

**SIMONA**



## **SIMONA<sup>®</sup> Solid and Hollow Rods**

Cost-effective production of fittings and finished parts

GLOBAL THERMOPLASTIC SOLUTIONS

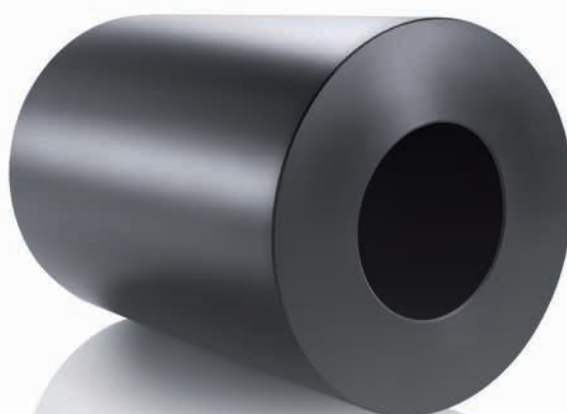
## SIMONA® Solid and Hollow Rods – Cost-effective production of fittings and finished parts

SIMONA® Solid and Hollow Rods are the perfect choice for the production of fittings and finished parts using CNC machining centres. The extruded rods combine high chemical resistance and excellent processing characteristics with extreme toughness and rigidity.



### SIMONA® Solid Rods

Owing to the special method of fabrication applied in this area, SIMONA® Solid Rods have a very low residual stress potential. This makes them particularly suitable for cost-effective machining of parts. SIMONA® Solid Rods are used for a wide range of applications, e.g. in the area of chemical equipment construction, mechanical engineering and medical technology as well as in the food, paper and nuclear technology industries. The range of materials covered by SIMONA® Solid Rods spans everything from PE-HD, PE 100, PE 500 and PE 1000 to PP AlphaPlus®, PP-H, PVC-CAW and PVDF.



### SIMONA® Hollow Rods

In view of their geometry, SIMONA® Hollow Rods offer additional material and cost savings compared to solid rods – the perfect choice for a wide range of fittings and finished parts. Extruded from PE 100 or PP AlphaPlus®, SIMONA® Hollow Rods have a high corrosion and abrasion resistance. Thanks to their UV stability, PE 100 Hollow Rods are also suitable for permanent outdoor use and are made from materials that meet the quality requirements of the KRV Material Lists.

### Fields of application for SIMONA® Solid and Hollow Rods

- Pump housings
- Filter covers
- Valves
- Conveyor rollers
- Idler pulleys
- Sprockets
- Screw conveyors
- Spindles
- Pulleys
- Liners
- Couplings
- Threaded rods



**+ Everything from a single source**

SIMONA is one of the few manufacturers worldwide with a product portfolio that includes both finished and semi-finished thermoplastic parts. Among the key benefits are customised designs and the option of developing materials tailored to customers' specific requirements. Supported by high-end processing technology and many years of experience, we are able to deliver perfect results.



**+ Excellent processing properties**

SIMONA® Solid and Hollow Rods can be efficiently processed in a number of ways. This includes welding, milling, drilling, sawing, cutting and water-jet cutting.



**+ Extensive product range**

The range of SIMONA® Solid and Hollow Rods encompasses a broad selection of materials, sizes and colours. Drawing on our vast portfolio of solid and hollow rods, we can even produce fittings and finished parts on your behalf.

**Product range of SIMONA® Solid and Hollow Rods**

	SIMONA® PE-HD	SIMONA® PE 100	SIMONA® PE 500	SIMONA® PE 1000	SIMONA® PP AlphaPlus®	SIMONA® PP-H	SIMONA® PVC-CAW	SIMONA® PVDF
--	---------------	----------------	----------------	-----------------	-----------------------	--------------	-----------------	--------------

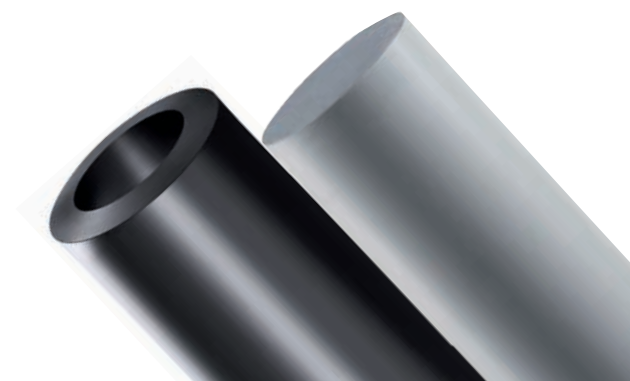
**Solid rods (length/diameter)**

	1000	8 - 800	8 - 800	40 - 500	20 - 200	8 - 800	8 - 800	6 - 300	10 - 500
	2000	8 - 800	8 - 800	10 - 500	20 - 200	8 - 800	8 - 800	6 - 300	10 - 500
	Colours	natural	black	natural	natural, black, green	grey	natural	black, dark grey, swiss grey, white, ivory, red	natural

**Hollow rods (length/outer diameter)**

	2000		110 - 810			360 - 810		
	Colours		black			grey		

Please contact our sales department for further details concerning availability: [sales@simona.de](mailto:sales@simona.de). Customised sizes available on request.



# SIMONA® Solid and Hollow Rods – Material specifications

## Material specifications

	SIMONA® PE-HD	SIMONA® PE 100	SIMONA® PE 500	SIMONA® PE 1000	SIMONA® PP AlphaPlus®	SIMONA® PP-H	SIMONA® PVC-CAW	SIMONA® PVDF
Density, g/cm <sup>3</sup> , DIN EN ISO 1183	0.955	0.960	0.957	0.930	0.915	0.905	1.440	1.780
Yield stress, MPa, DIN EN ISO 527	23	23	28	19	33	32	58	55
Elongation at yield, %, DIN EN ISO 527	9	9	8	11	8	8	4	8
Tensile modulus of elasticity, MPa, DIN EN ISO 527	1,100	1,100	1,100	700	1,700	1,400	3,300	1,950
Notched impact strength, kJ/m <sup>2</sup> , DIN EN ISO 179	21	30	–	–	9	7	4	12
Shore hardness D (15 s), DIN EN ISO 868	64	65	66	60	72	70	82	78
Temperature range, °C	– 50 to + 80	– 50 to + 80	– 100 to + 80	– 260 to + 80	0 to + 100	0 to + 100	0 to + 60	– 30 to + 140
Suitable for contact with food- stuffs as per EU 10/2011	✓	✓	✓	✓	✓	✓	–	✓

The data presented in this section are to be seen as a guide and may vary depending on the processing method and test specimen used. In general, data specified applies to average values measured on extruded sheets with a thickness of 4 mm. In the case of sheets manufactured by means of pressing, testing is generally performed on sheets with a thickness of 20 mm. Deviations from the values specified are possible if the sheets in this thickness are not available. In the case of backed sheets, all technical specifications relate to the non-backed base sheets. Please note that this information is not necessarily applicable to products that have undergone downstream processing. The suitability of a material for a specific area of application must be checked by the processor or end user. All technical specifications presented herein are designed merely to provide assistance in terms of project planning.

### SIMONA AG

Teichweg 16  
55606 Kirn  
Germany  
Phone +49 (0) 67 52 14-0  
Fax +49 (0) 67 52 14-211  
mail@simona.de  
www.simona.de

### PRODUCTION SITES

#### Plant I

Teichweg 16  
55606 Kirn  
Germany

#### Plant II

Sulzbacher Straße 77  
55606 Kirn  
Germany

#### Plant III

Gewerbestraße 1–2  
77975 Ringsheim  
Germany

#### SIMONA Plast-Technik s.r.o.

U Autodílen č.p. 23  
43603 Litvinov-Chudeřín  
Czech Republic

#### SIMONA ENGINEERING PLASTICS

##### (Guangdong) Co. Ltd.

No. 368 Jinou Road  
High & New Technology Industrial  
Development Zone  
Jiangmen, Guangdong  
China 529000

#### SIMONA AMERICA INC.

101 Power Boulevard  
Archbald, PA 18403  
USA

#### Boltaron Inc.

A SIMONA Group Company  
One General Street  
Newcomerstown, OH 43832  
USA

### SALES OFFICES

#### SIMONA S.A.S. FRANCE

Z.I. 1, rue du Plant Loger  
95335 Domont Cedex  
France  
Phone +33 (0) 1 39 35 49 49  
Fax +33 (0) 1 39 91 05 58  
mail@simona-fr.com  
www.simona-fr.com

#### SIMONA UK LIMITED

Telford Drive  
Brookmead Industrial Park  
Stafford ST16 3ST  
Great Britain  
Phone +44 (0) 1785 22 24 44  
Fax +44 (0) 1785 22 20 80  
mail@simona-uk.com  
www.simona-uk.com

#### SIMONA AG SWITZERLAND

Industriezone  
Bäumlimattstrasse 16  
4313 Möhlin  
Switzerland  
Phone +41 (0) 61 855 9070  
Fax +41 (0) 61 855 9075  
mail@simona-ch.com  
www.simona-ch.com

#### SIMONA S.r.l. SOCIETÀ UNIPERSONALE

Via Volontari del Sangue 54a  
20093 Cologno Monzese (MI)  
Italy  
Phone +39 02 250851  
Fax +39 02 2508520  
commerciale@simona-it.com  
www.simona-it.com

#### SIMONA IBERICA

##### SEMIELABORADOS S.L.

Doctor Josep Castells, 26–30  
Polígono Industrial Fonollar  
08830 Sant Boi de Llobregat  
Spain  
Phone +34 93 635 41 03  
Fax +34 93 630 88 90  
mail@simona-es.com  
www.simona-es.com

#### SIMONA Plast-Technik s.r.o.

Paříkova 910/11a  
19000 Praha 9 – Vysočany  
Czech Republic  
Phone +420 236 160 701  
Fax +420 476 767 313  
mail@simona-cz.com  
www.simona-cz.com

#### SIMONA POLSKA Sp. z o.o.

ul. Wrocławska 36  
Wojkowice k / Wrocławia  
55-020 Żórawina  
Poland  
Phone +48 (0) 71 352 80 20  
Fax +48 (0) 71 352 81 40  
mail@simona-pl.com  
www.simona-pl.com

#### OOO "SIMONA RUS"

Prospekt Andropova, 18, Bl. 6  
115432 Moscow  
Russian Federation  
Phone +7 (499) 683 00 41  
Fax +7 (499) 683 00 42  
mail@simona-ru.com  
www.simona-ru.com

#### SIMONA FAR EAST LIMITED

Room 501, 5/F  
CCT Telecom Building  
11 Wo Shing Street  
Fo Tan, Hong Kong  
China  
Phone +852 29 47 01 93  
Fax +852 29 47 01 98  
sales@simona-hk.com  
www.simona-cn.com

#### SIMONA ENGINEERING PLASTICS TRADING (Shanghai) Co. Ltd.

Room C, 19/F, Block A  
Jia Fa Mansion  
129 Da Tian Road, Jing An District  
Shanghai  
China 200041  
Phone +86 21 6267 0881  
Fax +86 21 6267 0885  
shanghai@simona.com.cn  
www.simona-cn.com

#### SIMONA AMERICA INC.

101 Power Boulevard  
Archbald, PA 18403  
USA  
Phone +1 866 501 2992  
Fax +1 800 522 4857  
mail@simona-america.com  
www.simona-america.com

#### Boltaron Inc.

A SIMONA Group Company  
1 General Street  
Newcomerstown, OH 43832  
USA  
Phone +1 800 342 7444  
Fax +1 740 498 5448  
info@boltaron.com  
www.boltaron.com