



INDIVIDUAL LAMINATES FOR INDIVIDUAL REQUIREMENTS

ISOVOLTA manufactures high-quality prepregs and laminates as sheets, tubes and rods. Future-oriented and efficient production sites enable us to adjust technical properties of laminates to the specific needs of our customers.

Thanks to our own resin production facilities we can create individual resin systems ideally suited for the professional and flexible manufacture of special products.

THE ISOVOLTA COMPETENCY

From resin to prepreg – from prepreg to laminate

OUR MODE OF OPERATION

A synergy of partnership and experience

The reliable ISOVOLTA supplier network guarantees first-class products and meeting delivery deadlines. A long-term and close cooperation with our suppliers ensures that only the best raw materials are being used in production and provides a supply guarantee characterised by reliable delivery and both innovative thinking and action. All ISOVOLTA partners are ISO-certified and audited by ISOVOLTA.

Our production plants use these substrate materials:

- ⚡ paper
- ⚡ cotton fabric
- ⚡ glass fabric
- ⚡ carbon fabric

These are impregnated with various resin systems manufactured by ISOVOLTA, such as:

- ⚡ epoxy resin
- ⚡ phenol resin
- ⚡ melamine resin
- ⚡ silicon resin

and pressed to high quality technical laminates in form of sheets, tubes and rods.

Polymer chemistry for suitable resins

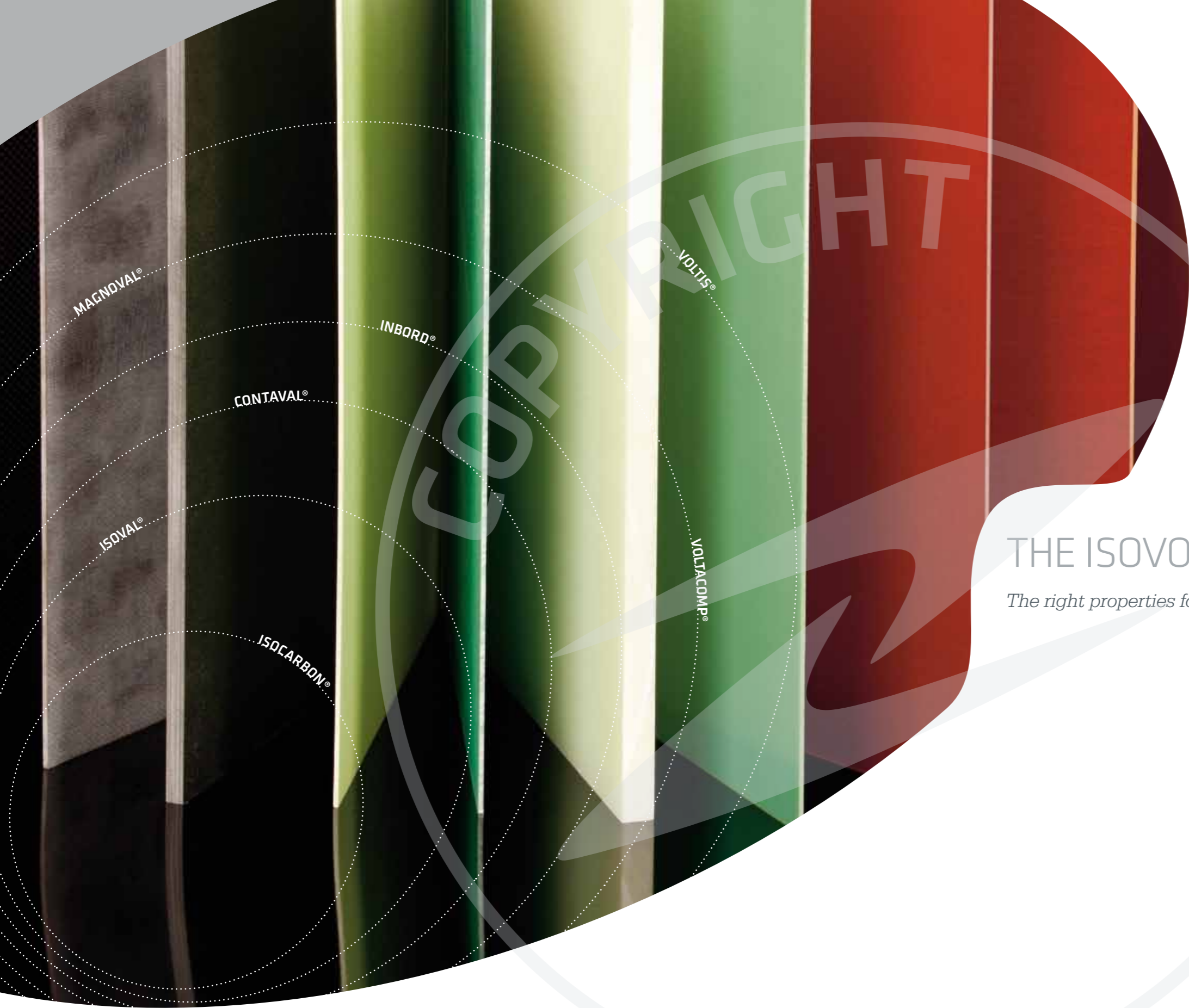
The development of resins systems is one of the ISOVOLTA core competencies, pursued in dedicated research programmes at our ultra-modern laboratories. This competency enables us to not only maintain high technical standards in products but to continuously develop them further.

Impregnation for individual prepreps

The application or inserting of the resin matrix onto or into the substrate material is done by means of horizontal and vertical impregnation equipment. During this process, special attention must be paid to ensure that the demanded quantity of resin is correctly dosed and that the required degree of tackiness is accurately adjusted. This greatly influences the next processing step of "prepreps" thereby created. It may consist of pressing laminates, rolling tubes and rods or shaping forms. The correct combination of resin and substrate material determines the main chemical, mechanical, electrical and thermal properties of prepreps and therefore of the resulting laminates.

Pressing for versatile laminates

The prepreps are either used in our production plants to make high-pressure laminates, tubes and rods or being sold to fabricators. The pressing of laminates and the curing of tubes and rods are controlled by pressure, temperature and time. The large variety of ISOVOLTA press formats and the many adjustable prepreg parameters enable us to respond effectively to customers' requirements.



THE ISOVOLTA PRODUCT RANGE

The right properties for every application





VOLTIS® HP

VOLTIS® Hp 2061
(PF CP 201)

VOLTIS® Hp 2061.5
(PF CP 202)

VOLTIS® Hgw

VOLTIS® Hgw 2082
(PF CC 201)

VOLTIS® Hgw 2082.5 CE
(PF CC 202)

VOLTIS® Hgw 2083
(PF CC 203)

VOLTIS® LC

VOLTIS® LC 141

VOLTIS® LC 205

INBORD®

INBORD® E

INBORD® M

INBORD® EGS

Phenolic Paper Laminates

Highest mechanical strength, good electric properties at normal humidity

High electric strength in oil, used in high voltage range at power frequencies

Phenolic Cotton Laminates

Viscoplastic material for mechanical application

Viscoplastic material for mechanical and electrical application

Viscoplastic material for mechanical application and finely machined parts

Rubber Clad Laminates

Also with PTFE or PP film, best solvent resistance

Also with PTFE or PP film, easy to punch

Laminates with Melamine Surface

Tracking index CTI 600 for switchgear and electric appliances

Tracking index CTI 200 for mechanical applications and punched pieces

Tracking index CTI 600 for switchgear with improved safety in case of arcing, with additional glass cloth reinforcement

ISOVAL®

ISOVAL® A
(EP GC 201)

ISOVAL® 10 R

ISOVAL® 11
(EP GC 203 & 308)

ISOVAL® 11 HKB
(EP GC 306 & 308)

ISOVAL® TM
(EP GC 203 & 308)

ISOVAL® FR4-HF
(EP GC 202)

ISOVAL® R
(EP GC 205)

ISOVAL® RKB-FR
(similar to EP GC 202)

Epoxy glass fabric laminates with the high-performance and temperature resistant ISOVAL® resin system

With glass filament fabric for test adapters in printed circuit testing equipment

With glass roving fabric, high-quality thermal insulation for mechanical engineering and plant engineering and construction where high working temperatures (up to 300 °C) and high pressure loads combined, Thermal Class H (180 °C)

With glass filament fabric, for electric appliances and transformers, high flexural strength at elevated operating temperatures, Thermal Class H (180 °C)

High tracking resistance (CTI 600) glass filament fabric, construction material in electric appliances and switchgear, especially for applications where surface contamination occurs, Thermal Class H (180 °C)

With glass filament fabric, high-quality construction material for a wide variety of high-temperature applications, Thermal Class H (180 °C)

Flame-resistant, halogen-free glass fabric laminate Type FR4, without any toxic flame retardants, UL 94 listed, Thermal Class H (180 °C)

With glass roving fabric, similar to ISOVAL 11, but for larger parts, Thermal Class H (180 °C)

Tracking resistance of CTI 600, glass roving fabric laminates, for insulating partitions in switchgear, flame resistant, Thermal Class F (155 °C)



Special Glass Laminates

- CONTAVAL®
Glass filament fabric for conductive corona protection for slot packing in high voltage machines, Thermal Class H (180 °C)

- MAGNOVAL®
For magnetic slot wedges in high voltage machines, Thermal Class F (155 °C) and Thermal Class H (180 °C)

- VOLTIS ME® (MF GC 201)
Tracking resistant laminate with melamine-resin-impregnated glass fabric, for mechanical and electrical applications. Low flammability

- ISOCARBON®
Carbon epoxy laminates with a wide range of applications and a long-term thermal stability of up to 200 °C
3K or 12K carbon cloth with 0/90° or quasi isotropic fibre orientation

- VOLTACOMP®
Multi-functional epoxy-resin-system impregnated glass roving fabric, laminate with high mechanical resilience and excellent thermal properties

- VOLTIS® SI (SI GC 202)
Silicone glass filament fabric, insulation material for high-frequency applications, Thermal Class H (180 °C)

- VOLTIS® Hgw 2072 (PF GC 201)
Phenolic/glass filament fabric for electrical applications under high temperatures, flame resistant

VOLTIS® AND ISOVAL®

- VOLTIS® Hp TU 21 (PF CP 21)

- VOLTIS® Hgw TU 21 (PF CC 21)

- VOLTIS® Hgw TU 22 (PF CC 22)

- VOLTIS® Hgw RO 41 (PF CC 41)

- VOLTIS® Hgw RO 42 (PF CC 42)

- ISOVAL® TU 21/FR4 (EP GC 21)

- ISOVAL® TU 22 (EP GC 22)

Round rolled and moulded tubes and rods

- Round rolled phenolic paper laminate tube for mechanical and electrical applications

- Round rolled phenolic fine weave cotton fabric laminate tube with high toughness for mechanical applications, excellent machinability

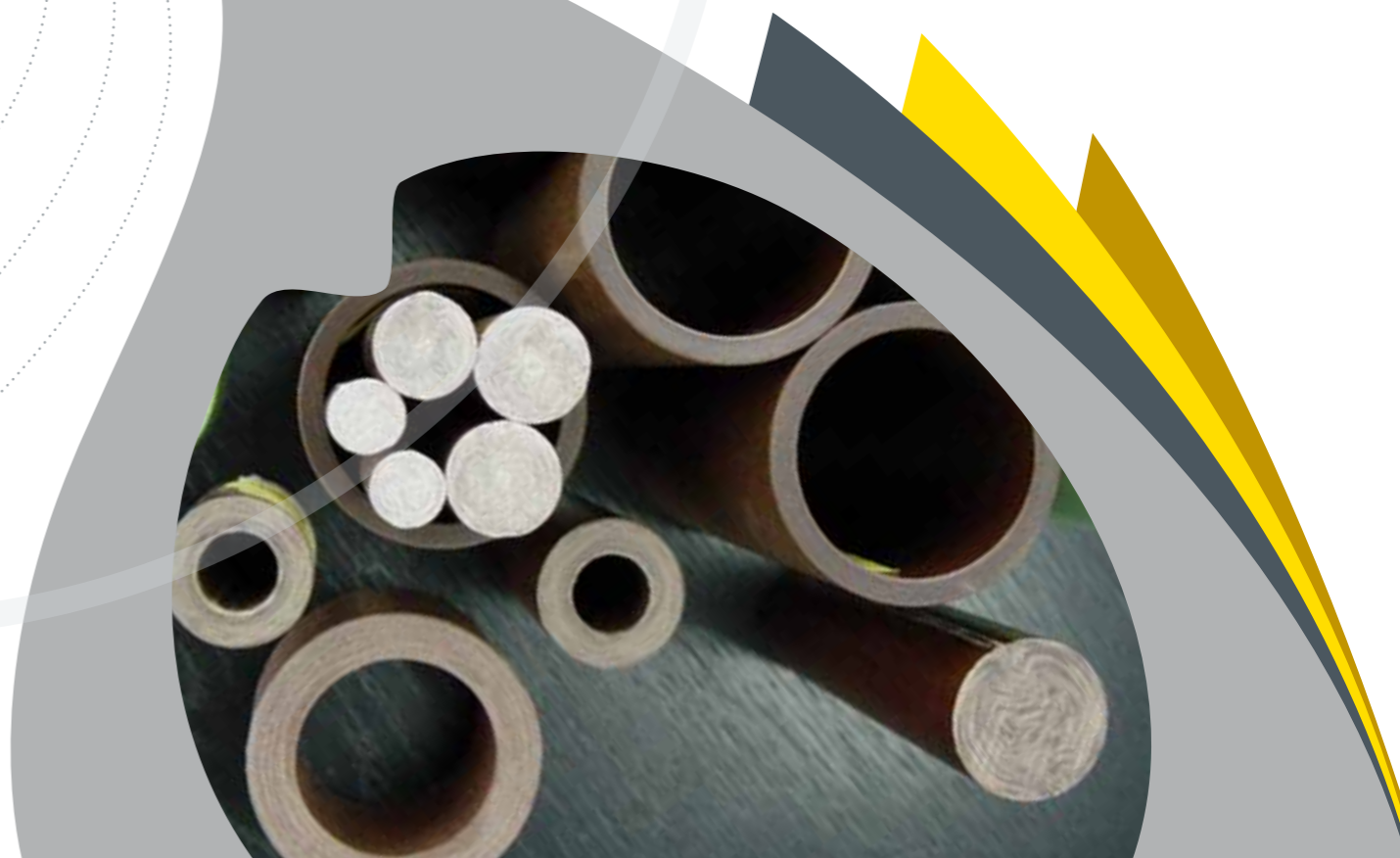
- Round rolled phenolic cotton fabric laminate tube with high toughness for mechanical applications

- Round moulded phenolic fine weave cotton fabric laminate rod with high toughness for mechanical applications, excellent machinability

- Round moulded phenolic cotton fabric laminate rod with high toughness for mechanical applications

- Flame-resistant, halogen-free round rolled epoxy glass fabric laminate tube with high strength for mechanical and electrical applications

- Round rolled epoxy glass fabric laminate tube with high strength even at elevated temperature for mechanical and electrical applications





THE ISOVOLTA SERVICE

Quality beyond the product

ISOVOLTA supports customers and business partners worldwide in a variety of industries and sectors, offering flexibility and a focus on practical implementation. Comprehensive and personal customer service is our first priority. Being a reliable partner, ensuring fast deliveries and maintaining high-quality in products and working processes is as second nature to us as environmental protection and safety at work. ISOVOLTA's commitment to the reduction of emissions is confirmed by our ISO 14001 environmental certification. Our research and development departments and our quality management system in action ensure high standards and a continuous improvement of our products. All ISOVOLTA plants are certified according to ISO 9001.

ISOVOLTA INNOVATION

To utilise the potential of possibilities

ISOVOLTA development projects focus on continuously optimising in-house formulated and manufactured resins, so that products can be adapt to individual customer requirements. Years of experience and state-of-the-art technologies assist in finding the right settings for every application. Furthermore, high-performance

ISOVOLTA production facilities enable the manufacture of special products according to customer specifications. ISOVOLTA competence centres constantly work on developing new products, always extending our technological leadership. Our successful special products speak volumes.



CONTACT

www.isovolta.com



Headquarters

ISOVOLTA AG
 IZ, NÖ – Süd, Strasse 3
 2355 Wiener Neudorf
 Austria
 T: +43 5 9595 0
 F: +43 5 9595 9050
headquarters@isovolta.com

Composite Materials · Prepregs & Laminates

Sales Service
 T: +43 5 9595 9466
 F: +43 5 9595 9477
prepregs-laminates@isovolta.com

ISOVOLTA Group production and distribution sites

AUSTRIA

ISOVOLTA AG
 Plant Wr. Neudorf
 IZ, NÖ – Süd, Strasse 3
 2355 Wiener Neudorf
 Austria
 T: +43 5 9595 0
 F: +43 5 9595 9050
headquarters@isovolta.com

ISOVOLTA AG
 Plant Werndorf
 Vianovastrasse 20
 8402 Werndorf
 Austria
 T: +43 5 9595 9500
 F: +43 5 9595 9509
wdf@isovolta.com

FRANCE

ISOVOLTA FRANCE SAS
 40, Rue du Professeur Gosset
 75018 Paris
 France
 T: +33 1 4011 0232
 F: +33 1 4011 9193
info@isovolta.fr

ISOVOLTA FRANCE SAS
 Plant Brognard
 253, Allée Adolphe Kégresse
 25600 Brognard
 France
 T: +33 3 813 1270 0
 F: +33 3 813 1270 1
info@isovolta.fr

ISOVOLTA FRANCE SAS
 Plant Chalette
 1, rue Gay-Lussac
 45120 Chalette Sur Loing
 France
 T: +33 2 388 5808 0
 F: +33 2 389 8352 5
info@isovolta.fr

MEXICO

ISOVOLTA DE MÉXICO S.A. de C.V.
 Michael Faraday No. 6
 Parque Industrial Cuamatla
 Cuautitlán Izcalli
 54730 Estado de México
 Mexico
 T: +52 55 5870 7930
 F: +52 55 5870 5329
info@isovolta.com.mx

GERMANY

ISOVOLTA GATEX GmbH
 Industriestrasse 1
 92442 Wackersdorf
 Germany
 T: +49 9431 635 0
 F: +49 9431 635 310
info@isovolta.de

ISOVOLTA GATEX GmbH
 Plant West
 Gottlieb-Daimler-Strasse 1
 50181 Bedburg
 Germany
 T: +49 9431 635 0
 F: +49 9431 635 310
info@isovolta.de

SPAIN

ISOVOLTA S.A.U.
 Pol. Ind. Can Salvatella
 Avda. Salvatella 85-97
 08210 Barberà del Vallès / Barcelona
 Spain
 T: +34 93 729 75 50
 F: +34 93 719 05 11
info@isovolta.es

USA

ISOVOLTA Inc.
 495 Territorial Street
 P.O. Box 287
 Harrisburg, OR 97446
 USA
 T: +1 541 995 6395
 F: +1 541 995 8425
info@isovolta-or.us

ISOVOLTA Inc.
 477 Windcrest Road
 P.O. Box 848
 Rutland, VT 05702
 USA
 T: +1 800 248 5528
 F: +1 802 775 5935
info@isovolta-vt.us

ROMANIA

ISOVOLTA S.A.
 130, Drumul intre Tarlale
 032982 Bucuresti, Sector 3
 Romania
 T: +40 31 030 1111
 F: +40 21 301 1544
info@isovolta.ro

CHINA

CHANGZHOU ISOVOLTA TECHNICAL
 COMPOSITE Co., Ltd.
 51, Hehuan Road
 Zhonglou Economic Development Zone
 213023 Changzhou City
 Jiangsu Province
 China
 T: +86 519 866 22885 8223
 F: +86 519 866 22855
info@isovolta.com.cn

HONG KONG

ISOVOLTA ASIA Ltd.
 21/F, Golden Star Bldg.
 20-24 Lockhart Road
 Hong Kong
 T: +852 252 91129
 F: +852 252 74553
general@isovolta.com.hk

INDIA

ISOVOLTA INDIA PRIVATE Ltd.
 27, Kiroi Vidya Vihar West Rd.,
 400 086 Mumbai
 India
 T: +91 22 6575 1750 0
 F: +91 22 2510 6092
info@isovolta.in

Liaison Offices

TURKEY

ISOVOLTA AG TÜRKIYE İRTİBAT BÜROSU
 Kayisdagi Cad. No. 76/8
 Karadaği Apt.
 34752 İcerenköy - Atasehir / Istanbul
 Turkey
 T: +90 541 8076860
 F: +90 216 5723285
info@isovolta.com.tr

HUNGARY

ISOVOLTA AG MAGYARORSZÁGI
 KERESKEDELMI KÉPVISELET
 Kócsag Utca 31
 1221 Budapest
 Hungary
 T: +36 309991883
 F: +36 12093444
isovolta@varady-brenner.hu

COPYRIGHT

