



SIMONA

Global Thermoplastic Solutions

Products and services

GLOBAL THERMOPLASTIC SOLUTIONS

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Your partner for innovative plastic solutions – any time, any place



SIMONA is acknowledged as one of the leading producers and development partners in the field of thermoplastics. We are able to offer you best-in-class solutions tailored to your applications: in the chemical processing industry, in the water and energy supply sector as well as in the field of environmental technology, mobility, construction and agriculture. What is more, our operations span the globe.

Our semi-finished products, piping systems and finished parts are designed to help meet key challenges of the future. A team of more than 1,400 SIMONA employees ensures that each application is matched up with the perfect material, while also being fully focused on developing superior solutions and providing the best technical support imaginable.

Our mission

Operating at a global level, we are acknowledged as a solutions provider for polymer-based applications. Our focus is on delivering customer value. Drawing on our advanced skills in process engineering, we offer first-class products together with the benefits of fast, efficient and reliable workflow. Our aim is to pursue growth on our own terms and remain independent.

Products in range

>35.000



SIMONA Product overview

Our strengths



Quality you can always rely on

SIMONA's pedigree of excellence when it comes to quality, reliability and precision spans more than 160 years. The key to best-in-class results: motivated employees and state-of-the-art technology.



Know-how that will help you advance

The focus at SIMONA is always on meeting customers' requirements and delivering value. As specialists within their field, our employees offer you far-reaching expertise in process engineering and the very best in technical support.



Diversity at its best

Boasting more than 35,000 items, SIMONA has a product range that is probably one of the most extensive worldwide. We use a wide selection of premium-quality materials to manufacture our products.



A company like a friend

At SIMONA, people make all the difference. SIMONA employees stand for professional expertise, conscientiousness and team spirit. The result: a motivated and loyal workforce that thrives on the close working relationships and indeed in many cases the friendships established with customers and business partners.

Always at your service

SIMONA has production plants in Europe, America and Asia. Operating with sales companies in 11 countries and a global network of dealers, we can ensure a fast, flexible and reliable service of delivery. It is thanks to this global presence and our first-class service that customers around the world can rest assured that our plastics solutions are ready for deployment whenever they need them.





SIMONA Produktion Kirn, DE

Products:

- Sheets
- Solid/hollow rods
- Profiles
- Welding rods

Processing methods:

- Monoextrusion, coextrusion, RAM extrusion
- Compression moulding
- Foaming
- Research and Development
- Technology centre

SIMONA UK Ltd.

SIMONA S.A.S.
FRANCE

SIMONA IBERICA
SEMIELABORADOS S.L.

SIMONA AG
SCHWEIZ

SIMONA S.r.l.
ITALIA

SIMONA
POLSKA Sp. z o.o.

SIMONA-PLASTICS CZ, s.r.o.

OOO "SIMONA RUS"



SIMONA Plast-Technik s.r.o., Litvinov, CZ

Products:

- Sheets
- Pipes
- Fittings

Processing methods:

- Extrusion
- Thermoforming
- Plastics workshop



SIMONA Produktion Ringsheim, DE

Products:

- Pipes
- Fittings
- Finished parts

Processing methods:

- Extrusion
- Coextrusion
- Injection moulding
- Machining
- Plastics workshop

SIMONA ENGINEERING PLASTICS
TRADING (SHANGHAI) CO. LTD.

SIMONA
FAR EAST
LIMITED
Hongkong

SIMONA INDIA
PRIVATE LIMITED



SIMONA ENGINEERING PLASTICS
(Guangdong) Co. Ltd., Jiangmen, CN

Products:

- Sheets
- Welding rods

Processing methods:

- Extrusion
- Coextrusion

Discovering the power of diversity

Our customers benefit from our ability to deliver superior technical solutions tailored to their specific markets. This applies not only to the process of refining existing plastic solutions but also to replacing materials used in the past with state-of-the-art plastic products.

From chemical tank and equipment engineering to the utilities sector and solutions used in the mining or advertising technology industry, the fields of application for our semi-finished parts and pipes could hardly be more diverse. Among the key benefits of our products are durability, simple processability and resistance to aggressive chemicals. SIMONA plastics help to make aircrafts lighter, chemical plants safer and piping systems more cost-effective.

One of our strengths is the ability to develop intelligent solutions in response to customer requirements. Drawing on their specialist expertise in many fields of application, our employees are committed to driving forward the company's product development activities. This allows us to align our product portfolio with market needs to the greatest extent possible.

Fields of application:

- Chemical process industry
- Agriculture and food industry
- Power, environmental engineering and resources
- Mobility and aviation
- Water management
- Leisure and health
- Construction and advertising
- Infrastructure

SIMONA City

Our products are contributing to people's well-being and quality of life in various fields of application. SIMONA City is designed to capture the spirit of diversity that infuses our portfolio of products. It is also to be seen as an invitation to our business partners to join us in expanding the horizons of plastics engineering around the globe. Discover SIMONA City and discover the versatility of SIMONA products:

 www.simona.de/applications





We love plastics. And our environment.

SIMONA is aware of its responsibilities towards people and the environment. Our products help to conserve resources by, for example, replacing heavier materials, enabling water treatment or reducing CO₂ emissions. For many decades now, we have been producing PVC sheets without any hazardous lead stabilisers. Additionally, more than 98% of the waste material produced as part of the manufacturing process is returned to the production cycle. As part of the “Zero Granulate Loss” industry initiative, we are also actively working against the loss of plastic granulate along the entire supply chain.

Our integrated quality, environmental and energy management system provides the basis for ongoing improvements to the quality of our products and processes, in addition to helping us optimise our energy footprint and reduce CO₂ emissions.



Our efforts to contribute to environmental protection are underlined by our successful environmental management, which is certified according to DIN EN ISO 14001. Our quality and energy management systems also meet the requirements of DIN EN ISO 9001 and DIN EN ISO 50001.



By participating in the “Zero Granulate Loss” initiative of pro-K Industrieverband Halbzeuge und Konsumprodukte aus Kunststoff e.V., we help to reduce the overall volume of plastic granulate discharged into our waste water or the environment. The initiative is part of the international “Operation Clean Sweep” programme, which is committed to the containment of granulate losses and marine litter.



We actively participate in an initiative by the name of “Energieeffizienz-Netzwerk der IHK Koblenz Süd” (Energy Efficiency Network of the Koblenz South Chamber of Industry and Commerce) and help to achieve the climate and energy policy goals of the Federal Republic of Germany.



We are an active member of VinylPlus, an organisation that focuses on improving sustainability within the PVC supply chain.

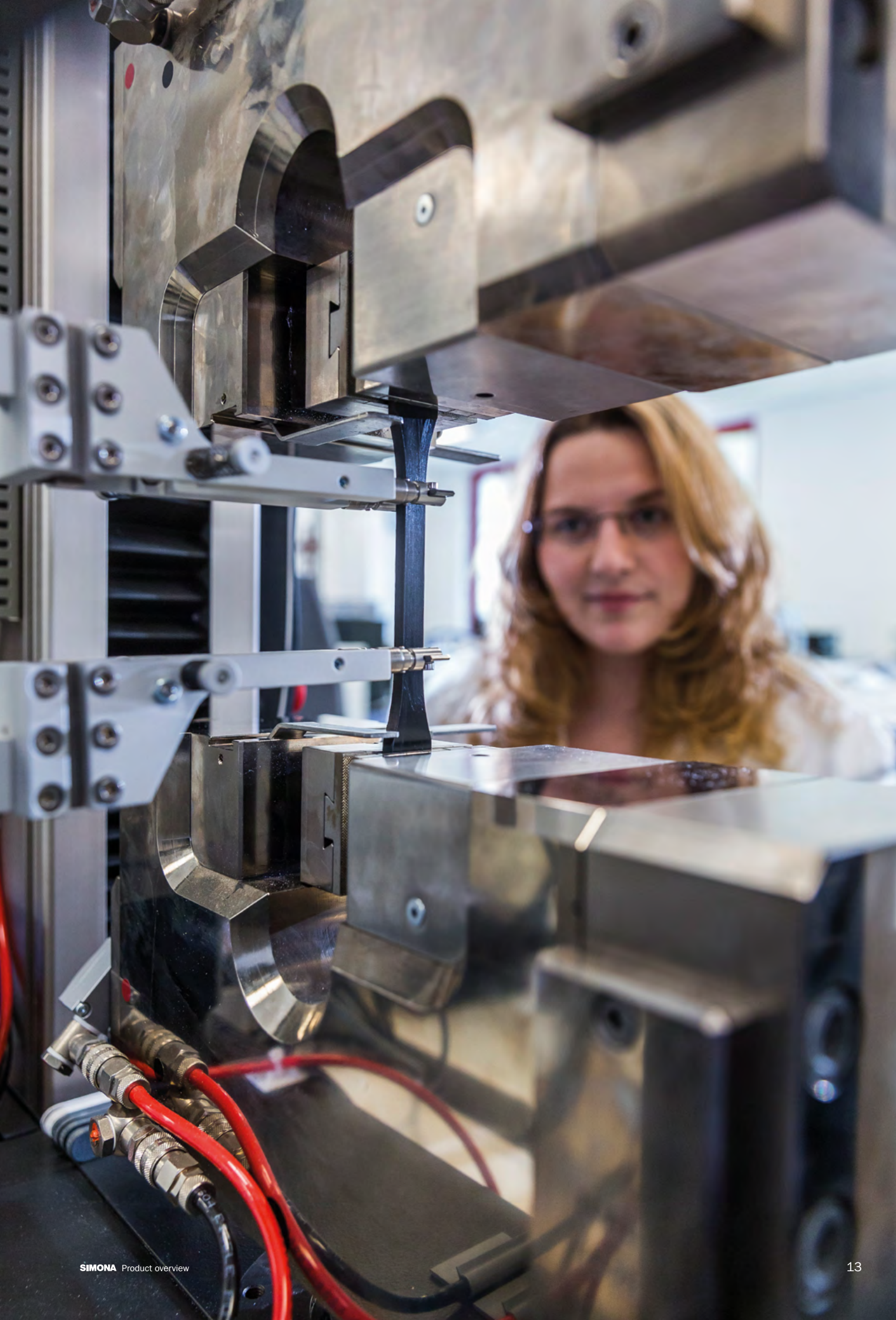




Percentage of plastic scrap returned to the
production cycle

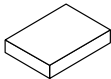
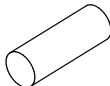
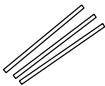
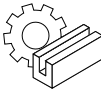
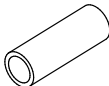
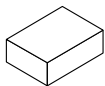
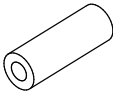
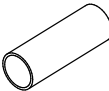
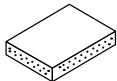
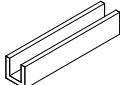
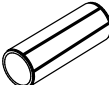
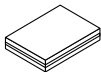
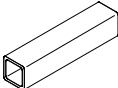

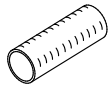



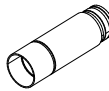

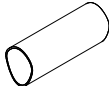
>98 %

Quality
you can always rely on



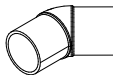


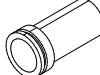



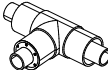







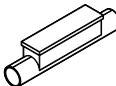













Best-in-class products for your fields of application

We have what you are looking for: when it comes to setting up and aligning our product range, delivering customer value is always our top priority. Thanks to the diversity, quality and sheer breadth of our product range, we are able to deliver perfect solutions for virtually any application.

SHEETS	RODS AND PROFILES	WELDING RODS	FINISHED PARTS	PIPES
 Extruded sheets	 Solid rods	 Welding rods	 Finished parts	 Pressure pipes
 Pressed sheets	 Hollow rods			 Sewer pipes
 Foamed sheets	 U-profiles			 Multilayer pipes
 Multilayer sheets	 Square pipes			 Double-containment pipes
 Cross-ribbed twin-wall sheets				 Drainage pipes
 Lengthways-ribbed twin-wall sheets				 Liner pipes
 TWS corner elements				 Interconnecting modules
				 Coils
				 Ovoid pipes

Plastics production per year (in tons)

+140.000

FITTINGS	DOUBLE-CONTAINMENT PIPE FITTINGS		CUSTOMISED FITTINGS	VALVES AND FLANGES
				
Elbows	Fixing points for pipe clamps	SIMODUAL² Bends	Connectors	Valves
				
Bends	Electrofusion sockets	SIMODUAL² Tees	Double sockets	Flanges
				
Stub flanges	Tapping saddles	SIMODUAL² Reducers	Pipe collar wall seals	
				
Tees, standard	External saddles	SIMODUAL² Electrofusion sockets	Inspection boxes	
				
Tees, reduced	Branches	SIMODUAL² Transition fittings	Shaft connections	
				
Reducers concentric		SIMODUAL² Spacers	Shaft liners	
				
Reducers eccentric		SIMODUAL² Fixing points	Coned flanges	
				
End caps		SIMODUAL² Leak adaptor pieces		
				
Adaptors		SIMODUAL² Fixing points for pipe clamps		

From all-rounder to high-performer

We rely on a wide selection of premium-quality materials of various specifications for the purpose of manufacturing our high-end products. Additionally, we use a range of special formulas in order to further enhance the properties of our products and open up new fields of application.



Material

Standard materials

- PE
- PP
- PVC, CPVC
- PETG
- PVDF
- ECTFE
- FEP
- PFA

Specialist materials

- ETFE
- EVA
- PC, PC/ASA
- PA 12
- TPO
- ABS
- PVC/Acrylic



Functional characteristics

- Antistatic
- Electrically conductive
- Anti-slip
- Low flammability
- Suitable for contact with foodstuffs
- UV-stabilised
- ...



**Your
product solution**

Expertise in production and processing

You can always rely on SIMONA's capabilities in process engineering: alongside single-layer mono-extrudates we also supply multilayer structures using the coextrusion method. Large-dimension tools are deployed to manufacture customized, injection-moulded products, while a range of mechanical processing methods involving CNC machining centres open up countless possibilities for the use of our products.



Our processing methods

- Monoextrusion, coextrusion or ram extrusion with up to 7 layers
- Pipe extrusion
- Sheet extrusion
- Profile extrusion
- Solid rod extrusion
- Hollow rod extrusion
- Extrusion of highly filled materials
- Injection moulding with shot weight of up to 205 kilogramme
- Multicomponent injection moulding with up to 2,700 tons clamping force
- Compression moulding of sheets
- Foaming
- Turning, milling, drilling, sawing, die-cutting
- Welding, bolting, incorporation of inserts, overmoulding
- Forming
- Laser and water-jet cutting
- Backings, surface activation, printing
- Plastics workshop for the manufacture of customised parts, shafts, fittings, ...

Know-how
that will help you advance



Solutions tailored to your requirements



Our customers benefit from customised solutions that help them compete successfully within the business arena. Thanks to our Technology Centre located at the company's headquarters in Kirn, we are able to focus fully on development projects with new materials and combinations of materials, thereby reducing time to market.

Customising is one of SIMONA's key strengths. Not only do we offer individually tailored formats, colours and dimensions, we also engineer customised properties in response to the growing variety of applications for plastics. What is more, we will take on any challenge you throw at us. Get in touch with our team and we will work with you to develop bespoke solutions for your projects.

SIMONA accessories service

Apart from offering customised product solutions, we also supply machines and accessories for the professional processing and welding of our products. This equipment is available for hire or sale:

- Welding machines and equipment
- Peeling and stripping machines
- Clamping tools
- Silicone heating mats
- Scrapers

Delivering expert advice



We offer a first-class support service around the globe. Our Technical Service Centre and Customer Service will offer you extensive advice and support from the initial project planning stage through to product and material selection. They can even assist you with issues relating to on-site applications engineering.

Our employees are experts within their field and have many years' experience in the production and processing of plastics. Be it tank and equipment construction, linings or piping system engineering, our specialists will assist you every step of the way when it comes to choosing suitable products and materials. They can also help you if you have questions regarding post-processing and product usage. It's all about delivering advice you can rely on.

Technical Service Centre:

Phone +49 (0) 67 52 14-587
tsc@simona.de

Customer Service:

Phone +49 (0) 67 52 14-926
sales@simona.de

Customer satisfaction with our advice relating to structural calculations*

96 %

* based on customer satisfaction analysis 2017

Information at the click of a button



Our website's download centre offers a wealth of information about our products and the materials used. Via the mySIMONA portal you will also have the chance to access other services, such as our SIMCHEM database.

Our digital planning tools

- SIMONA® SmartTank: software for the structural calculation of rectangular and cylindrical tanks
- SIMCHEM: online database with details of the chemical resistance of our materials
- Download function for technical parameters of fittings
- SIMONA online catalogue: overview of our product range with the option of comparing different materials and adding items to your personal list of favourites

 www.simona.de/products



Professional training by experts



SIMONA Academy is a highly professional and trusted partner when it comes to conveying specialist knowledge in the field of plastics engineering. As a customer and business partner, you always take centre stage: choose from our extensive portfolio of training courses or get in touch with us so that we can draw up a personalised training programme tailored to your specific requirements.

Our staff members assigned to our coaching team are faced with new technical challenges on a daily basis. Displaying a keen sense of commitment and motivation, they always have their finger on the pulse of things. You too will benefit from our training programmes.

 www.simona.de/academy

Number of people who have attended SIMONA Academy events

2.500

Diversity

at its best



PE

As a material, polyethylene (PE) is a true all-rounder when it comes to the construction of chemical tanks, systems and equipment. The black, UV-stabilised material offers the advantage of high impact strength even at low temperatures together with good corrosion resistance. It boasts excellent processing properties and is highly tolerant of chemicals.

Based on their molecular weight, high-density PE products are divided into three groups: PE 300 (e. g. PE-HD or PE 100, service temperature range from $-50\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$), PE 500 (service temperature range from $-100\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$) and PE 1000 (service temperature range from $-260\text{ }^{\circ}\text{C}$ to $+80\text{ }^{\circ}\text{C}$). The higher the molecular weight, the higher the abrasion resistance of the material.



Rehabilitation of a sewer using
SIMONA® PE 100 light grey ovoid pipes



Air scrubber made of SIMONA® PE 100
twin-wall sheets, pipes and fittings



Hull made of SIMONA® PE-HD

Types of material PE

Standard types

PE 100 natural	High heat stability, creep strength at 50 years, 20 °C, medium water = 10.0 MPa
PE 100 black	High heat stability, UV-stabilised, creep strength at 50 years, 20 °C, medium water = 10.0 MPa
PE 100 AR	High heat stability, with anti-slip surface on one side
PE 100 light blue	High heat stability, specially designed for the rehabilitation of drinking-water tanks, light blue
PE 100-SK	High heat stability, UV-stabilised, polyester-backed, black
PE 100 RC	High-heat stability, increased resistance to slow crack growth, UV-stabilised, creep strength at 50 years, 20 °C, medium water = 10.0 MPa, according to PAS 1075, black
PE-HD natural	High heat stability, natural
PE-HD black	High heat stability, UV-stabilised, black
PE FOAM	Closed-cell, coextruded polyethylene foam, UV-stabilised, embossed surface made of compact material, white
PE-EL	High heat stability, electrically conductive, black
PE 500	High molecular weight, high impact strength and abrasion resistance
PE 1000	Ultra-high molecular weight, high impact strength and wear resistance
PE 1000 AST	Ultra-high molecular weight, high impact strength and wear resistance, antistatic
PE 1000 superlining	Ultra-high molecular weight, mean molar mass > 9 million g/mol, high wear resistance, very good tribological properties
PE 55	Ultra-high molecular weight, with regrind, green and black
PE 46	PE with regrind, multicoloured

Special types


PE-UV	High heat stability, UV-stabilised, natural and coloured
PE-AS	High heat stability, antistatic, natural and coloured
PE-TF	Excellent thermoforming properties
PE embossed	High heat stability, with embossed surface on one side
PE-FL	High heat stability, flame retardant
PE-EL-SK	High heat stability, electrically conductive, polyester-backed, black
PE 500 UV	High molecular weight, high impact strength and abrasion resistance, UV-stabilised, pressed
PE 1000 UV	Ultra-high molecular weight, UV-stabilised
PE 1000 EL	Ultra-high molecular weight, electrically conductive
PE 100 AP	"Abrasion Protect", particularly wear-resistant
PE 100 FM	In accordance with FM 1613, for underground firefighting water pipes
PE-RT	"Raised Temperature", good creep strength even at high temperatures
PE-RD	"Resistance against Disinfectants", improved resistance to raised chlorine content in drinking water pipes

Range of semi-finished products PE

Dimensions in mm, unless otherwise stated

	SIMONA® PE 100 natural	SIMONA® PE 100 black	SIMONA® PE-HD natural	SIMONA® PE-HD black	SIMONA® PE FOAM	SIMONA® PE-EL ②	SIMONA® PE 500	SIMONA® PE 1000
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Extruded sheets (size | thickness)

	2000 x 1000	6 - 40	1 - 50	1 - 30	1 - 30	6 - 19	3 - 20	3 - 15	
	3000 x 1500	6 - 30	2 - 40	2 - 30	2 - 30		3 - 15	4 - 12	
	4000 x 2000	6 - 30	5 - 40	3 - 5	10 - 30				
	20000 x 1500		3 - 5 ①						
	Colours	□	■	□	■	□	■	□	


Pressed sheets (size | thickness)

	2000 x 1000		10 - 150	10 - 150			10 - 80	8 - 120	8 - 120
	3000 x 1250							8 - 80	8 - 80
	4120 x 2010		10 - 150	10 - 150					
	Colours		■	□			■	□ ■ ■	□ ■ ■


Cross-ribbed twin-wall sheets (size | thickness)

	2000 x 1000		30, 40						
	Colours		■						


Lengthways-ribbed twin-wall sheets (size | thickness)

	3000 x 1000		54, 58						
	Colours		■						

HKP corner elements 45° and 90° (length | thickness)

	1500		54, 58						
	2000		40						
	3000		54, 58						
	Colours		■						

Welding rods

	Types	○▽▽	○▽▽▽	○			○	○	
	Thicknesses	3 - 5	3 - 7	3 - 4			3 - 4	3 - 4	
	Colours	□	■	□			■	□	

The dimensions specified are standard dimensions. Other sizes, thicknesses, lengths, diameters and colours available on request.

① Also available as SIMONA® PE 100-SK polyester-backed; supplied on rolls

② Also available as SIMONA® PE-EL-SK polyester-backed

○▽▽▽ : round, triangular TA 90, triangular TA 80, three-core









□□■ ■ : natural, white, black, green

Range of semi-finished products PE


Dimensions in mm, unless otherwise stated

	SIMONA® PE 100 natural	SIMONA® PE 100 black	SIMONA® PE-HD natural	SIMONA® PE-HD black	SIMONA® PE FOAM	SIMONA® PE-EL	SIMONA® PE 500	SIMONA® PE 1000
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Solid rods (length | diameter)

Solid rods (length / diameter)									
	1000			20 – 800	250 – 300			100 – 500	20 – 300
	2000			8 – 500	20 – 200			10 – 500	20 – 200
	1220 (48 inch)			6 – 14"					
	1830 (72 inch)			2 ¼ – 5 ½"					
	2440 (96 inch)			¾ – 2"					
	Colours								   

Hollow rods (length | diameter)

	2000		110 – 810						
	Colours		■						

U-profiles (length | width / height)

	5000		48 – 92 / 46 – 155						
	Colours		■						

Square pipes (length | width / height)

	5000		35 – 50 / 35 – 50						
	Colours		■						

The dimensions specified are standard dimensions. Other sizes, lengths, diameters and colours available on request.




□ ■ ■ ■ : natural, black, grey, green

Range of pipes, fittings and valves PE


Diameters in mm, unless otherwise stated

	SIMONA® PE 100	SIMONA® PE 100 RC	SIMONA® PE 100 AP	SIMONA® PE 100 FM	SIMONA® PE-EL
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Pipes

	Pressure pipes	10 – 1200	10 – 1200	160 – 630	90 – 630	20 – 630
	PE CoEx sewer pipes	160 – 630				
	Protective-jacket pipes		32 – 1000			
	Drainage pipes EBA HPQ	160 – 630 160 – 800 ^①				
	Coils	20 – 180				

Fittings with short spigots for butt welding

	Bends 90°, injection-moulded	20 – 500	20 – 500			32 – 400
	Stub flanges, injection-moulded/ machined	20 – 1200	20 – 500			20 – 630
	Tees, injection-moulded	20 – 630	20 – 630			20 – 355
	Tees with reduced branch, injection-moulded	63/32 – 180/125	63/32 – 180/125			
	Reducers, concentric, injection-moulded/machined	25/20 – 1000/900	25/20 – 315/280		110/90 – 630/560	32/20 – 355/250
	Reducers, eccentric, injection-moulded/machined	160/90 – 1000/900				
	End caps, machined	50 – 800			315 – 630	
	Thread plugs	25 – 95				25 – 95
	Fixing points for pipe clamps	50 – 500				

Fittings with elongated spigots for butt and electrofusion welding

	Elbows 90°, 45°, injection-moulded	20 – 315			90 – 315	
	Bends 90°, injection-moulded	20 – 500				
	Bends 90°, 60°, 45°, 30°, 22°, 11°, seamless	32 – 1000	32 – 1000	160 – 400	90 – 630	
	Bends 90°, 60°, 45°, 30°, welded	90 – 1200		160 – 630		
	Stub flanges, injection-moulded/ machined	20 – 1200		160 – 630	90 – 630	
	Tees, injection-moulded	20 – 630			90 – 500	
	Tees, welded	90 – 1200				
	Tees with reduced branch, injection-moulded	63/32 – 315/250			110/90 – 315/160	
	Tees with reduced branch, welded	90/40 – 1000/710				
	Tees with reduced branch, welded, reinforced	180/50 – 800/315			180/90 – 630/315	
	Tees with reduced branch, welded, with internal thread	50 – 800				
	Branches 45°, injection-moulded	63 – 110				
	Branches 45°, 60°, welded	110 – 630		160 – 630		
	Reducers, concentric, injection-moulded/machined	25/20 – 630/560			110/90 – 630/560	
	End caps, injection-moulded/ welded/machined	20 – 630			90 – 630	
	Unions, adaptors	20 – 63				

Electrofusion fittings/Special fittings

	Electrofusion sockets, tapping saddles	20 – 900, 40/20 – 250/63				
	Shafts, inspection tees, expansion sockets, tank connectors, pipe collar wall seals, etc.	on request				


Diameters in mm, unless otherwise stated

	SIMONA® PE 100	SIMONA® PE 100 RC	SIMONA® PE 100 AP	SIMONA® PE 100 FM	SIMONA® PE-EL
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Flanges

	PP/steel loose flanges, blind flanges, profiled loose flanges, special flange assemblies, gaskets, accessories	20 – 1200			90 – 630	32 – 500
	Full-face flanges	63 – 225				

Valves

	Plastic butterfly valves with hand lever/with locking lever for PE pipes	50 – 315				
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Double-containment piping systems (PE/PE)®

	Pressure pipes	90/160 – 500/630				
	Sewer pipes	160/250 – 630/800				
	SIMODUAL ² Industry pipes	32/90 – 225/355				

The dimensions specified are based on technical production capabilities.

Fabrication is possible in permissible pressure classes SDR 41/33/26/17/11/7.4 depending on type of product.

① An end-to-end system is available for applications within the area of traffic route engineering, e.g. control and inspection shafts, utility hole covers, double sockets, shaft liners, outlet flaps, end caps, bends, branches, etc.

② Interior pipe PE 100/exterior pipe PE 100. The double-containment piping system for pressurised applications is also available in the following material combinations: interior pipe PP-H AlphaPlus®/exterior pipe PP-H AlphaPlus® as well as interior pipe PP-H AlphaPlus®/exterior pipe PE 100. The SIMODUAL² double-containment piping system is also available in the following material combination: interior pipe PP-H AlphaPlus®/exterior pipe PE 100. An extensive range of fittings is available for all SIMONA® Double-Containment Piping Systems.



PP

Polypropylene (PP) is the most widely used material for chemical-technical applications. Compared to PE, it displays greater rigidity particularly in the upper service temperature range (up to +100 °C). Its key characteristics also include excellent chemical resistance, good long-term properties and a high resistance to slow crack growth.

There are two types of polypropylene: homopolymers (PP-H) and copolymers (PP-C). PP-H is completely polymerised from propylene and covers the temperature range from 0 °C to +100 °C. PP-C features a chemical combination of propylene monomers and ethylene monomers, which increases the material's impact strength at low temperatures. PP-C covers a service temperature range from –20 °C to +80 °C and is less rigid than PP-H. SIMONA offers best-in-class products of the highest possible quality in both categories – for applications that demand maximum safety and reliability.



Body of a wet-processing unit made of SIMONA® PP-H white sheets



Raw water filter system for water treatment made of SIMONA® PP-H AlphaPlus® pipes and fittings



Storage tanks made of SIMONA® PP-H AlphaPlus® twin-wall sheets

Types of material PP

Standard types

PP-H AlphaPlus®	Homopolymer, alpha-nucleated, permanent-heat stability, grey
PP-H AlphaPlus®-SK	Homopolymer, alpha-nucleated, permanent-heat stability, polyester-backed, grey
PP-H natural	Homopolymer, permanent-heat stability, natural
PP-H grey	Homopolymer, permanent-heat stability, grey
PP-H light grey	Homopolymer, permanent-heat stability, light grey
PP-H white 9002	Homopolymer, permanent-heat stability, white 9002
PP-C	Block copolymer
PP-C-PK	Block copolymer, permanent-heat stability, polypropylene-backed
PP-C-SK	Block copolymer, permanent-heat stability, polyester-backed
PP-C-UV	Block copolymer, UV-stabilised
PP-C-UV embossed	Block copolymer, UV-stabilised, embossed
PP FOAM	Closed-cell, coextruded polypropylene foam, smooth surface made of compact material
PP-EL-S	Random copolymer, electrically conductive, flame-retardant
PP-EL	Homopolymer, electrically conductive
PPs	Homopolymer, low flammability
PP-R	Random copolymer
PP-RM/-HM	"Pipe Modules" made out of "High Modulus" block copolymer, high impact strength, free of filler materials, superior levels of rigidity, modulus of elasticity > 1700 N/mm ²
frislyen® JN 480	Cutting boards, reversible boards with smooth surfaces, natural
frislyen® SP	Cutting boards, reversible boards with smooth surfaces, green
frislyen® BNL	Cutting boards, reversible boards with smooth surfaces, red brown
frislyen® XL 75	Cutting boards, reversible boards with smooth surfaces, multicoloured

Special types


PP-H AlphaPlus®-GK	Homopolymer, alpha-nucleated, permanent-heat stability, glass-backed, grey
PP-H white 826	Homopolymer, permanent-heat stability, white 826
PP-H-UV	Homopolymer, permanent-heat stability, UV-stabilised, natural and coloured
PP-H-TV	Homopolymer, with talc reinforcement
PP-H embossed	Homopolymer, with embossed surface on one side
PP-C-GK	Block copolymer, glass-backed
PP-EL-SK	Homopolymer, electrically conductive, polyester-backed
PP-EL-GK	Homopolymer, electrically conductive, glass-backed
frislyen® JN 480 E	Cutting boards, reversible boards with smooth surfaces, extruded, natural
frislyen® M 33	Cutting boards, reversible boards with smooth surfaces, grey

Range of semi-finished products PP


Dimensions in mm, unless otherwise stated

	SIMONA® PP-H AlphaPlus®	SIMONA® PP-H AlphaPlus® -SK	SIMONA® PP-H natural	SIMONA® PP-H white 9002	SIMONA® PP-C	SIMONA® PP-C -PK/-SK	SIMONA® PP FOAM	SIMONA® PP-EL-S	SIMONA® PPs
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Extruded sheets (size | thickness)

	2000 x 1000	0.8 – 50	2 – 8	0.8 – 50	1 – 30		5 – 20		1.5 – 30
	2440 x 1220				1.5 – 25	3 – 15			2 – 20
	3000 x 1500	1.5 – 40	2 – 8	1.5 – 30	2 – 30	3 – 30	3 – 6	5 – 20	3 – 12
	4000 x 2000	2 – 50		3 – 50	5 – 20				3 – 20
	10000 x 1200 [®]						1		
	20000 x 1500 [®]		2 – 6				3 – 6		
	Colours	■	■	□	□	□□■□	■	■	■

Pressed sheets (size | thickness)

	2000 x 1000	10 – 70 ^①		10 – 150		10 – 150		10 – 80	10 – 100
	4120 x 2010	10 – 70 ^①		10 – 150		10 – 150		10 – 80	10 – 100
	Colours	■		□		□□		■	■


Cross-ribbed twin-wall sheets (size | thickness)

	2000 x 1000					30, 40			30, 40
	Colours					■			■


Lengthways-ribbed twin-wall sheets (size | thickness)

	3000 x 1000	54, 58							54, 58
	Colours	■							■

HKP corner elements 45° and 90° (length | thickness)

	1500	54, 58							
	2000					40			
	3000	54, 58							
	Colours	■							

Welding rods

	Types	○▽▽▽∞○		○▽▽	○▽▽	○▽▽▽		○	○▽▽
	Thicknesses	3 – 7		3 – 5	3 – 6	3 – 7		3 – 4	3 – 6
	Colours	■		□	□	□□		■	□□

The dimensions specified are standard dimensions. Other sizes, thicknesses, lengths and colours available on request.

① Pressed sheets made of SIMONA® PP-H grey are available in thicknesses from 80 to 150 mm.

② Supplied on rolls

○▽▽▽∞○ : round, triangular TA 90, triangular TA 80, three-core, two-core, special profile oval


□□■□ : natural, white, black, grey

Range of semi-finished products PP

Dimensions in mm, unless otherwise stated

	SIMONA® PP-H AlphaPlus®	SIMONA® PP-H AlphaPlus® -SK	SIMONA® PP-H natural	SIMONA® PP-H white 9002	SIMONA® PP-C	SIMONA® PP-C -PK/-SK	SIMONA® PP FOAM	SIMONA® PP-EL-S	SIMONA® PPs
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Solid rods (length | diameter)

	1000	100 – 800		140 – 800					
	2000	8 – 500		8 – 500					
	1220 (48 inch)			6 – 14"					
	1830 (72 inch)			2 ¼ – 5 ½"					
	2440 (96 inch)			¼ – 2"					
	Colours	■		□					

Hollow rods (length | diameter)

	2000	360 – 810							
	Colours	■							

U-profiles (length | width / height)

	5000	48 – 92 / 46 – 155							
	Colours	■							

Square pipes (length | width / height)

	5000	35 – 50 / 35 – 50							35 – 50 / 35 – 50
	Colours	■							■


The dimensions specified are standard dimensions. Other sizes, lengths, diameters and colours available on request.




□ ■ : natural, grey

Range of pipes, fittings and valves PP


Diameters in mm, unless otherwise stated

		SIMONA® PP-H AlphaPlus®^①	SIMONA® PP-R	SIMONA® PP-EL-S	SIMONA® PPs	SIMONA® PP-RM
Pipes						
	Pressure pipes	10 - 1000				
	Ventilation pipes	180 - 1000		32 - 500	20 - 800 ^②	
	Interconnecting modules					144 - 950 ^③

Fittings with short spigots for butt welding

	Bends 90°, injection-moulded	20 - 225	250 - 500		50 - 630	
	Stub flanges, injection-moulded/ machined	20 - 225	250 - 1000		50 - 630	
	Tees, injection-moulded	20 - 225	250 - 500		50 - 630	
	Tees with reduced branch, injection-moulded	90/32 - 250/160				
	Reducers, concentric, injection-moulded/machined	25/20 - 225/200	250/160 - 800/710		75/50 - 630/560	
	End caps, machined	250 - 800	50 - 630		50 - 630	
	Thread sockets, thread plugs	25 - 95				
	Fixing points for pipe clamps	50 - 500				
	Unions	20 - 63				


Fittings with elongated spigots for butt and electrofusion welding

	Elbows 90°, 45°, injection-moulded	20 - 225	250 - 315			
	Bends 90°, injection-moulded	20 - 225	250 - 500			
	Bends 90°, 60°, 45°, 30°, 22°, 11°, seamless	32 - 315				
	Bends 90°, 60°, 45°, 30°, welded	90 - 1000				
	Stub flanges, injection-moulded	20 - 225	250 - 630			
	Tees, injection-moulded/welded	20 - 1000				
	Tees with reduced branch, injection-moulded		63/50 - 315/250			
	Tees with reduced branch, welded	90/50 - 630/315				
	Tees with reduced branch, welded, reinforced	180/50 - 800/315				
	Tees with reduced branch, welded, with internal thread	50 - 800				
	Branches 45°, injection-moulded		63 - 500			
	Reducers, eccentric, injection-moulded		25/20 - 315/280			
	End caps, injection-moulded	20 - 225				
	Unions, adaptors	20 - 63				
	Compensators	63 - 400				

Fittings for socket welding

	Elbows, tees, stub flanges for socket welding, sockets, reduc- ers, end caps, unions, adaptors	20 - 110				
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Electrofusion fittings/Special fittings

	Electrofusion sockets		20 - 355			
	Shafts, inspection tees, etc.	on request				


Flanges

	PP/steel loose flanges, blind flanges, profiled loose flanges, special flange assemblies, gaskets, accessories	20 - 1200				
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Diameters in mm, unless otherwise stated

	SIMONA® PP-H AlphaPlus®^①	SIMONA® PP-R	SIMONA® PP-EL-S	SIMONA® PPs	SIMONA® PP-RM
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Valves, accessories

	2-way ball valves	20 – 75			
	Diaphragm valves	20 – 75			
	Butterfly valves	50 – 315			
	Ball check valves	20 – 63			
	Ball valve brackets, inserts, mounting plates, locking devices, electrical position indicators	16 – 110			

Double-containment piping systems (PP/PE)^③

	Pressure pipes	90/160 – 630/800			
	Sewer pipes	160/250 – 630/800			
	SIMODUAL ² Industry pipes	32/90 – 225/355			

The dimensions specified are based on technical production capabilities.

Fabrication is possible in permissible pressure classes SDR 41/33/26/17.6/11 depending on type of product.

① For operational reasons, certain dimensions are produced in PP-R.

② A complete system is available for ventilation pipes, e. g. bends, tees, flange adaptors, butterfly valves, air exit ducts and sleeves made of PPs, PP-EL-s and PE-EL.

③ Interior pipe PP-H AlphaPlus®/exterior pipe PE 100. The double-containment piping system for pressurised applications is also available in the following material combinations: interior pipe PE 100/exterior pipe PE 100 as well as interior pipe PP-H AlphaPlus®/exterior pipe PP-H AlphaPlus®. The SIMODUAL² double-containment piping system is also available in the following material combination: interior pipe PE 100/exterior pipe PE 100. An extensive range of fittings is available for all SIMONA® Double-Containment Piping Systems.

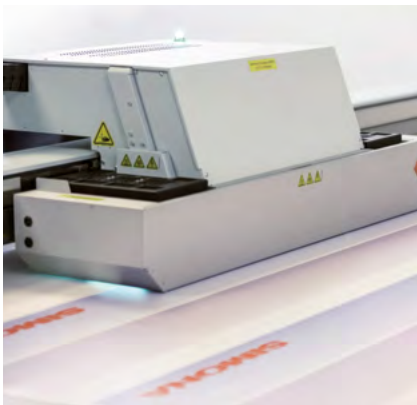
④ A complete system is available for SIMONA® PP-RM rehabilitation modules, e. g. shaft connections, sockets and internal saddles.



PVC, CPVC

In contrast to the partially crystalline materials PE and PP, polyvinyl chloride (PVC) is an amorphous thermoplastic with a service temperature range from 0 °C to +60 °C. It displays very good chemical properties and low flammability, fulfils various standards in respect of fire behaviour and is highly versatile when it comes to processing. Using special formulas and additives, we are able to adapt this material perfectly for use in a wide range of applications. PVC is popular in particular as a thermoforming material, but it is also widely used in the fields of chemistry, advertising and construction.

CPVC is a post-chlorinated PVC. Owing to its increased chlorine content, it offers outstanding chemical resistance, particularly to acids. As a result, it is a perfect choice for applications within the chemical process industry. The service temperature range is from -40 °C to +95 °C.



Digital direct printing on SIMOPOR SP



Wall and ceiling elements made of COPLAST-AS



Chemical supply systems with doors made of SIMONA® PVC-GLAS

Types of material PVC rigid

Standard types

PVC-CAW	Rigid PVC, normal impact strength, chemical resistance
PVC-MZ-COLOR	Rigid PVC, increased impact strength, suitable for thermoforming, UV-stabilised, coloured
PVC-GLAS	Rigid PVC, normal impact strength, transparent
PVC-GLAS-SX	Rigid PVC, increased impact strength, transparent, suitable for die-cutting
CPVC CORZAN Industrial Grade extruded	Post-chlorinated PVC, CORZAN™, light grey
CPVC CORZAN Industrial Grade pressed	Post-chlorinated PVC, CORZAN™, swiss grey
PVC-KYRNIT®	Rigid PVC, pressed

Special types

PVC-CAW-UV	Rigid PVC, normal impact strength, chemical resistance, UV-stabilised
PVC-T matt	Rigid PVC, UV-stabilised, specially for door fabrication, matt
PVC-LZ	Rigid PVC, physiologically safe
PVC embossed	Rigid PVC, with embossed surface on one side
PVC-DS-TW	Rigid PVC, increased impact strength, for use in drinking-water sector and swimming-pool construction
PVC-GLAS opal	Rigid PVC, normal impact strength, translucent, opal
PVC-GLAS clear	Rigid PVC, normal impact strength, transparent, neutral colour
CPVC CORZAN FM 4910 G2	Post-chlorinated, low-flammability PVC, FM 4910 certified, CORZAN™, white
SIMOSHIELD	Rigid PVC, with woodgrain foil, specially for door fabrication

Types of material PVC foamed

Standard types

SIMOPOR S	PVC free-foam sheet, excellent processing capabilities
SIMOPOR SP	PVC free-foam sheet, brilliant white for digital direct printing, finely structured, even, high level of flatness
SIMOPOR E	PVC free-foam sheet, lightweight design, simple handling
SIMOPOR EP	PVC free-foam sheet, lightweight design, simple handling, bright white
SIMOPOR-COLOR	PVC free-foam sheet, perfectly even surface finish, coloured
SIMOPOR CONSTRUCT	PVC free-foam sheet, low weight, high stability, good processing capabilities
COPLAST-AS	Coextruded PVC foam sheet, UV-stabilised, antistatic, outer skins white, with white core
COPLAST-AS-X	Coextruded PVC foam sheet, UV-stabilised, antistatic, outer skins white, with grey core

Special types


COPLAST-AR-X	Coextruded PVC foam sheet, with anti-slip surface on one side
COPLAST-COLOR	Coextruded PVC foam sheet, coloured outer skins
COPLAST-AS-X-FR	Coextruded PVC foam sheet, UV-stabilised, antistatic, outer skins white, with grey core, low flammability

Range of semi-finished products and pipes PVC rigid


Dimensions in mm, unless otherwise stated

	SIMONA® PVC-CAW	SIMONA® PVC-MZ-COLOR	SIMONA® PVC-GLAS	SIMONA® CPVC CORZAN Industrial Grade	SIMONA® PVC-KYRNIT®
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Extruded sheets (size | thickness)

	2000 x 1000	1 - 50	1 - 30	1 - 15	
	2440 x 1220				3 - 12
	3000 x 1500	1 - 30	3 - 5	1 - 10	
	Colours	■ ■ ■ ■ ■	■ ■ ■ ■ ■ ■ ■	■	■


Pressed sheets (size | thickness)

	1000 x 1000				60 - 100
	2000 x 1000			15 - 80	10 - 100
	Colours			■	■ ■

Welding rods

	Types	○▽▽▽○	○	○▽	○▽
	Thicknesses	3 - 7	3 - 4	3 - 5	3 - 5
	Colours	■ ■ ■ ■	■	■	■

Solid rods (length | diameter)

	1000	100 - 300			
	2000	6 - 300			
	1525 (60 inch)	2 ¼ - 10"			
	3050 (120 inch)	¼ - 2"			
	Colours	■ ■ ■ ■			

Pipes (length | diameter)

	5000			6 - 160	
	Colours			■	

The dimensions specified are standard dimensions. Other sizes, thicknesses, lengths, diameters and colours available on request.



○▽▽▽○

: round, triangular TA 90, triangular TA 80, three-core, special profile oval

■ ■ ■ ■ ■ ■ ■ ■


: dark grey, light grey, white, black, red, green, yellow, blue, transparent

Range of semi-finished products PVC foamed

Dimensions in mm, unless otherwise stated

	SIMOPOR S	SIMOPOR SP	SIMOPOR E	SIMOPOR EP	SIMOPOR -COLOR	SIMOPOR CONSTRUCT	SIMONA® COPLAST-AS	SIMONA® COPLAST-AS-X
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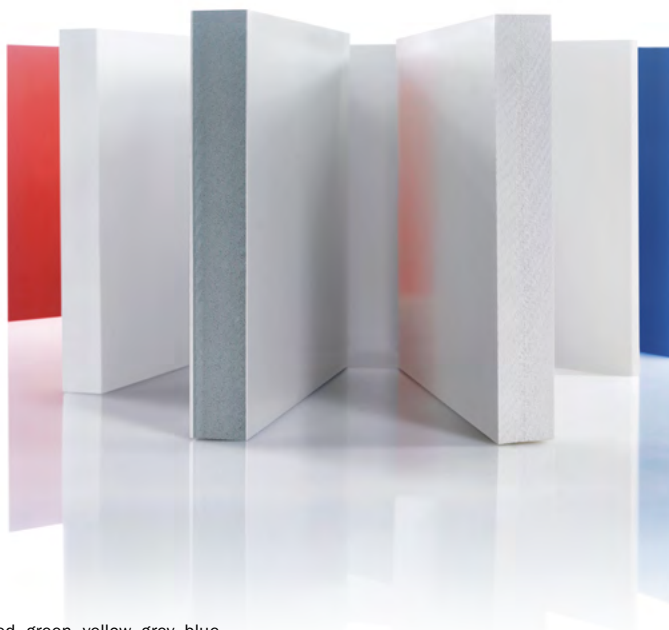
Extruded sheets (size | thickness)

	2000 x 1000						8 - 12	
	2440 x 1220	1 - 19	1 - 10	3 - 10	1 - 10		8 - 12	
	3000 x 1000						8 - 30	
	3050 x 1220	1 - 19	1 - 10			3 - 6	8 - 24	6 - 19
	3050 x 1500						8 - 24	3 - 19
	3050 x 1530	1 - 19	1 - 10	3 - 19	1 - 10	3 - 6, 19 (black only)		
	3050 x 2030	1 - 15	1 - 10	3 - 10	1 - 10	3 - 5, 10 (black only)		
	4050 x 2030	3 - 10	3, 5					
	Colours	□	□	□	□	■ ■ ■ ■ ■ ■ ■ ■	■	□ ^① □ ^②

The dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

① White outer skins with white core

② White outer skins with grey core



□ ■ ■ ■ ■ ■ ■ ■ : white, black, red, green, yellow, grey, blue

PETG

Polyethylene terephthalate modified with glycol (PETG) is a transparent copolyester with excellent material-specific properties in respect of thermoformability, transparency and impact strength. This material has a broad service temperature range from -40°C to $+65^{\circ}\text{C}$, as well as being physiologically safe and very simple to process.

It shows no signs of crystallising out during warming and therefore remains completely transparent. This offers tangible advantages particularly in the case of warm bending and vacuum thermoforming. PETG is the perfect choice for a wide range of applications – from medical devices and machine enclosures to the entire field of design.



Wall design using SIMOLUX



Signage made with SIMOLUX



Machine cover made with SIMOLUX

Types of material and range of semi-finished products PETG

Standard types

SIMOLUX	Thermoplastic copolyester, transparent
SIMOLUX opal	Thermoplastic copolyester, opal


Special types

SIMOLUX satined	Thermoplastic copolyester, satin-finish surface
SIMOLUX embossed	Thermoplastic copolyester, embossed surface
SIMOLUX-UV	Thermoplastic copolyester, UV-stabilised


Dimensions in mm, unless otherwise stated

	SIMOLUX (PETG)	SIMOLUX opal
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Extruded sheets (size | thickness)

	2000 x 1000	1 – 15	2 – 4
	2050 x 1250	2 – 12	2 – 4
	3050 x 1500	2 – 12	2 – 4
	3050 x 2050	2 – 10	2 – 4
	Colours	□	□

Welding rods

	Types	○	
	Thicknesses	3 – 4	
	Colours	□	

The dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

○ : round

□ : transparent, opal



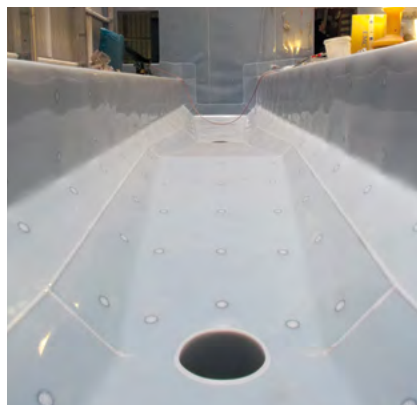
PVDF, ECTFE, FEP, PFA

We offer a range of partially and fully fluorinated high-performance plastics such as polyvinylidene fluoride (PVDF), ethylene-chlorotrifluoroethylene (ECTFE), fluorinated ethylene propylene (FEP) and perfluoroalkoxy alkane (PFA) for fields of application that are particularly demanding in terms of chemical resistance and service temperature range. Among thermoplastics these products excel not only in respect of UV resistance, physiological safety and processing properties, they also combine best-in-class chemical resistance with the highest possible thermal stability.

PVDF can be used within a service temperature range from $-30\text{ }^{\circ}\text{C}$ to $+140\text{ }^{\circ}\text{C}$, ECTFE from $-40\text{ }^{\circ}\text{C}$ to $+150\text{ }^{\circ}\text{C}$ and FEP and PFA from $-190\text{ }^{\circ}\text{C}$ to $+205\text{ }^{\circ}\text{C}$ and from $-190\text{ }^{\circ}\text{C}$ to $+260\text{ }^{\circ}\text{C}$ respectively. These materials are suited in particular for use in the chemical and electroplating industry and the electrical and semiconductor industry as well as in the field of medical and nuclear technology or power and environmental technology.



Chimney lining made of SIMONA® ECTFE-GK sheets



Anchor point lining of a chimney flue made of SIMONA® PFA sheets



SIMONA® PVDF pipes and fittings in a water fluoridation system

Types of material PVDF, ECTFE, FEP, PFA

Standard types

PVDF	Partially fluorinated high-performance plastic, homopolymeric polyvinylidene fluoride, FM 4910-certified, natural
PVDF-SK	Partially fluorinated high-performance plastic, homopolymeric polyvinylidene fluoride, polyester-backed, natural
PVDF-GK	Partially fluorinated high-performance plastic, homopolymeric polyvinylidene fluoride, glass-backed, natural
PVDF-EL	Partially fluorinated high-performance plastic, polyvinylidene fluoride, electrically conductive
PVDF-CV	Partially fluorinated high-performance plastic, homopolymeric polyvinylidene fluoride, chemically pretreated
PVDF-C	Partially fluorinated high-performance plastic, copolymeric polyvinylidene fluoride
PVDF-C-SK	Partially fluorinated high-performance plastic, copolymeric polyvinylidene fluoride, polyester-backed
ECTFE	Partially fluorinated high-performance plastic, ethylene-chlorotrifluoroethylene copolymer, natural
ECTFE-GK	Partially fluorinated high-performance plastic, ethylene-chlorotrifluoroethylene copolymer, glass-backed, natural
ECTFE-AK	Partially fluorinated high-performance plastic, ethylene-chlorotrifluoroethylene copolymer, aramid-backed, natural
FEP	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and hexafluoropropylene, natural
FEP-GK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and hexafluoropropylene, glass-backed, natural
FEP-AK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and hexafluoropropylene, aramid-backed, natural
PFA	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, natural
PFA-GK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, glass-backed, natural
PFA-AK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, aramid-backed, natural
PFA-M-AK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated methyl vinyl ether, aramid-backed, natural
PFA-HP	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, for high standard of purity, natural
PFA-HCR	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, high corrosion resistance, natural
PFA-HCR-AK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated propyl vinyl ether, high corrosion resistance, aramid-backed, natural

Special types

PVDF-AK	Partially fluorinated high-performance plastic, polyvinylidene fluoride, aramid-backed, natural
PVDF-CL	Partially fluorinated high-performance plastic, polyvinylidene fluoride, stabilised to protect against chlorine radicals
PVDF-EL-SK	Partially fluorinated high-performance plastic, polyvinylidene fluoride, electrically conductive, polyester-backed
PVDF-EL-GK	Partially fluorinated high-performance plastic, polyvinylidene fluoride, electrically conductive, glass-backed
PFA-M	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated methyl vinyl ether, natural
PFA-M-GK	Fully fluorinated high-performance material, copolymer made of tetrafluoroethylene and perfluorinated methyl vinyl ether, glass-backed, natural


Range of semi-finished products

PVDF and ECTFE


Dimensions in mm, unless otherwise stated

	SIMONA® PVDF	SIMONA® PVDF-SK/-GK	SIMONA® PVDF-C-SK	SIMONA® PVDF-EL	SIMONA® ECTFE	SIMONA® ECTFE-GK/-AK
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Extruded sheets (size | thickness)

	1500 x 1500		0,8			0.8
	2000 x 1000	1 - 25	2.3 - 6		3 - 4	6 - 25
	3000 x 1500	2 - 15	1.5 - 6	3 - 5		1.5 - 5
	4000 x 2000	2 - 10				
	10000 x 1500 ^①					0.8 - 4
	15000 x 1500 ^①					
	20000 x 1500 ^①		2 - 5	3 - 4	3 - 4	1.5 - 4
	Colours	□	□	■	□	□


Pressed sheets (size | thickness)

	2000 x 1000	10 - 80			10 - 80	30
	Colours	□			■	□

Welding rods

	Types	○ ▽		○	○	○
	Thicknesses	3 - 5		3 - 4 ^②	3 - 4	3 - 4
	Colours	□ □		□	■	□

Solid rods (length | diameter)

	1000	70 - 500				
	2000	10 - 500				
	Colours	□				

The dimensions specified are standard dimensions. Other sizes, thicknesses, lengths, diameters and colours available on request.

① Supplied on rolls

② SIMONA® PVDF-C, without backing

Our preferred partner for PVDF





○ ▽ : round, triangular TA 80

□ ■ □ : natural, black, pink

Range of semi-finished products

FEP and PFA

Dimensions in mm, unless otherwise stated

		SIMONA® FEP	SIMONA® FEP-GK/-AK	SIMONA® PFA	SIMONA® PFA-GK/-AK
Extruded sheets (size thickness)					
	1500 x 1500		0.8	0.8 – 8	0.8
	2000 x 1000				
	3000 x 1500	2.3 – 3.8	2.3 – 3.8	1.5 – 2.3	2.3 – 3.8
	4000 x 2000				
	10000 x 1500 ^①	2.3 – 3.8	0.8 – 3.8	0.8 – 3.8	0.8 – 3.8
	15000 x 1500 ^①		1.5 – 2.3	0.8 – 2.8	1.5 – 2.3
	20000 x 1500 ^①			0.8 – 2.3	
	Colours	□	□	□	□
Welding rods					
	Types	○		○	
	Thicknesses	3 – 4		3 – 4 ^②	
	Colours	□		□	






The dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

- ① Supplied on rolls
- ② SIMONA® PFA-HP/-HCR

- : round
- : natural

Range of pipes, fittings and valves PVDF and ECTFE

Diameters in mm, unless otherwise stated

		SIMONA® PVDF	SIMONA® ECTFE
Pipes			
	Pressure pipes	16 – 315	20 – 160
	Liner pipes ^①	32 – 400	
Fittings for IR/butt welding			
	Elbows 90°, 45°, injection-moulded	20 – 225	
	Bends 90°, injection-moulded	20 – 225	
	Tees, injection-moulded	20 – 225	
	Stub flanges, injection-moulded	20 – 225	
	Reducers, injection-moulded	25/20 – 225/200	
	Unions, adaptors	20 – 63	
Fittings for socket welding			
	Elbows, tees, stub flanges for socket welding, sockets, reducers, end caps, unions, adaptors	20 – 110	
Flanges			
	PP/steel loose flanges, blind flanges, profiled loose flanges, special flange assemblies, gaskets, accessories	20 – 1200	
Valves, accessories			
	2-way ball valves	16 – 75	
	Diaphragm valves	20 – 75	
	Butterfly valves	50 – 315	
	Ball check valves	25 – 63	
	Ball valve brackets, inserts, mounting plates, locking devices, electrical position indicators	16 – 110	

The dimensions specified are based on technical production capabilities.

^① Available as SIMONA® PVDF-CV with chemically pretreated surface

Our preferred partner for PVDF

KYNAR
BY ARKEMA



Specialty products

In addition to our standard materials, we offer a range of specialty products and materials which, thanks to their distinct property profiles, are optimally matched to the exacting requirements seen within selected areas of application. The variety offered by these “specialists” knows no boundaries. Be it prostheses and orthoses, automotive engineering or gas transport, you can always rely on SIMONA products.

Furthermore, SIMONA subsidiaries around the globe offer a number of other specialty products for various niche markets. Drawing on their extensive expertise and processing capabilities, they are among the market leaders within the specific segments.

SIMOLIFE – Product Range for Orthotics and Prosthetics

The SIMOLIFE range includes sheets made of PE, PP, PETG and EVA that are specially designed for the production of orthoses and prostheses. Thanks to the different property profiles of the respective types of plastic, tailor-made orthoses and prostheses can be manufactured to meet the individual needs of patients.

Highest quality standards

We only use certified raw materials of the highest quality for the manufacture of SIMOLIFE products. The suitability of raw materials used in the area of prosthetics and orthotics is safeguarded by stringent incoming goods inspections.

Excellent processing characteristics


SIMOLIFE products have excellent thermoforming properties. With the help of advanced process engineering, we have reduced the level of material shrinkage to a minimum – a tangible benefit particularly in the field of orthopaedic technology.

Very good skin compatibility

All products within the standard portfolio are certified as biocompatible in accordance with DIN EN ISO 10993-5/-10 (cytotoxicity, skin irritations). On request, selected SIMOLIFE materials can be supplied with antimicrobial properties. All SIMOLIFE products are also physiologically safe in accordance with BfR as well as being FDA food compliant. As a result of these properties and the resistance to sweat, cosmetics, skin creams, detergents and disinfectants, they offer users the combined benefits of safety and reliability.

Range of semi-finished products SIMOLIFE

Dimensions in mm, unless otherwise stated

		SIMOLIFE PE	SIMOLIFE PE 1000	SIMOLIFE PE flex	SIMOLIFE PP	SIMOLIFE PP-C	SIMOLIFE PETG	SIMOLIFE EVA flex	SIMOLIFE EVA flex antibac	SIMOLIFE EVA superflex
Extruded sheets (size thickness)										
	400 x 400						9 – 20	6 – 15	6 – 15	6 – 15
	1208 x 804						8 – 20			
	2000 x 1000	2 – 15	1 – 6	1 – 6	2 – 15	2 – 6		3 – 15		
	50000 x 1000 ^①			1 – 2						
	Colours	□ □	□ ■	□ □	□	□	□	□ □	□ □	□

The dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

^① Supplied on rolls

□ □ ■ □ : natural, skin-coloured, green, transparent



Lower arm orthosis made of SIMOLIFE PE



Corset made of SIMOLIFE PP



Diagnosis/test sockets made of SIMOLIFE PETG

SIMONA® PC/ASA and SIMONA® PC FR RAIL – Solutions for automotive engineering and rail vehicle interiors

PC/ASA

SIMONA® PC/ASA sheets can be hot-formed within a broad temperature range with uniform wall thickness distribution. Among the key benefits of SIMONA® PC/ASA sheets are a high temperature of continuous use together with a high heat deflection temperature and excellent toughness even at sub-zero temperatures. Furthermore, SIMONA® PC/ASA offers exceptional UV stability and extreme resistance to weather conditions and ageing.


Therefore, SIMONA® PC/ASA sheets are suitable for extreme exterior applications, such as facing components, roofs, roof boxes and vehicle wind control systems (cars, trucks and caravans).

PC FR RAIL

Specially developed to meet the requirements of the DIN EN 45545 standard, our low-flammability SIMONA® PC FR RAIL sheets provide maximum safety for the interior lining of rail vehicles. The material has excellent thermoforming properties, thus making it the perfect choice when it comes to achieving high degrees of complexity in forming. Its other benefits include very good surface quality and a wide temperature range of application. Machining, welding and gluing of the material is also possible without any problems.

Range of semi-finished products PC/ASA and PC FR RAIL

Dimensions in mm, unless otherwise stated

	SIMONA® PC/ASA	SIMONA® PC FR RAIL
Extruded sheets (size thickness)		
 3000 x 2000		1 – 3
3000 x 2050	1.5 – 8	
Colours	□	□

The dimensions specified are standard dimensions. Other sizes, thicknesses and colours available on request.

□ : natural



Truck front panel made of PC/ASA



Interior trim components made of PC FR RAIL

SIMONA® PA 12-Line – Pipes and fittings for gas applications



SIMONA® PA 12-Line pipes and fittings can be used in gas pressure applications up to 16 bar. Permanent, high tensile-strength bonds make any installation perfectly safe.

Due to their high crack and internal pressure resistance, pipes and fittings made of SIMONA® PA 12 can even be laid safely and efficiently in particularly sensitive areas, e.g. inner-city locations. They can be installed using both open-trench and trenchless methods. PA 12 pipes and fittings can be connected using conventional bonding methods such as heated-tool butt welding and electrofusion welding. They are notch-resistant and low in weight, while also offering a high degree of flexibility.



Range of pipes and fittings PA 12-Line

Diameters in mm, unless otherwise stated

SIMONA® PA 12-Line		
Pipes		
	Pressure pipes	Available on request
Fittings		
	Elbows, 90°, 45°	90, 110, 125, 160
	Tees, standard	90, 110, 125, 160
	Tees, reduced	90/63, 110/63, 110/90, 160/63, 160/90, 160/110
	Stub flanges	90, 110, 125, 160
	Reducers, concentric	90/63, 110/63, 110/90, 125/63, 125/90, 125/110, 160/90, 160/110, 160/125
	End caps	90, 110, 125, 160

Other dimensions on request.



Welding a SIMONA® PA 12 gas pipeline

Product offering SIMONA AMERICA Industries



SIMONA AMERICA Industries offers a portfolio of plastic sheet and rod for a diverse range of major markets served by plastic fabricators and distributors in North America. Main application areas are the chemical processing and semiconductor industry, food processing, orthopedics as well as marine and outdoor living.

Serving these segments, the company offers a range of specialty materials and brands in addition to the standard SIMONA materials. Be it UV and water resistant products for playgrounds or an extensive product range of chemical and flame-resistant sheet that meets FM 4910 regulatory requirements – SIMONA AMERICA Industries is your competent partner for innovative product solutions.

Materials

- | | | |
|--------------|---------------|-------------|
| ■ PE | ■ PVC Type I | ■ PVDF |
| ■ PP-H, PP-C | ■ PVC Type II | ■ ECTFE 901 |
| ■ FRP-3 | ■ CPVC | ■ ETFE |
| ■ FRP-5 | ■ CRP-1 | ■ PFA-M |

Brands^①

SIMONA® HDPE Boat Board®	UV and water resistant HDPE for marine and outdoor living
SIMONA® HDPE Boat Board® Lightweight	20 % lighter foamed UV and water resistant HDPE for marine, outdoor living, and retail display
SIMONA® HDPE Polytone®	Single and multi-layer UV HDPE for playground, sign and display
SIMONA® PVDF®	Extruded with Kynar® PVDF 740 resin
SIMONA® PVDF® 2850	Extruded with Kynar® PVDF copolymer 2850 resin
SIMONA® PVC CRP-1	FM 4910 rated white PVC with superior chemical resistance and surface appearance
SIMONA® Clear CPVC 2000	FM 4910 rated clear CPVC

^① Specialty brands for selected target markets. Additionally, all of the above-mentioned materials are available.



Outdoor kitchen made of SIMONA® HDPE Boat Board®



SIMONA® HDPE Polytone®



SIMONA® PVC CRP-1 FM 4910 and
SIMONA® Clear PVC 2000

Product offering SIMONA PMC



SIMONA PMC is an extrusion company specializing primarily in the manufacture of plastic sheet products used in caravan, agricultural, and industrial applications. Focusing on attractive niche markets for thermoforming applications, SIMONA PMC supplies high-performance plastics requiring specialist solutions and significant materials expertise. Among the key materials processed by the company are TPO, ABS, and combinations of vinyl and acrylic with ABS. SIMONA PMC is renowned for its highly flexible production capabilities and its extensive in-house expertise in the field of product development.

Materials

- TPO
- ABS
- PMMA
- ASA
- PC/ABS
- PP

Products and brands

PMC® Low Gloss ABS	Impact resistant ABS with a low gloss ABS cap layer
PMC® PMMA-capped ABS	ABS capped with PMMA (both low & high gloss)
PMC® High Gloss ASA/Capped ABS	High gloss ASA laminated over an ABS substrate
PMC® Softflex ASA/ABS	Soft-touch, Low gloss ASA cap, coextruded over ABS
PMC® FR ABS	ABS with advanced fire-resistance performance
PMC® One Step Vinyl/ABS	Leather-like textured vinyl foam composite is laminated over ABS to create a piece that mimics hand-wrapped parts
PMC® Copolymer PP Alloys	PP-C alloys offering good wear and chemical resistance
PMC® High Melt Strength	TPO with high melt strength performance
PMC® Utility TPO	Utility grade TPO
PMC® PremierCap High Gloss TPO	High gloss polyolefin cap layer coextruded over TPO
PMC® PremierCap Low Gloss TPO	TPO with a low gloss finish
PMC® FR TPO	Fire resistant TPO
PMC® Exultra™ 2000 Soft-touch TPO	Cap of partially cross-linked TPE coextruded over TPO
PMC® StrataGem™ SMR	Acrylic film laminated over coextruded tie layer and TPO
PMC® PC/ABS	ABS and polycarbonate combined to improve heat deflection temperature, stiffness and low-temperature impact resistance. Requires cap or coating for weatherability
PMC® FR PC/ABS	Meets stringent UL regulations for fire behavior, electrical safety and resistance to chemicals



PMC® One Step Vinyl/ABS



PMC® High Gloss TPO



John Deere tractor engine cover made with
PMC® StrataGem™

Product offering SIMONA Boltaron

SIMONA Boltaron is a world leader in custom order high-performance plastics for demanding applications, specifically for the aircraft interiors industry. Other areas that SIMONA Boltaron materials are used for include semiconductor equipment manufacturing, wall cladding, specialty and hobby, retail display and general thermoforming. SIMONA Boltaron offers a diverse range of specialized grades that offer a combination of regulatory fire ratings, enhanced durability, custom color matching, extruded and press laminated textures, and a range of material gauges from very thin to extra thick.

Materials

■ PVC

■ PVC/Acrylic

■ CPVC



Textured economy seat back made with Boltaron® 9815 P material



Economy seat back and tray table made with Boltaron® 9815 P material



Thermoformed decorative material made with Boltaron® 9815 pearlescent sheet

Products and brands

Boltaron® 9000 Series Materials for aircraft interiors

These materials meet the requirements of FAR 25.853 (a) and (d) for flammability, smoke and heat release for use in the aircraft interior.

Boltaron® 9815 E	High impact resistance
Boltaron® 9815 M	High impact with an embedded metallic effect
Boltaron® 9815 P	High impact with a pressed texture
Boltaron® 9815 D	High impact sheet with an embedded print
Boltaron® 9200	Light-blocking sheet for aircraft window shades
Boltaron® 9250	Maximum light-blocking sheet for aircraft window shades
Boltaron® 9850	Low smoke performance

Boltaron® 4000 Series Materials for aircraft interiors

These materials meet the flammability requirements of FAR 25.853 (a) for use in the aircraft interior.

Boltaron® 4205	High temperature resistance
Boltaron® 4385	Highest heat deflection temperature
Boltaron® 4350	Rigid, translucent
Boltaron® 4330	Highest impact sheet
Boltaron® 8830	Soft touch

Corrosion resistant FR materials

Boltaron® 4050	PVC Type II
Boltaron® 4225	FM 4910 CPVC
Boltaron® 4300	Clear ASTM D-1784 CPVC
Boltaron® 4325	Clear FM 4910 CPVC

General thermoforming materials

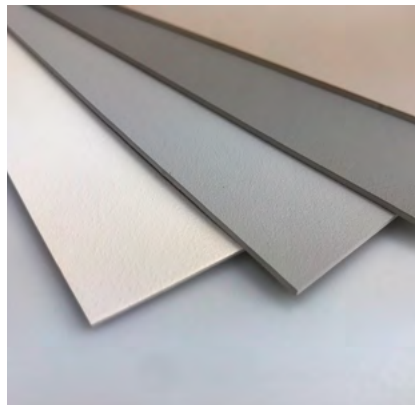
Boltaron® 1165	Recycled black
Boltaron® 4335	High impact thermoformable
Boltaron® 6540	UL 94 V-0 rated
Boltaron® 4550	High impact, weatherable
Boltaron® 4800	Docket 90-A rated

Building and interior materials

Boltaron® 4065 MP	Thin gauge for membrane pressing
Boltaron® Rigiwall® 4323	Class 1-A rated for interior wall coverings
Boltaron® Rigiwall® 4333	Class 1-A rated for interior wall coverings



Designer prints made with Boltaron® 9815 D material



Boltaron® 9815 True Pearl swatches

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