

New solution to protect plants and vegetables

production Roto Group, Slovenia

The greenhouse originates from the need to preserve vegetables and plants mainly during the colder seasons; it generally consists of a metal structure on which a plastic cover is placed. The new greenhouse system produced by Roto Group introduces an important innovation through rotational technology: a series of moulded polyethylene covers that preserve plants and vegetables from rain and snow. They are modular elements that can be assembled in different configurations and completed with side walls. They can be easily transported, are always ready for use and require less installation time than traditional systems.

www.rotogroup.eu



> Rotomoulded greenhouses are stackable and take up little space during transport. The opaline finish allows light to enter the inside of the covered part.

Dorado Tractor
Working with a multifunctional roof

production Same Tractors, Italy
moulding OkPlay, India

The Dorado Stage V range has been revamped with FARMotion 45 engines designed specifically for agricultural use: compact, efficient and with minimal maintenance requirements. Equipped with a high-pressure common rail injection system, they offer high performance and constant power and torque curves, even at low revs, specifically designed for agricultural applications.

Despite having one of the most generous displacements in its class, the FARMotion 45 has particularly compact external dimensions, providing a sloping and compact bonnet to maximise visibility and agility of the machine.

The cab roof has been specially designed to be roto-moulded, integrating the front lights on the inside, giving the vehicle optimum visibility even in the dark.

www.same-tractors.com



> The roof of the passenger compartment is rotomoulded and is designed to integrate the front lights and interior ventilation system.

2. Transport



Introduction

The transport sector is constantly evolving with the gradual shift from combustion power to hybrid systems and electric motors. In this context, urban mobility is discovering new vehicle models that combine compact dimensions with great flexibility of use.

Rotational moulding accompanies this ongoing revolution through many new applications to create light and strong vehicles, replacing components previously made of metal or other moulding technologies. Furthermore, even traditional typologies, such as the bicycle, are given a new life through innovative rotomoulded solutions.



SOFTCOT

Softcar
Bringing the automotive industry
fully into the circular economy

production SoftCar, Switzerland
moulding Rotovia, Iceland
moulds XMTech, Italy

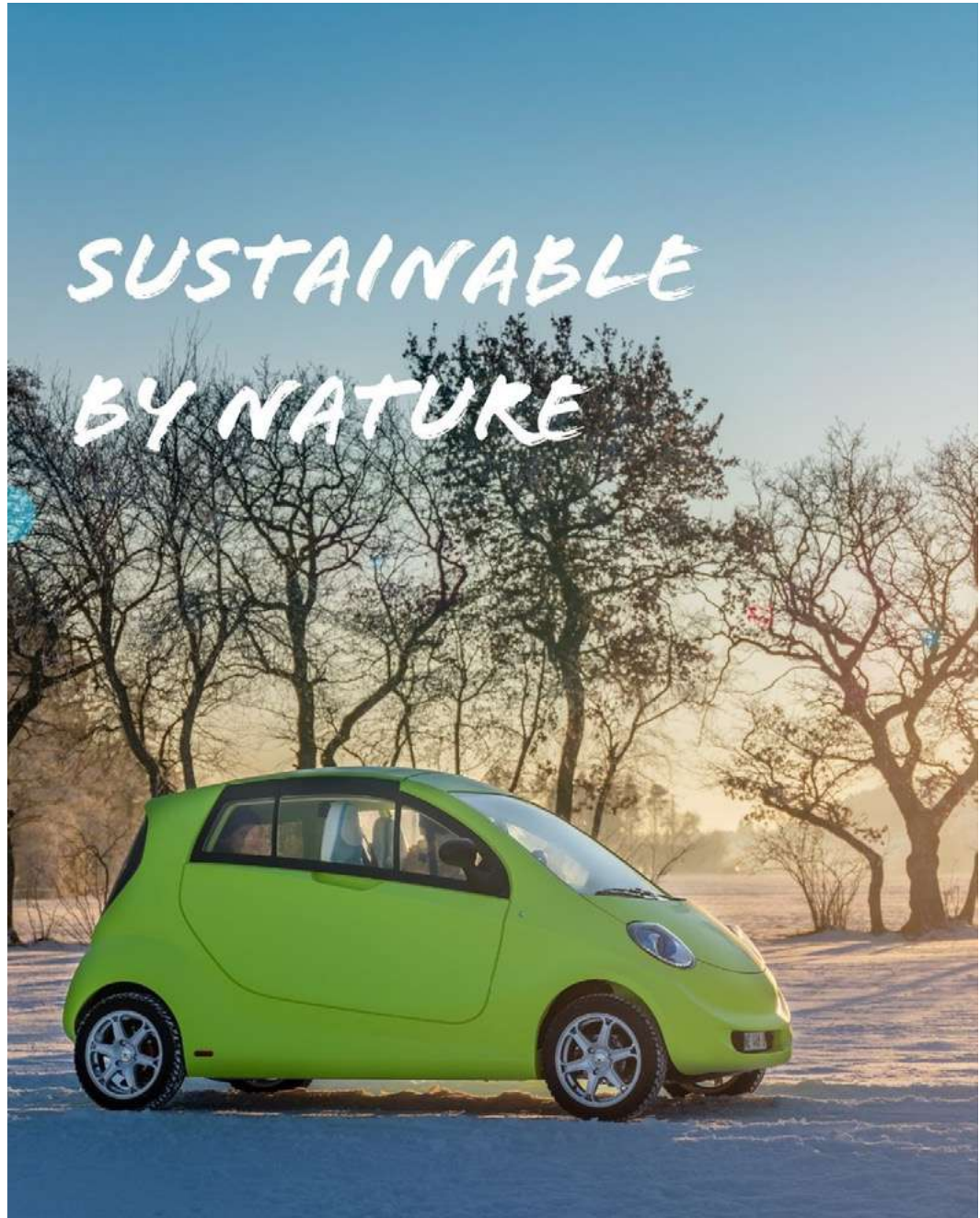
Softcar recently unveiled a new innovative electric car that aims to transform urban mobility. This vehicle, designed to be eco-friendly and practical, has already debuted in Switzerland and is expected to hit the market by the end of 2025.

The interior and exterior of the body are rotationally molded with a revolutionary polymer, in a single piece: this principle allows to drastically reduce the number of parts and increase the moment of inertia of the body in the event of an accident. In combination with the chassis, it allows to create a lightweight and recyclable architecture.

This model stands out for its lightweight and resistant design, made with recyclable materials. With a total weight of just 642 kg, Softcar offers a one-piece polymer body weighing just 60 kg, developed in collaboration with Total, which guarantees durability and ease of replacement.

The vehicle consumes just 8 kWh per 100 km and has a range of 200 km thanks to its 15 kWh battery. It also features fast charging, no small feat considering the segment, and takes just 2.5 hours to fully charge.

www.softcar.com



> With a power output of around 20 CV and a top speed of 90 km/h, this quadricycle is suitable for both urban use and short journeys outside urban areas.



LEF
A three-wheel vehicle for a new urban mobility

production EV Mobility - Netherlands
design: Erik Vegt, Dave Goudekot - Netherlands

LEF is a vehicle that offers an elegant solution for short trips designed to evolve mobility in urban and suburban areas. The Dutch three-wheeler features a cocoon-like interior designed to comfortably accommodate a passenger. A transparent canopy ensures that the occupant is protected from the elements, while the three 10Ah lithium-iron batteries promise a maximum range of 90 kilometres per charge. The LEF can reach a maximum speed of 25 km, making it a perfect personal mobility machine for city dwellers. The main body is rotomoulded in recyclable polyethylene. Inside, the driver can keep an eye on speed, battery status and kilometres travelled thanks to a digital display. There are LED lights on the front and rear, a USB port for charging smartphones and enough space to store a 50-litre bag, groceries and other items. Designer Erik Vegt was inspired to create the LEF because he wanted to provide people with a personal mobility option that consumed less money, energy and resources. After three years of development, the product was approved by the RDW and the Ministry of Infrastructure and Water Management.

www.evmobility.nl

> A cocooned cockpit designed to comfortably accommodate one passenger



Pinguino
The mini-revolution in
ice resurfacing

production Wm Technics, Italy

With its compact size and agility, the Pinguino delivers perfect ice conditions for events and mobile rinks with surfaces up to 800 m² / 8,600 ft². Whether sporting events or ice skating on a mobile rink, the nimble Pinguino makes cleaning and maintaining smaller ice surfaces effortless. This innovative, compact ice resurfer (3 meters / 10 feet long, 2 meters / 6.5 feet high) matches the performance of its larger counterparts, planing ice with impressive efficiency and delivering exceptional ice quality. Its front-facing driver's seat is a standout feature, offering a clear 360° view and making operations significantly more accessible, even for less experienced users. The external structure and water tank are characterised by rotomoulded elements designed to optimise the footprint and create a functional and aesthetically pleasing design. With its modern design, top-quality construction, and ease of maintenance, resurfacing mobile ice rinks looks an innovatice multiuse vehicle.

www.wm-technics.com



> The front seating position provides a complete field of view, better peripheral vision, and easier maneuvering. This enhances safety for people, the machine, and the sports facility.

LC1 Water Bike
Redesigning the bicycle through rotational moulding

design Clandestine Design Group - Australia

The LC1's frame is primarily constructed from two identical polymer frame halves that are bolted tother around a Seat / Crank Post and the Head Set Support bracket. These frame halves are designed to be rotationally moulded from plastic with composite fibres and minerals added for structural and thermal integrity.

By innovatively designing a hollow moulded twin shell frame, CDG has created a large capacity yet structural reservoir which facilitates the convenient transportation of ~15 litres (kids frame) to ~30 litres (adult frame) of water.

Regardless if western customers use the LC1's water carrying capacity they will still benefit from the bicycles unique style, lightweight and supple ride comfort.

www.clandestinedesigngroup.com



> A hollow rotomoulded twin shell frame

> Transportation of ~15 litres (kids frame) to ~30 litres (adult frame) of water



3. Urban Furniture



Introduction

Rotational moulding is making its way into new and unexpected applications. We are only just beginning to scratch the surface of what is possible with this innovative technology. In the street furniture sector, rotational moulding is playing an increasingly key role in renewing products for pedestrian and green areas. In particular, the integration of new technologies such as solar panels and LED sources makes it possible to create new products that can be powered by clean energy, are resistant to interference and are highly aesthetically recognisable.

AD-Bloc
Modular plastic parklet system

production Armoulding, New Zealand
design Interboro, USA

Parklets are sidewalk extensions which occupy parking spaces, creating community spaces to hang out on, much like front porches or stoops. The Boston Department of Transportation hired design firm Interboro to design a modular system for urban areas, creating two of Boston's first parklets. To meet the city's requirement that the parklet be lightweight, inexpensive, and flexible, Interboro designed the Ad-bloc, a durable, easy-to-install, easy-to-maintain, and connectable plastic block. Ad-blocs are rotomolded, highly durable, and can be filled with water to make them heavy and stable. Ad-blocs can be arranged in a variety of configurations: they can be placed side by side, perpendicularly, or stacked, to create a variety of seating areas. A stool, which also serves as a planter, acts as an interlocking peg to hold the blocks together. Cylindrical voids in the blocks can be used to accommodate standard-sized planters.

www.armoulding.co.nz



>The openings for plugs are designed to fit standard nursery pots. The plugs are hollow and open along one side.

GiraGlob
A new concept of urban furniture

design Lgop, New Zealand
production GiraGlob, New Zealand
moulding Galloway, New Zealand

The GiraGlob is a semi-enclosed, multifunctional, spherical shelter featuring a 360-degree turning mechanism. The GiraGlob is rotationally molded in high-density copolymer (HDPE) in 3 design units. It is then bespoke assembled & finished.
Openings for windows, vents, solar panels and light fittings are cut out of GiraGlob Shell. The GiraGlob's internal turning mechanism is specifically engineered to turn slowly without gaining momentum & speed. It is rotatable by either turning the dial in the center of GiraGlob Table or pushing GiraGlob Shell from the outside. GiraGlob Bench-Seat sits 8 people comfortably.
GiraGlob is flexible for numerous social needs. The 3 design units of the GiraGlob allow a multitude of options, depending on how they are assembled are ideal for creating customized GiraGlobs.
Building on Joseph Beuys's concept, GiraGlob aims to initiate interconnected, compassionate, & thoughtful global communities through a hybrid of art and design. Stand-alone or in groupings GiraGlobs create accessible, safe, free, informal and engaging social spaces to meet, share and connect.

www.giraglobe.co.nz



> The structure is entirely rotomoulded while the outer shell is decorated with a series of graphics applied to the surface.



5. Wellness



Introduction

Personal care and wellbeing today represent activities that create new products specifically designed to improve the quality of life. From this point of view, rotational moulding, thanks to its intrinsic production flexibility capable of producing articulated and complex shapes, plays a very important role.

New types of products are establishing themselves in the world of bathrooms, wellness centres, and tourist resorts where comfort merges with quality.

KolKol
Wood-fired hot tub

production Kolkol - South Africa

A Kolkol hot tub is a beautifully crafted, eco-friendly wood-fired tub designed to bring a touch of contemporary luxury to any outdoor setting. Made through rotational moulding using high-quality polymer, Kolkol tubs offer a natural, off-the-grid relaxation experience, with no electricity needed—just wood and water. These tubs feature a compact design with molded seating for comfort, making them perfect for small spaces while comfortably accommodating multiple bathers.

With their smooth, minimalist exterior and warm wooden finish, Kolkol hot tubs seamlessly blend into gardens, patios, or glamping sites, providing a relaxing, authentic connection to nature.

www.kolkoltubs.com



> The particular wavy shape of the rotomolded tub gives rigidity to the structure, which does not deform when filled with water.

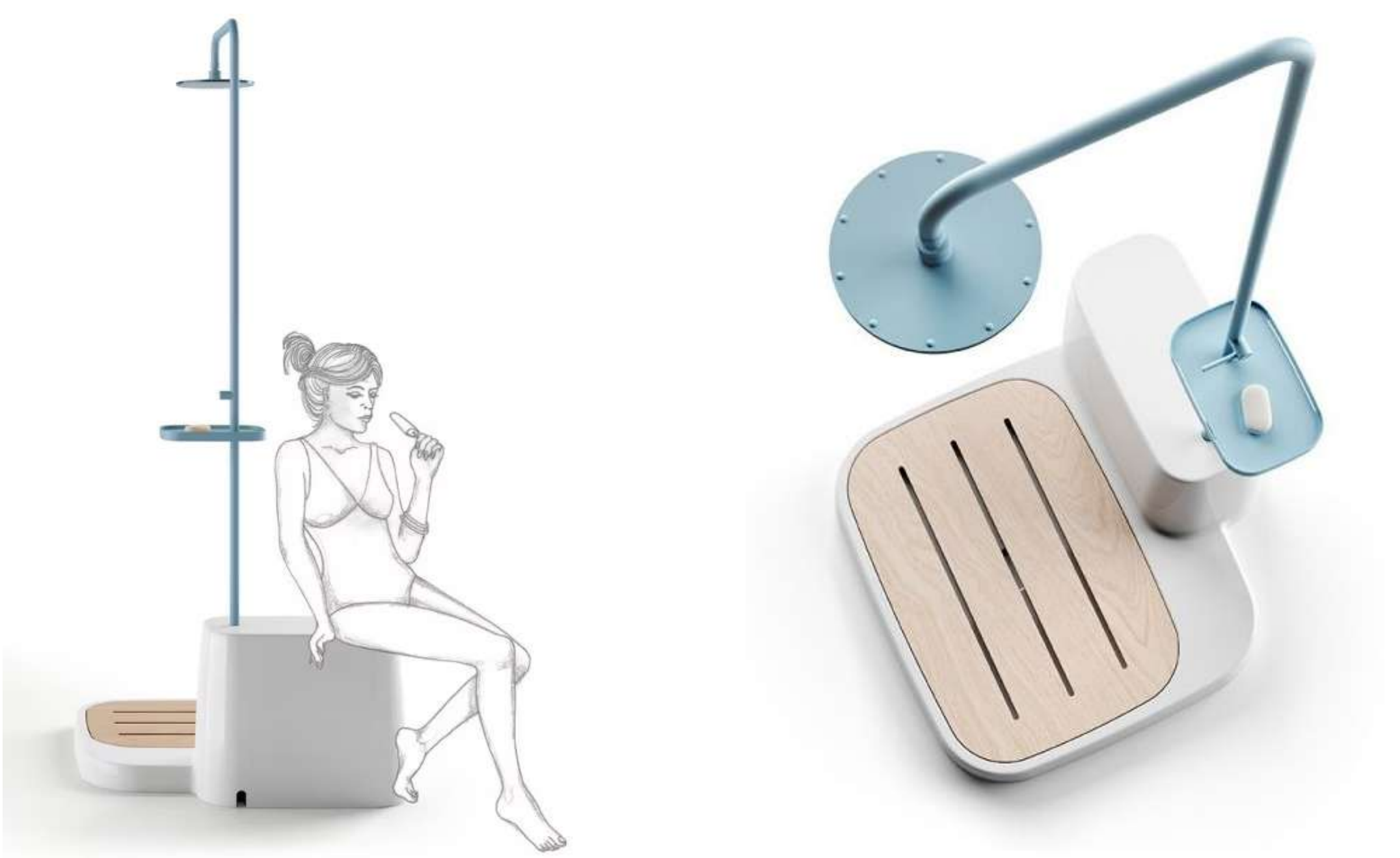
Istà Shower

Free standing outdoor shower

design JoeVelluto, Italy
production Lineabeta, Italy

Designed by the JoeVelluto studio to refresh during hot summer days, Istà is an outdoor furniture item ideal for the summer outdoors. Produced by Lineabeta, it is an outdoor shower with an original design, made with a painted metal pole (available in different colours) and a rotomoulded base integrated with a supporting surface that can also be used as a seat. Developed to be versatile and functional for various types of spaces and needs, it can be conveniently connected to a garden hose for freer and more mobile use, or directly to a traditional plumbing system.

www.samo.it33



> *The shower is connected to a standard water hose while the base is completed with a wooden insert.*

Fly and Maya
Backwash Units

production Gharieni, Germany

With almost 30 years of experience, Gharieni Group is one of the world's leading manufacturers of high-quality treatment tables and equipment for spa, beauty & wellness.

Recognized by the industry as a prominent and prestigious manufacturer of professional grade products, it has led to sustained dynamic growth.

Its innovative concepts and designs have been greatly acknowledged and rewarded with awards and prizes.

Fly and Cocoon are new timeless, modern wash units that invite to relaxation. The collection has been designed as a must: new products with right combination of comfort and technology, a modern and elegant chair with rotomolded main structure.

Fly shows a removable cushion for the lumbar region comfort, a new vertical adjustment through back-lit navigator and a romotoulded base for best position of the back.

Maya has a comfortable seat with horizontal topstitching and a roundshape station which is a real added-value for salons. The base is made through rotomoulding.

www.gharieni.com



> Fly Backwash Unit



> Maya Backwash Unit

P!LL
Smart vertical bathroom unit

production Viglacera Trading JSC, Vietnam
design Sara Zama, Mirko Lorenzini, and
Nilo Gioacchini, Italy

P!LL incorporates all essential bathroom functions into a small footprint. This enables it to be used in previously unexplored areas, such as residential renovations and offices, or anywhere limited by spatial constraints. All of its primary functions can be fulfilled when it is combined with a shower tray.
Metamorphosis is the word that comes to mind to describe P!LL. The toilet has the option of including an electronic bidet (like an intelligent toilet). The washbasin is equipped with removable taps that facilitates toilet cleaning. The repositionable board transforms the sink into a washboard. The storage container, made by rotomoulding, is available in a wide range of colours.

www.viglaceratrading.vn



> The rotomoulded storage container can rotate 180° allowing multiple configurations.



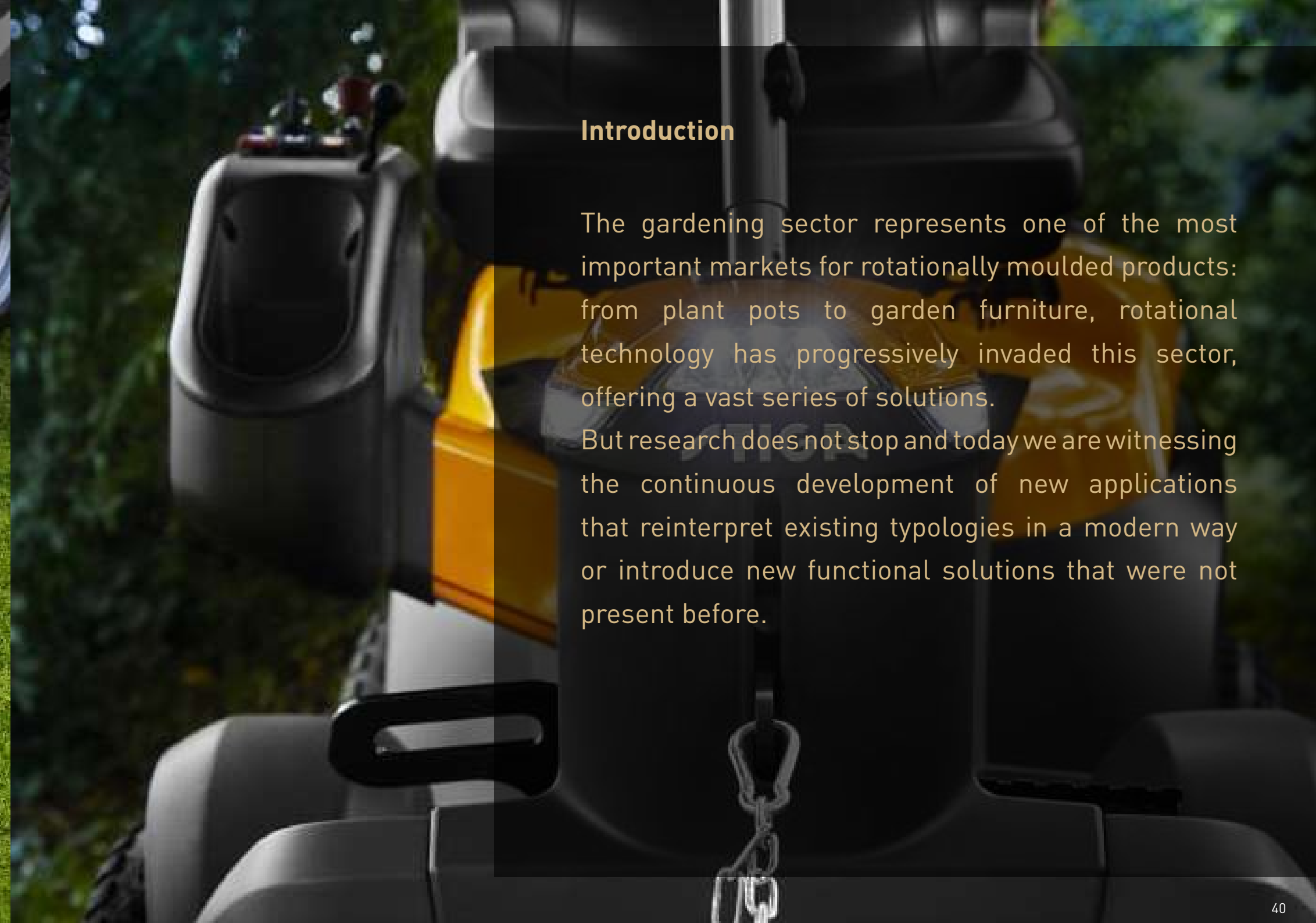
6. Gardening



Introduction

The gardening sector represents one of the most important markets for rotationally moulded products: from plant pots to garden furniture, rotational technology has progressively invaded this sector, offering a vast series of solutions.

But research does not stop and today we are witnessing the continuous development of new applications that reinterpret existing typologies in a modern way or introduce new functional solutions that were not present before.



Park 900 WX
Petrol-powered front lawn tractor

design Delineo, Italy
production Stiga, Italy

The Park 900 WX front lawn tractor offers maximum power with minimum effort, thanks to its 635 cc twin-cylinder STIGA ST 650 engine for professional performance, its Tuff Torq all-wheel-drive hydraulic transmission and its 50:50 articulated steering which is easy and light to manoeuvre. The height-adjustable front deck offers a wide choice of cutting widths, from 95 cm to 125 cm. The result? Increased tractor speed, a more comfortable ride on uneven surfaces, improved front visibility, easier access to corners and precise cutting along edges.
Park is part of a new series of front-mounted ride-on mowers designed for Stiga, designed in every detail to guarantee a professional experience for any user. Delineo design has redesigned a product with a lot of history behind it, renewing it according to the new company guidelines.

www.stiga.com



> The front deck of the Park 900 WX allows you to set the cutting width between 95 cm and 125 cm, thus working at speed and ensuring excellent front visibility and better access to corners.

K-Line
Flexible pipe and sprinkler pod
system

production RXP, New Zealand

K-Line is a flexible and innovative pipe and rotomoulded sprinkler pod system that delivers cost effective, water efficient irrigation, effluent dispersal and dust suppression across multiple applications. K-Line is ideal for farms unsuited to centre pivot travelling irrigators, land areas of unusual shape, lifestyle blocks, sports fields, construction sites and family homes.

The system is capable of operating in almost any environment, in areas where traditional solid-set, centre pivot or travelling irrigators would struggle including land with an unusual shape or steep slope or in sites where they're not practical, such as construction zones or home gardens.

www.rxp.co.nz



> *The single pod easily connects to the regular garden hose and can be adjusted for part circle or full circle irrigation.*

Chiara Pots

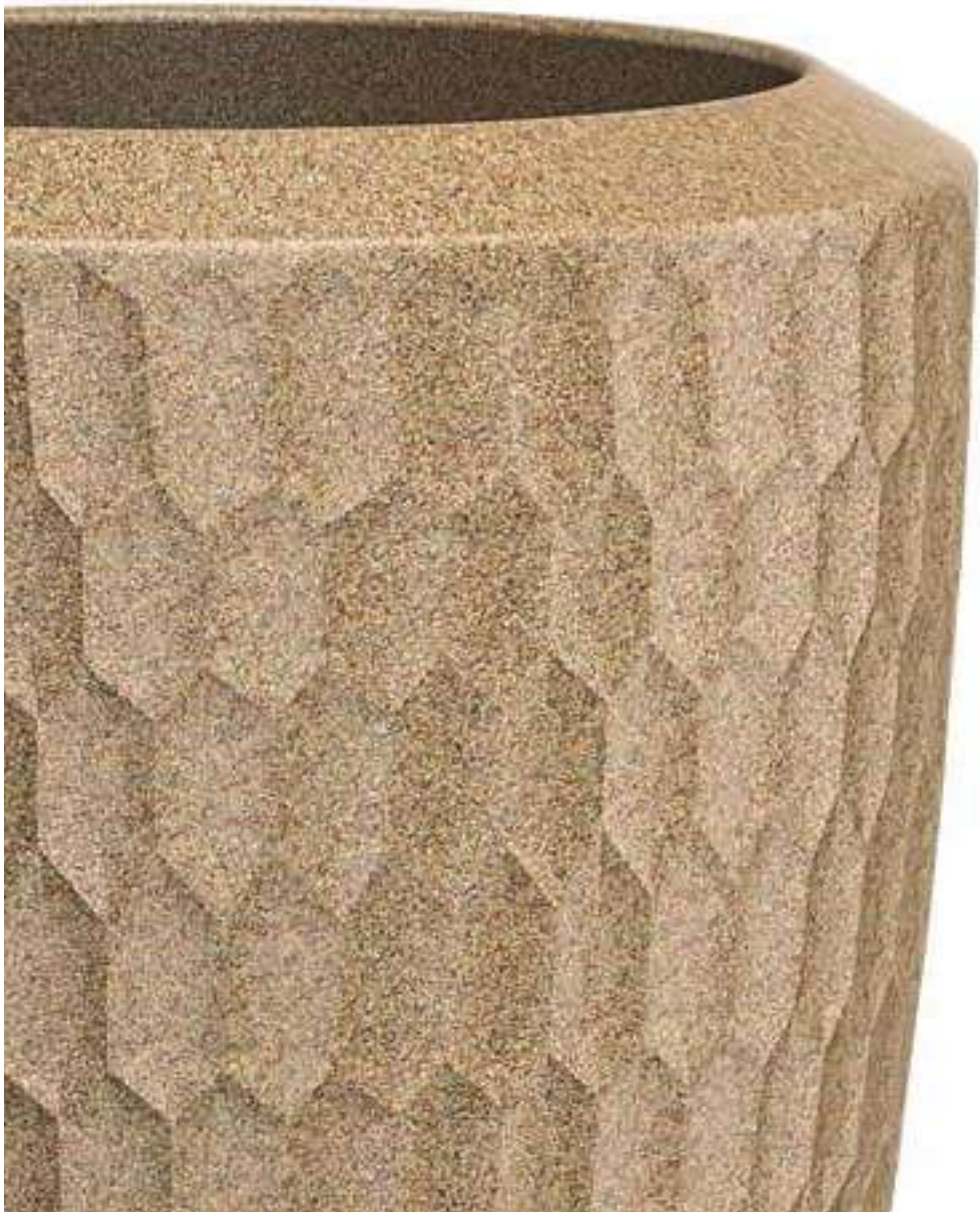
A collection of textured vases
with hexagonal motifs

production Sereno, India
moulding Frontier Polymers, India

Vases, lamps and furnishing elements in the Sereno collection are characterized by three-dimensional surfaces where volumes and textures give a sophisticated and complex image to the products. Through the play of shadows and lights produced by the internal lighting, the surface texture of the rotomoulded object acquires strength and depth. They are as beautiful to the touch as they are to the eye due to the tactile perception they generate.

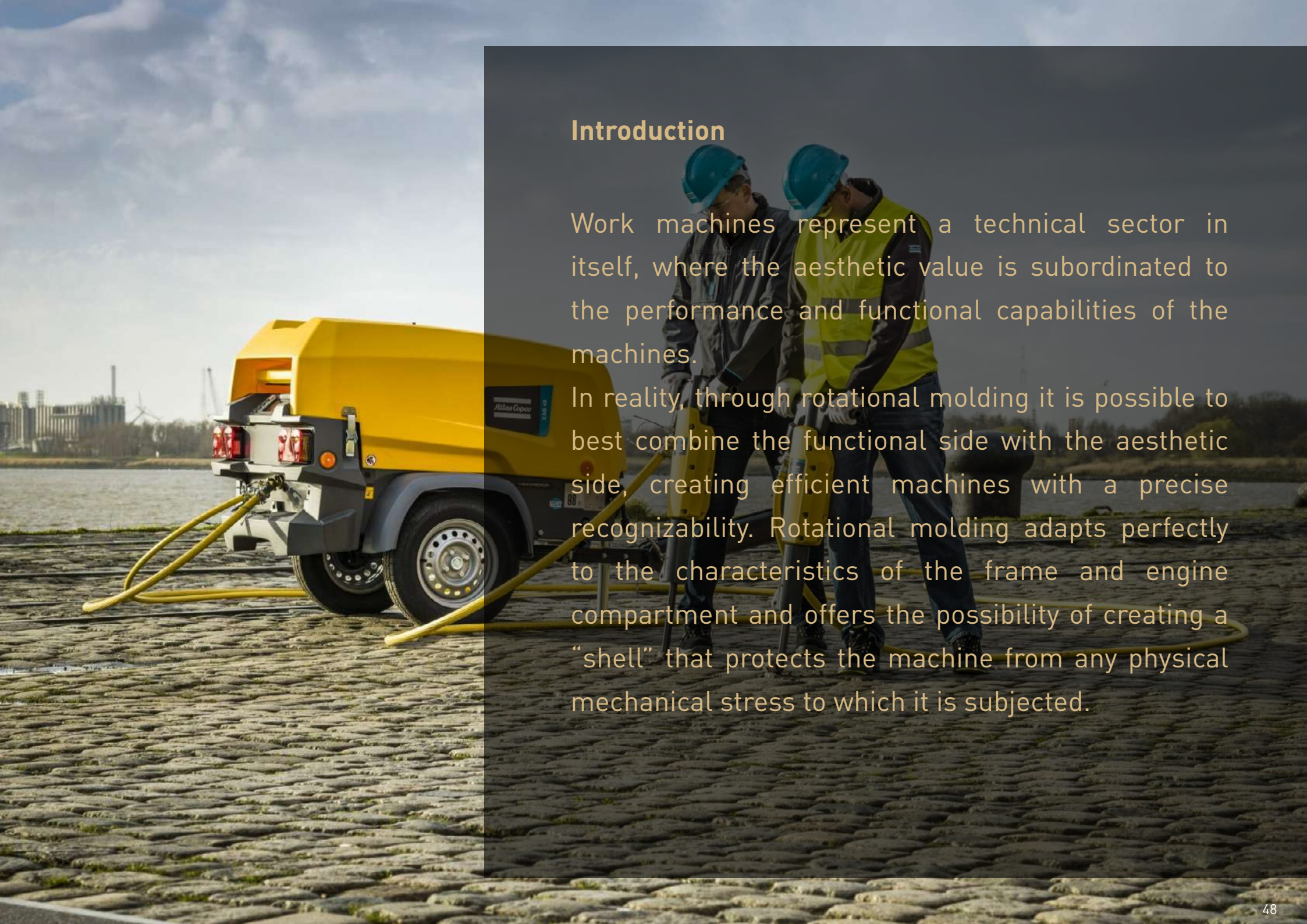
Rotomolding hollow bodies using quality polymers reduces the thickness of the walls to a minimum while ensuring the necessary strength. You can obtain large and medium-sized products with a reduced weight, making them easier to move and transport.

www.sereno.co.in



> Plant pots manufactured by Frontier Polymers are made from engineered polymer resin that resists breakage.

7. Work Machines



Introduction

Work machines represent a technical sector in itself, where the aesthetic value is subordinated to the performance and functional capabilities of the machines.

In reality, through rotational molding it is possible to best combine the functional side with the aesthetic side, creating efficient machines with a precise recognizability. Rotational molding adapts perfectly to the characteristics of the frame and engine compartment and offers the possibility of creating a “shell” that protects the machine from any physical mechanical stress to which it is subjected.

Hardhat Air Compressors

Air compressors compliant with Stage V standards

production Atlas Copco, USA

The Hardhat compressor features a rotomoulded linear medium density polyethylene (PE) canopy.

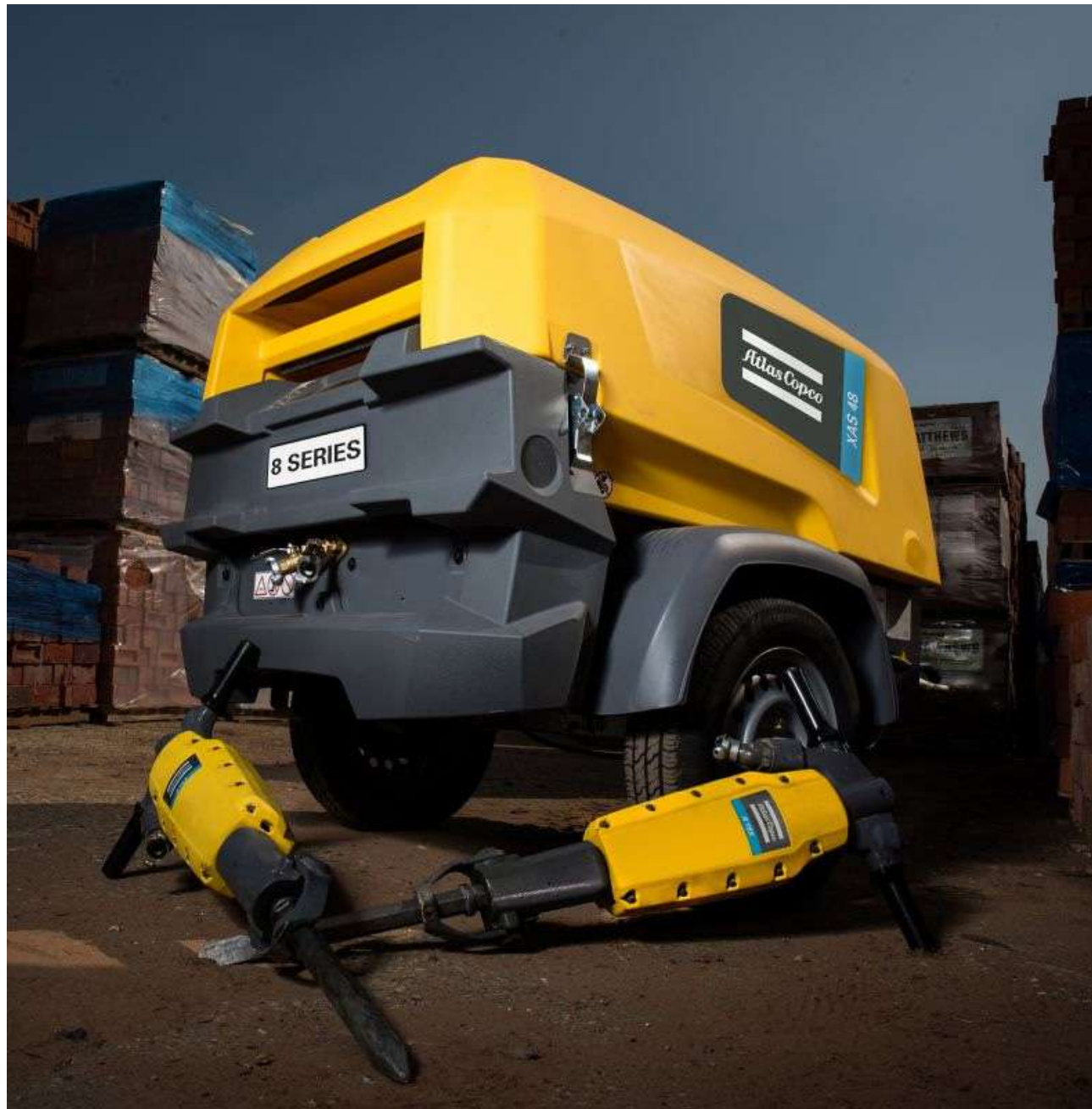
The integrated generator increases efficiency on site as there is no need to roll in a generator for small power needs. In addition, these compressors are easy to lift, transport and maneuver.

None of these known and appreciated 8 series benefits have been sacrificed with the introduction of Stage V. Atlas Copco introduced the HardHat enclosure in 2005 and has progressively evolved it to guarantee a series of high performances for its products, applying it to both compressors and light towers.

Depending on the individual application, you may need greater strength, durability or resistance. For this reason, the HardHat rotomoulded solution allows to obtain a product that is extremely more resistant to impacts and mechanical stress compared to similar products made of sheet metal.

Thanks to the use of plastic instead of metal, the HardHat canopy is corrosion-resistant, lightweight, crack-resistant, environmentally friendly and able to best meet the demanding demands of construction site use.

www.atlascopco.com



> PE protection for increased reliability and resale value, service in under an hour for increased uptime.

PPS 1224

Mobile Booster

production Kunzer, Germany

The PPS 1224 wheeled model delivers 2640CA at 24V and is suitable for heavy and repeated use by industrial body shops, the rescue fleet and large transport companies, on cars and vans of any engine capacity and on industrial vehicles with completely discharged batteries. even in cold temperature conditions

The booster has a structure composed of a rotationally moulded body and equipped with a large upper handle that facilitates gripping and moving. This booster features flat freewheels making it the perfect tool for workshops, depots and car parks. The wheels provide easy mobility on the most difficult terrain.

The Propulstation® system allows you to obtain an optimal charge and avoids irreversible sulfation of the internal parts of the battery extending the life of the unit. With the Propulstation® system there is a LED signal that indicates the voltage to select on the booster. Reduces the risk of misuse when using a 12/24V booster. In case of misuse any gas concentration is evacuated.

www.kunzer.de



> The particular shape of the rotomoulded handle allows you to position the cables for the electrical connections.



Go-Box 70
Road and garden maintenance

production Cemo - Germany

Go-Box 70 is born from the idea of creating a useful mobile container to contain salt, grit and various materials during road and garden maintenance work. Go-Box 70 is rotomolded in polyethylene, resistant to atmospheric agents and composed of a container with handle, a folding lid and rubber wheels. It is 100% recyclable and is equipped with a separator accessory to divide the internal compartment. The angled lid for water drainage, the eccentric stainless steel closure and an ergonomic and easy-to-use handle represent the key details that allow this product to be particularly useful and functional.

www.cemo-group.com



> *Locking lid for loading and unloading rotomoulded of resistant and recyclable polyethylene.*

BC 341
Evaporative cooler

production Dantherm Group - Denmark
rotomoulding Moulding Service - Italy

BC 341 represents the new portable air cooling with integrated UV light that removes any risk of virus and bacteria disinfection. With its minimal energy consumption, the BC 341 is ideal for cooling of areas up to 400m2 that are unfit for traditional A/C.

The heart of the evaporative cooling system is the cooling pad where the water evaporates and the air passing through the pads is cooled. Evaporative cooling pads are manufactured from fluted cellulose sheets that are glued together. The material is chemically impregnated with special compounds to prevent rot and ensure a long service life and easy maintenance.

A given volume of air at a certain temperature and pressure is capable of absorbing and holding a certain amount of water vapour. If that volume of air contains 50% of the moisture it is capable of holding, it means that is at 50% relative humidity.

The main constructive innovation consists in the realization of the external body through rotational molding: compared to many other models on the market made of metal sheet, BC 341 maintains a strong and impact-resistant structure.

The cooler is able to increase humidity by 2 to 5%, depending on temperature and humidity in the environment you want to cool.

www.danthermgroup.com



> Gigantic cooling pads



> Simple water selection



> Non-stop water



> The cooler is suitable for many uses in different industrial fields as automotive, building, general industry and production, military and aerospace, events and temporary structures

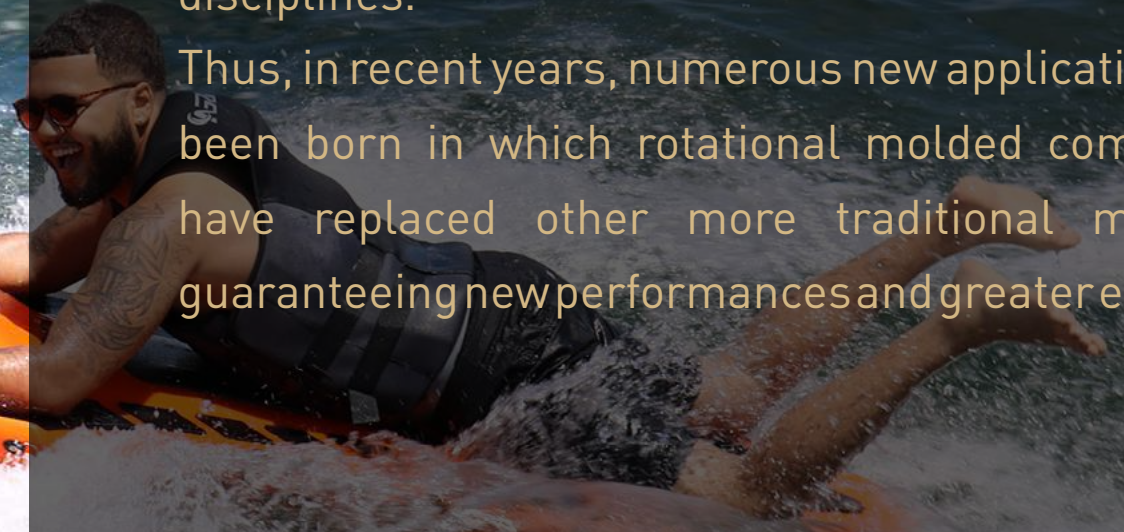
8. Sport



Introduction

Thanks to the possibility of creating hollow components with a high resistance to stress, rotational molding represents an ideal technology for reinterpreting in a contemporary way many equipment of different sports disciplines.

Thus, in recent years, numerous new applications have been born in which rotational molded components have replaced other more traditional materials, guaranteeing new performances and greater efficiency.



Kymera

Electric surfboard to run freely
on the water

production Kymera, USA
design Jason Woods, USA

The Kymera Body Board is the perfect watercraft for a great fun day on the lake! The Award-winning Kymera Body Board is the World's First Electric Body Board. Powered by our lithium ion battery, the Kymera Body Board offers an eco-friendly alternative to those who don't want the hassle, noise or expense of a bulky heavy jet ski.

The Kymera's v-hull cuts through water with ease, and the shape of the hull makes fins unnecessary, improving safety and ease of transport.

Invented by Jason Woods, is the Kymera Body Board, the world's first line of electric jet body boards. The Kymera rotomoulded body board is capable of reaching speeds up to 25 miles per hour, and is lightweight at about 35 pounds making it easy to transport to the water by one person. Which means, you can get into the water and start the fun with no need for a ramp. A 1,000-watt RMS brushless motor propels it and the battery alots for an average 1 hour running time before a charge is needed. With an intuitive leaning steering mechanism with throttle control at the handle, it is easy for the individual to hop on, laydown and jet away.

www.kymera.com



> Kymera is the next evolution in personal electric-powered sports.



Ecokart SeaU

A trimaran with water jet propulsion

production EcoConcept Marine - France

EcoConcept Marine is a company based in Sarthe at La Ferté-Bernard. It develops and manufactures small crafts for the river and maritime sectors, equipped with innovative propulsion. Its main objective is to offer a new alternative to tourism and leisure professionals. For EcoConcept Marine, Ecology is not only the use of electrical energy, but is an integral part of the manufacturing process. The recyclability of the materials used is for us a decisive factor in addressing environmental issues. These concerns are reflected at every stage of our manufacturing process. Ecokart SeaU is a rotomoulded trimaran equipped with water jet electric propulsion Eco marine concept maintenance free, designed for one person, this boat will suit everyone. The structure is rotomoulded in polypropylene to ensure excellent resistance to shocks and stresses. The floats are interchangeable and can be dismantled in 2 minutes.

www.ecoconceptmarine.com



9. Climate Change

Introduction

The ongoing climate changes pose new fundamental challenges to humanity and, at the same time, represent an extraordinary opportunity to rethink the logic through which man exploits the environment and impacts the ecosystem.

Thanks to its intrinsic flexibility of use, rotational technology represents a valid tool through which to create new solutions to contain the advance of the seas or contribute to removing the gigantic quantities of waste accumulated in the oceans. Or creating valid solutions to protect things and people during the violent action of hurricanes.

Anti Erosion System
Modular elements to stop coastal erosion

production Teti - Italy
rotomoulding Moulding Service - Italy

Teti is an innovative company born with the aim of exploiting an exclusive patent conceived by the same administrator, capable of intervening on the coastal erosion of the beaches which are a natural asset for everyone and an instrumental asset for operators in the bathing sector. This ideation has the ability to completely reverse the erosion process up to a nourishment of the beaches in simple, economic, natural terms and within the reach of operators in the sector.

Contrary to traditional systems, the shape of the rotomoulded element facilitates the flow and advancement of the wave while hindering its outflow, resulting in a barrier to the removal of sand and granules from the surface layers of the beach lapped by the waves and, moreover, braking its flow, forces the suspensions contained in the starting wave to decant, acting as a sedimentary trap.

The entire system is composed of elements which, in addition to their operational value, combine the possibility of being easily installed during the winter period and removed during the bathing period without the aid of mechanical handling equipment, either by land or by sea. The flexibility of the module allows it to be allocated and adapted to any geographical area.

www.tetisrl.org



> *The system is able to decant the suspended sand contained in the wave, making it deposit on the same shore line, giving rise to the nourishment phenomenon.*

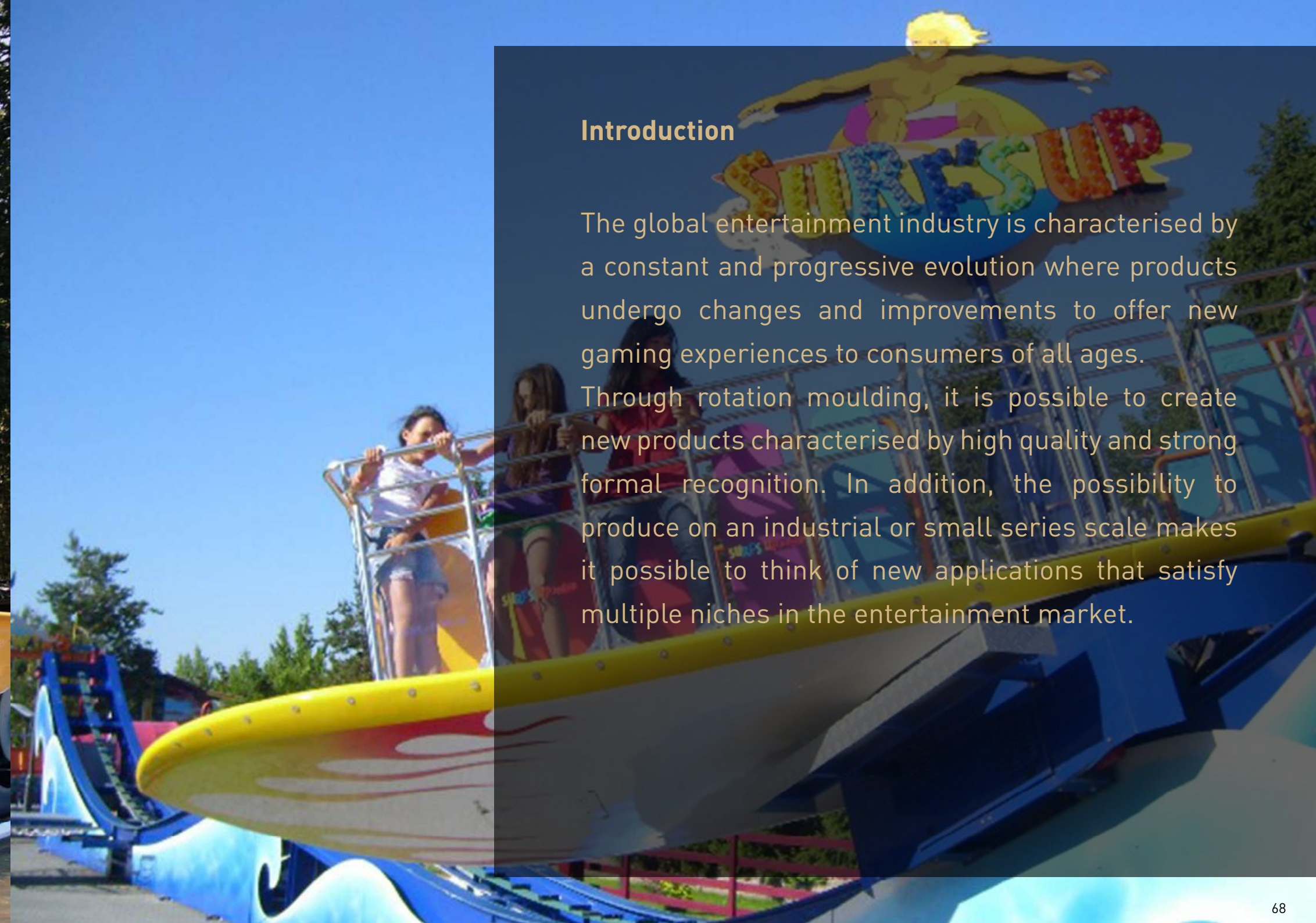
10. Entertainment



Introduction

The global entertainment industry is characterised by a constant and progressive evolution where products undergo changes and improvements to offer new gaming experiences to consumers of all ages.

Through rotation moulding, it is possible to create new products characterised by high quality and strong formal recognition. In addition, the possibility to produce on an industrial or small series scale makes it possible to think of new applications that satisfy multiple niches in the entertainment market.



Surf's Up

A wave of excitement

production Zamperla, Italy
moulds: XMTech, Italy

Zamperla Group is a premier worldwide leader in amusement ride manufacturing. With a rich history, the company is driven by a relentless passion for innovation, introducing new technologies and materials, continuously striving to deliver ever-more immersive and inclusive experiences. Surf's Up features a large painted surfboard that rotates continuously, allowing passengers to "surf" along the waves of the track while standing. The stations where the participating public sits are designed with a particular rotomolded shape designed to protect the body during movements. These elements are positioned inside the carousel and are completed with a series of belts to ensure the necessary safety. The carousel consists of a giant painted surfboard that spins on itself. People stand up and surf while standing offers an unique interactivity.

www.zamperla.com



> The stations are rotomoulded in multiple colors to coordinate with the graphic image of the carousel.

Rocky
Rocking horse

production Magis, Italy
design: Marc Newson, Australia

Commissioned for Magis' Me Too range for children, Rocky is a modern take on a traditional object - a pop version taking its form loosely from medieval jousting horses. The parallelogram motion mimics the movement of a traditional rocking horse. It is made from rotationally moulded polyethylene chosen for both its durability and recyclability, and is in production by Magis.

www.magisdesign.com



Credits

Cover Pictures
courtesy Euro3Plast, Italy

Projects
Bahçesehir 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*

Arbos, *Italy*
Rototech, *Italy*
Roto Group, *Slovenia*
Same Tractors,, *Italy*
Ok Play, *India*
Softcar, *Switzerland*
Rotovia, *Iceland*
XM Tech, *Italy*
EV Mobility, *Netherlands*
WM Technics, *Italy*
Clandestine, *Australia*
Armoulding, *Australia*
Interboro, *USA*
Lgop, *New Zealand*
Giraglob, *New Zealand*
Kolkol, *South Africa*
LineaBeta, *Italy*
Joe Velluto, *Italy*
Viglacera Trading, *Vietnam*
Gharieni, *Germany*
Stiga, *Italy*
Delineo, *Italy*
RXP, *New Zealand*
Serenio, *India*
Frontier Polymers, *India*
Atlas Copco, *USA*
Kunzer, *Germany*
Cemo, *Germany*
Zamperla, *Italy*
Teti, *Italy*
Moulding Service, *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

