





Israeli-German Business Dialogue Lightweighting - Composites & Technology

07th – **10**th December **2020**

Company Products and Services Catalogue

In collaboration with



Project of



Israeli-German business dialogue online 7th-10th December 2020



Amidst the current background of the COVID-19 pandemic and the present exceptional global situation, the export industry is faced with numerous challenges. With the business trade mission to Israel, the Federal Ministry for Economic Affairs and Energy (BMWi) offers a concrete support measure for the continuation of international business despite travel restrictions. This funding project is implemented digitally and brings together with potential customers and business partners from Germany and Israel, using online video conference tools. The project is carried out by SBS systems for business solutions GmbH in cooperation with the AHK Israel.

From December 7th to 10th, 2020, there will be a four-day digital business trip to Israel for German companies interested in expanding their business into the Israeli market. The project is primarily aimed at small and medium-sized German companies and manufacturers in the field of lightweight construction technology and advanced materials for various industries such as chemicals, automotive suppliers, the aerospace industry and medical technology.

With this digital project implementation, the BMWi is supporting German companies in their foreign trade commitment through the targeted establishment and expansion of business contacts in Israel. The virtual business initiation is intended to point out market opportunities and prepare long-term sales potential for German companies in the Israeli market and vice versa.

This is a great opportunity for Israeli companies to be exposed to new business opportunities with the German participants of this delegation and to discover potential synergies

German Companies

AFPT 5
Böllinger Group
BÜFA Thermoplastic Composites
Leibniz-Institut für Polymerforschung e. V. (IPF)
KARL MAYER
M&A Dieterle
Mitsui Chemicals Europe
Plasticon Composites
RTE
SAHM
TEXTECHNO
ThermHex



A warm welcome to all participants of our digital German-Israeli business forum on lightweighting. This meeting is part of the Market Development Programme launched in 2012 by the Federal Ministry for Economic Affairs and Energy to support German companies in exploring foreign markets. Since the inception of the programme, over 10,000 SMEs have taken part in its projects, thus gaining access to new markets, securing existing markets and establishing networks.

The exceptional global situation caused by the COVID-19 pandemic has also given rise to a number of new challenges for the export sector. International networking and cooperation is more important than ever today.



Mr. Werner Loscheider

This digital business forum addresses the field of lightweight construction.

Lightweighting is an enabling technology based on a design philosophy which aims to reduce weight, integrate different functions and optimise the construction design in terms of load-bearing and materials. Lightweighting solutions have lower material requirements, allowing manufacturers to save costs. Lightweight products also help to keep down costs by using less energy and by reducing carbon emissions. Sustainable lightweight construction is one of the drivers of climate change mitigation and sustainability, the overriding global challenge in the years to come.

Both Israel and Germany have recognised the potential of lightweight construction as a game changer and are actively promoting technological development in this field. Lightweighting plays a crucial role in many different areas, ranging from the automotive and aviation industries to the construction sector and medical technology. Israel is not merely a sales market for lightweight products and new materials, but offers ample opportunity for industrial cooperation. There is excellent potential for enhanced bilateral business cooperation across all areas related to lightweighting, including components and machinery, the marketing of new materials and manufacturing technologies, as well as joint research and development projects. This is our common goal. I wish all the participants every success!

Mr. Werner Loscheider

Head of Division, Construction Industry, Lightweight Construction / New Materials, Resource Efficiency; Federal Ministry for Economic Affairs and Energy

Israeli-German business dialogue online 7th-10th December 2020

line composites & technology

lightweighting

PART 1: PRODUCTION AND TESTING TECHNOLOGY FOR LIGHTWEIGHT MATERIALS AND COMPONENTS

Monday, December 7th

TIME (IST)	Program
10.05 – 10.20 am	The Federal Ministry for Economic Affairs and Energy's Lightweighting Initiative – A German-Israelian Perspective Mr. Werner Loscheider, Head of Division IVB4 Construction industry, lightweight construction/new materials and resource efficiency, Federal Ministry for Economic Affairs and Energy
10.20 – 10.45 am	 Introductory Roundtable with industry experts from Israel and Germany: VDMA Working Group Hybrid Lightweight Technologies – Mr. Dámaso López, Project Manager Hybrid Lightweight Technologies, A Working Group within the Mechanical Engineering Industry Association (VDMA) Manufacturers Association of Israel – Mr. Oren Harambam, Head of Building Materials and Consumer Goods Industries Association
10.45 – 11.45 am	 Pitch presentation of the German companies: AFPT GmbH – Mr. Arne Büttner, Head of Sales Georg Sahm GmbH & Co. KG – Ms. Timea-Mona Köcher, Area Sales Manager KARL MAYER Technische Textilien GmbH – Mr. Turgay Turan, Business Development Manager M & A Dieterle GmbH Maschinen- und Apparatebau – Ms. Dr. Bettina Schrick, Sales Manager Composites RTE Akustik + Prüftechnik GmbH – Mr. Jörg Ritter, CEO TEXTECHNO Herbert Stein GmbH & Co. KG – Mr. Dr. Stefan Fliescher, Assistant Managing Director Sven Blanck (Deputy Managing Director MAI Carbon)
11.45 – 12.00 am	Q&A-Session

Israeli-German business dialogue online 7th-10th December 2020

MATERIALS AND COMPONENTS

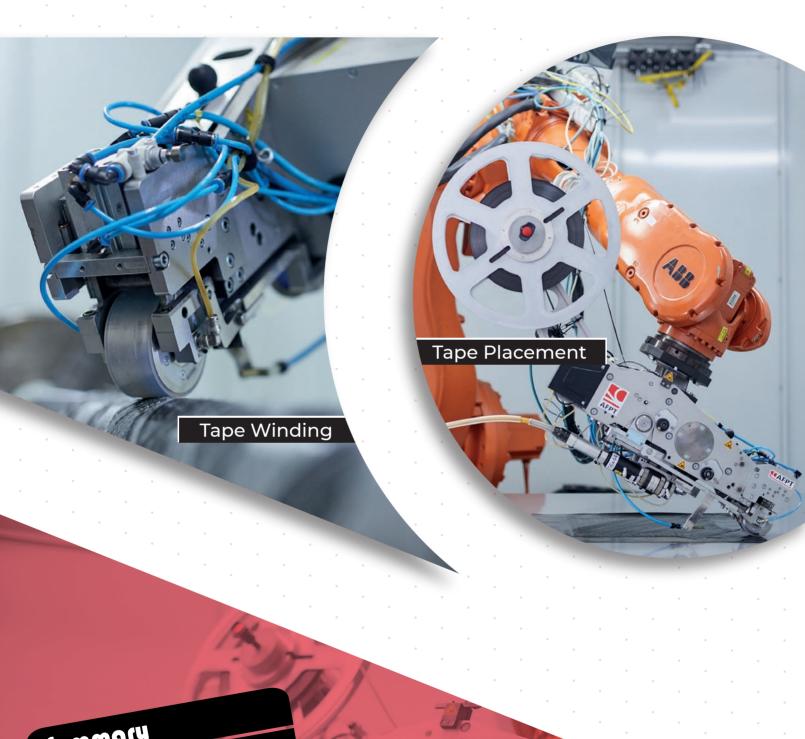


PART 2: PRODUCTION AND TESTING TECHNOLOGY FOR LIGHTWEIGHT

Monday, December 7th

TIME (IST)	Program
10.05 – 10.20 am	The Federal Ministry for Economic Affairs and Energy's Lightweighting Initiative – A German-Israeli Perspective Mr. Werner Loscheider, Head of Division IVB4 Construction industry, lightweight construction/new materials and resource efficiency, Federal Ministry for Economic Affairs and Energy
10.20 – 10.45 am	 Introductory Roundtable with industry experts from Israel and Germany: AVK – Industrievereinigung Verstärkte Kunststoffe e.V. – Association of Reinforced Plastics Industry Mr. Dr. Elmar Witten, Managing Director Dr. Naum Naveh, Israel Plastics and Rubber Center Senior Faculty Member Dept. of Polymer Materials Engineering, Shenkar College of Engineering, Design, Art
10.45 – 11.45 am	 Pitch presentation of the German companies: BÜFA Thermoplastic Composites GmbH & Co KG – Mr. Dirk Punke, Managing Director BÖLLINGER GROUP Holding GmbH – Mr. Franz Böllinger, CEO Leibniz-Institut für Polymerforschung Dresden e.V. – Mr. DrIng. Axel Spickenheuer, Head of Workgroup of Complex Structural Components Mitsui Chemicals Europe GmbH – Mr. Dr. Christos Karatzias, Business Development Manager Plasticon Germany GmbH – Mr. Gunar Krause, Senior Sales Manager ThermHex Waben GmbH – Mr. DrIng. Jochen Pflug, CEO Dr. Tjark von Reden, Cluster Manager MAI Carbon
11.45 – 12.00 am	Q&A-Session





Summary

מכונות וציוד לחומרים מרוכבים תרמופלסטיים. ספק לציוד ליפוף ומיקום סרטים תרמופלסטיים נתמך לייזר לייצור אוטומטי של פריטים מרוכבים תרמופלסטיים.

made in Germany

www.afpt.de

Since 2007, we have been the leading supplier of laser-assisted tape placement and winding machines. We support our customers in the implementation of machinery for thermoplastic composite component production.

With our innovative team of 20 people, we offer our products and services worldwide.

At our application centre, we support our customer with product development, prototype manufacturing and small series production. There are 3 state of the art machines available, that can be used by customers to realize their ideas.

Products / Services

Tape Placement & Winding Machines:

AFPT designs and builds fully automated machines for the production of composite components. Most machines are dedicated to special products and processes. According to customer wishes we are also able to supply special tooling like tape placement heads, molds or mandrel extractors.

Thermoplastic Composite Components:

At our technical centre in Germany we perform series production for smaller amounts (<50.000 pcs/a.). Typical applications are bearings, tubes, inserts for injection molding or other profiles.

Product & Process Development Service:

We assist you in developing new composite products from the material choice to the realization of first prototypes.

References and export activities

We already delivered equipment to central Europe and Asia. You can find our machines at several R&D institute like DLR Stuttgart & Augsburg, University of Munich, ICOMP Ireland or Cetim France.

Customers are using our equipment in the oil & gas industry to produce pipelines & deep sea risers or as structural elements for power tools.

Target group

AFPT is looking for business partners that are interested in composite components in different industries like,

- Automotive
- Oil & Gas
- Infrastructure
- Aerospace
- Electronics

Competitive advantages

AFPT has more than 10 years experience in tape placement & winding processes. Our fully automated production systems allows new application for composite components due to reduced cost and increased productivity.

Our process observation system allows online quality control and complete traceability.

Purpose of participation in the project

We are looking for potential applications of thermoplastic composites in Israel. Especially the infrastructure and automotive industry are a promising branches.

AFPT GmbH

Trinkbornstraße 10 56281 Dörth Germany

www.afpt.de

1. Contact person Arne Büttner

Sales Manager

Phone: +49 6747 950 185 31 arne.buettner@afpt.de

2. Contact person Patrick Kölzer **Managing Director**

Phone: +49 6747 950 185 0 sales@afpt.de

AFPT

Languages: English, German

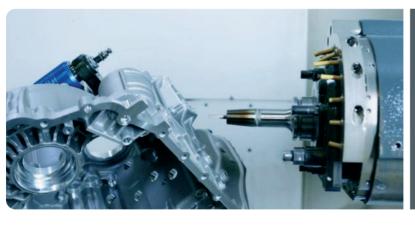
Project of



THE EXPERTS IN ADDITIVEMANUFACTURING



THE PROFESSIONALS IN COMPLEX ALUMINIUM SAND CASTING



THE SPECIALISTS IN HIGH-PERFORMANCE MACHINING

שמחית בייצור של אבטיפוסים חדשניים, פיתוח חלקים, מוצרי נישה וסדרות מיוחדות. - הנדסה - ייצור בהוספה (Additive Manufacturing) - אלומיניום ביציקת חול - עיבוד שבבי באיכות גבוהה made in Germany

TRANSFORMING TRADITION PIONEERING PROGRESS

The BÖLLINGER GROUP is located in south of Germany, in Baden-Württemberg, round about 50 km far away from Stuttgart.

Since 1989 the year of founding the BÖLLINGER GROUP is the specialist for Engineering and producing high complex functional parts in the automotive, aerospace, mechanical engineering and consumer goods industries.

For that we engineer the processes and produce parts in 3 Locations in Germany, for our Customers world wide.

As an family owned Company is it our daily business to satisfy the expectations of our ambitious customers in a very short time with the highest quality standard.

Products / Services

According to our Slogan "FROM THE CUSTOMER DESIGN IDEA TO THE FINISHED FUNCTION PART - ALL FROM ONE SOURCE!", we transfer your construction ideas in high complex components. Therefore we use in the additive manufacturing, the Laser Powder Bed Fusion Technology. We have worldwide the biggest work space in that technology with 800 x 400 x 500 mm max.

In addition to that we use the aluminum sand casting technology, especially the low pressure sand casting process for best mechanical characteristics and high reproducibility.

As well 3D printed parts as the casting parts are subject to a high end machining process. Therefore we use most modern plant park and infrastructure also for all complementary processes.

Our customers have the possibility to select a single technology for their parts or use the completely process options.

References and export activities

Out of our 3 Locations in Germany we supply and support well named and is established customers even also like Start Up companies, worldwide. Till now we have active business relationships in Germany, Europe, North America and Asia.

Target group

Target Customers are all that companies who need very complex components useable for their machines and systems in a short period between engineering and realization. Very interesting for us and additional to that what we do till now, are industries like space and satellite technology, medical technology, military engineering and transportation technology.

Competitive advantages

- High process competence
- Innovation-friendly attitude,
- Linking innovative technologies into an overall process
- Know-How made in Germany
- International mind setting and intercultural competence
- 3D printing Technology is standing for new chances in product realization

Purpose of participation in the project

To maintain customer contacts and to expand new business relationship in Israel.

BÖLLINGER GROUP

Salinenstr. 38-44 74177, Bad Friedrichshall Germany **BÖLLINGER GROUP**

www.boellinger-group.com

1. Contact person Franz Böllinger

Phone: +49 7136 9634 201 Mobil: +49 171 478 65 80 f.boellinger@boellinger-group.com 2. Contact person Marion Seebold Sales

Phone: +49 7136 9634 209 Mobil: +49 173 6761191 m.seebold@boellinger-group.com

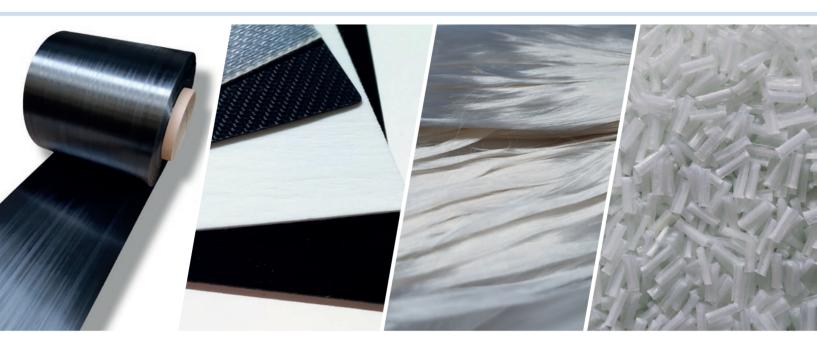
Languages: German and English

Project of





Thermoplastic Composites



DISTRIBUTOR OF RAW MATERIALS AND SEMI-FINISHED PRODUCTS



Formable by heat



Possibility of welding



Short process times with high reproducibility



Storage at room temperature



Easy transport

Summary

ספקית של חומרי גלם ומוצרים חצי מוגמרים שבאמצעותם ניתן לייצר רכיבים תרמופלסטיים משורייני סיבים ארוכים או אינסופיים. דגש ניתן על מוצרים מחומרי גלם מתחדשים.



made in Germany

https://thermoplasticcomposites.de/en/

We are a newly founded company in the BÜFA Group that focuses on long and continuous fibre reinforced thermoplastics. We do import, storage, distribution, cutting to length and width, free-form cutting, customer-specific laminates from tapes.

Due to their better recyclability, we rely on thermoplastics, including post-consumer recyclates. The reinforcing fiber in our semi-finished products is glass, carbon or natural fiber.

Products / Services

- UD Tapes
- Laminates
- Natural fibre
- Organosheets
- Sandwich panels
- LFT
- LCF
- Slitting
- Cutting
- · Free-form cutting

Target group There are po

There are potential customers for our materials in all sectors of the economy. However, we focus on non-military applications. Possible applications are construction, automotive, commercial vehicles, sports equipment, leisure, medical technology, rehabilitation, energy industry, pipes, tanks, containers, 3D-print and many more.

We can imagine both direct customers and a technically oriented distributor.

Competitive advantages

We offer a variety of materials even in small quantities, which are otherwise difficult to obtain from the manufacturers.

We have stocks of standard materials, so that we can guarantee fast deliveries.

Purpose of participation in the project

We are interested in partnerships on the Israeli market. We are looking for customers, but also for manufacturers of thermoplastic materials who would like to use us as a distributor for the European market.

References and export activities

We have already delivered materials to: Portugal, Spain, France, UK, Netherlands, Belgium, Austria, Denmark, Hungary, Switzerland, USA

BÜFA Thermoplastic Composites GmbH&Co KG

Stubbenweg 40 26125 Oldenburg Germany



2. Contact person

https://thermoplasticcomposites.de/en/

1. Contact person
Dirk Punke
Managing Director

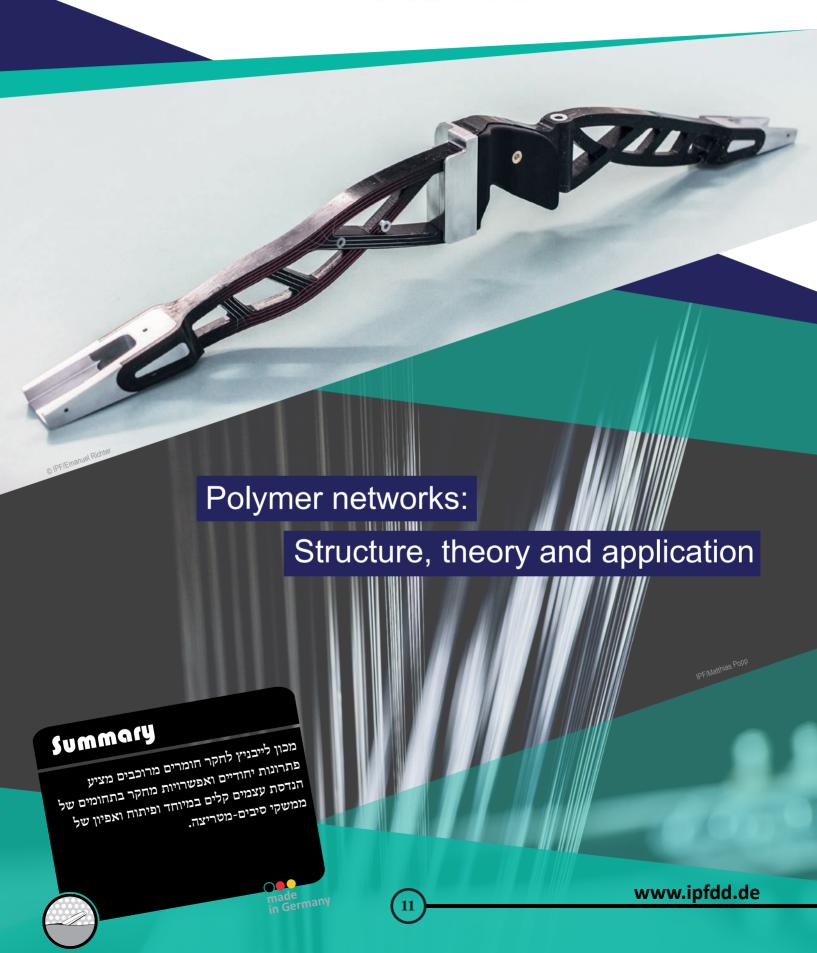
Siobhan Wilson
Sales Manager
Phone: +49 441

Phone: +49 441 931 79 05 Mobile: +49 170 456 94 56 dirk.punke@buefa.de Phone: +49 441 931 79 07 Mobile: +49 171 3000987 siobhan.wilson@buefa.de

Languages: German, English







The Leibniz-Institut für Polymerforschung Dresden e. V. (IPF) is a publicly funded research institute. As one of the largest polymer research institutes in Germany, it conducts holistic materials science research - from synthesis, modification, characterization and theory of polymers to processing and testing. It develops new, multifunctional polymer functional and construction materials as well as biomaterials and composites. Composite materials are one of the research foci of the institute. The IPF has specific competences in the field of fiber interface and extremely lightweight design.

Products / Services

The IPF offers research services in the field of polymer and composite materials, among others:

- Glass fiber spinning pilot plant,
- Development of thermoplastic glass fiber hybrid yarns,
- Lightweight design by means of variable-axial, fiber reinforced plastics (FRP) using Tailored Fiber Placement (TFP) technology,
- Structural simulation and optimization methods for extreme lightweight construction applications,
- Composite material characterization, e.g. single fiber pull-out tests,
- Polymer and composite material analysis.

Target group

The solutions for fiber-plastic composite applications developed at the IPF are transferred and used by a large number of different companies. The companies range from OEM to TIER-1 and TIER-2 as well as suppliers of special solutions.

Competitive advantages

The IPF offers unique know-how in the field of fiber-matrix interface design, in the development of thermoplastic hybrid yarns as well as in the design of mass-minimal FRP lightweight structures based on a variable-axial fiber architecture.

Purpose of participation in the project

Establishment of new contacts for project initiation with partners in Israel.

References and export activities

The IPF cooperates in numerous national, European and international research projects with a variety of research institutions as well as medium and large-sized industrial companies.

Industrial partners come from Germany, USA, Japan, Israel, France, Switzerland and other countries.

Leibniz-Institut für Polymerforschung Dresden e. V.

Hohe Straße 6 01069 Dresden Germany

www.ipfdd.de

1. Contact person

Axel Spickenheuer, Dr.-Ing., Head of Workgroup of Complex Structural Components

Phone: +49 (0)351 4658 374 spickenheuer@ipfdd.de

Languages: German, English



2. Contact person

Christina Scheffler, Dr.-Ing., Head of Workgroup Reinforcing Fibres and Interphase Characterization

Phone: +49 (0)351 4658 373 scheffler@ipfdd.de

Project of







KARL MAYER is an innovative market leader as well as driving force in the textile machinery building. The manufacturer offers perfect solutions for the fields of warp knitting and flat knitting, technical textiles, warp preparation for weaving and digitalisation.

To ensure the success of its international customers, KARL MAYER has always been eager to provide its clients with the best economical and technical products and services and to offer innovations which bring fresh impetus to the textile world.

With more than 3,300 employees worldwide, the international organization produces in its main markets, so that KARL MAYER is always close to its customers and their needs.

Products / Services

- Textile machines
- Composite machines
- Fiber Spreading Systems, Multiaxial NCF machines e.g.
- Knitting machines (Carbon and Glass)
- Thermoplastic machines

To view product videos click here:

WEFTTRONIC II G - https://youtu.be/UCqpPf_IPg4 COP MAX 5 - https://youtu.be/zvwS2flwwWc

References and export activities

Reference machines at global main players in the texile world, corporate, mid-sized and small companies.

Based on the international organization and production in our major markets, KARL MAYER always operates close to the customers and meet their specific needs with:

- Worldwide presence in all markets
- Production and engineering in the main markets
- Qualified agency network in more than 90 countries

Target group

Automotive / Building and Construction / Transport and Aerospace / Renewable Energy / Sports Equipment / Personal Protection / Advertising (Advertising tarps e.g.) / Medical Technology / Infrastructure / Apparel and Home Textiles / Reinforcement and Coating Substrates

Competitive advantages

- Customer satisfaction comes first at KARL MAYER
- Over 80 years of experience with textile machines
- Service in more than 90 countries
- Academy also for training the employees of our partners
- Spare parts supply
- Digital solutions and services

Purpose of participation in the project

- Win new business partners
- Market KARL MAYER systems
- Make the advantages of our systems known

KARL MAYER Technische Textilien GmbH

Mauersbergerstrasse 2 09117 Chemnitz Germany



www.karlmayer.com

1. Contact person

Turgay Turan

Business Development Manager

Phone: +49 371 814 33 22 Mobil: +49 173 867 52 17 turgay.turan@karlmayer.com

Languages: German, English, Turkish

Project of







15

Summary

מכונות מודלריות, ידידותיות למשתמש ולפי דרישת הלקוח לעיבוד סיבים והנחת פרפרג / סיבים / רצועות. יותר בקרת תהליכים, פחות פחת, הגברת היעילות הודות לייצור מרוכבים ממוכן.

https://www.ma-dieterle.de/en/composites-new

M & A DIETERLE (since1964) is an established provider for the development and construction of tailor-made machinery and components for the textile and paper industry.

Our Composites Unit offers modular, cost-efficient and flexible machines for fiber processing - from fiber spreading and impregnation to fiber placement.

Our latest development, the CROSSLAYER enables automated preforming with either prepreg or dry fiber placement. The placement head can also be integrated in a robot. All machines are designed for ease of use and maximum flexibility. Machines can be reconfigured.

Products / Services

Products

- 1. UD FixedTow Machine (spead and powder fixed Tow production)
- 2. Crosslayer (automated 2D dry fiber placement or pregpreg placement)
- 3. Fiber Discovery Modules: Customized fiber processing machines (sizing, spreading, impregnation of fibers)
- 4. Customized Fiber Placement machines integrated in robots; multi - head machines

Services

- 1. Material production (fixedTow, sizedTow, preforms)
- 2. Co-Development

References and export activities

Numerous references from international well-kown companies and SMEs in the field of composite, textile, and paper processing industries. Agreements with world-wide sales representative for machine services.

Target group

- Composite manufacturing companies along the value chain from fiber processing to the final part.
- Companies who want to switch from manual to automated processes, e.g. sports equipment, etc.
- R&D companies / institutes: looking for cost-efficient fiber processing equipment for training students and personnel

Competitive advantages

- High quality machines made in Germany: inhouse machine development and assembly. Have own preforming lab to validate processes before machines are built.
- Develop customized and functional solutions to customer's problem.
- Access to new fiber processing and composite innovations

Purpose of participation in the project

We would like to establish new business relationships to companies / institutes in fiber processing and composite manufacturing. This may include sales of fiber processing / automated fiber placement machines as well as co-development projects with partners for targeted applications and markets.

M&A Dieterle GmbH Maschinenbau

Neuhofstr. 26 D-73113 Ottenbach Germany



https://www.ma-dieterle.de/en/composites-new

1. Contact person Dr. Bettina Schrick Project manager Composites

Dietmar Dieterle

2. Contact person

CFO

Mobile: +49 170 224 02 60 bettina.schrick@ma-dieterle.de

Phone: +49 7165 20 10 dietmar.dieterle@ma-dieterle.de

Languages: English, German

Project of





Mitsui Chemicals Group

TAFNEX[™]

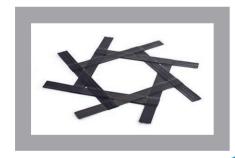
CF - PP UD Tape





made in Germany









Summary

יצרן של חומרים לייצור קל משקל כמו סרטים חד-כיווניים (UD) על בסיס סיבי פחמן (CF) ופוליפרופילן (PP) TAFNEX™ CF-PP UD

TAFNEX™ CF - PP UD

is an unidirectional thermoplastic tape consists of carbon fiber and polypropylene

www.tafnex.eu

The Mitsui Chemicals Europe GmbH is the European subsidiary of the Mitsui Chemicals Group, which is a global chemical manufacturer and supplier of value added specialty chemicals, plastics and materials for the automotive, healthcare, packaging, agricultural, construction, semiconductor and electronics market.

We are responsible for the market in Europe, Middle East, Africa and Central Asia and contribute to society by offering innovative and high-quality products and services that are in harmony with the global environment.

Products / Services

In addition to the focus on Polypropylene production and compounding, the Group offers a wide range of products such as impact modifier (TAFMER™), thermoplastic elastomers (MILASTOMER™, Mitsui EPT™), adhesion promoters (ADMER™) and various functional polymers (ARLEN™, APEL™, TPX™).

Regarding the lightweight business, Mitsui Chemicals developed the new product TAFNEX™ CF-PP UD, a unidirectional (UD) fibre reinforced tape based on carbon fibres (CF) and polypropylene (PP) with specially developed fiber bonding technology. It has a very good water resistance, high stiffness and strength at low density. It offers excellent processability in thermoforming, tube winding, tape placement or back-injection molding.

References and export activities

Mitsui Chemicals Europe is present with twelve affiliates in Germany, Italy, Poland, Netherlands, France, Great Britain and Spain. So we are always close to our customer – with innovative and high-quality products and services.

Also, we are already supplying different polymer materials to customers in Israel. Group wide we are supplying nearly to all relevant polymer market regions.

Target group

As a material supplier, we support every industry and company within the value chain that is interested in using thermoplastic composites.

Competitive advantages

Mitsui Chemicals developed in-house a unique fiber-matrix bonding technology to overcome existing constraints in the combination of non-polar polyolefins like PP and CF. Overall, this results in high mechanical properties as UD Tape product for the use in PP based parts or replacing other materials.

Purpose of participation in the project

Mitsui Chemicals is eager to develop new markets and to continuously open up new fields of business with the lightweight composite product TAFNEX™ CF-PP UD.

Mitsui Chemicals Europe GmbH

Oststrasse 34 40211 Düsseldorf Germany

www.tafnex.eu

1. Contact person Dr. Christos Karatzias Business Development Manager

Phone: +49 211 17332 351 Mobile: +49 175 954 99 69 christos.karatzias@mcie.de

Languages: German, English



2. Contact person René Laschak Pinto Gonçalves Business Development Engineer

Phone: +49 211 17332 352 Mobile: +49 151 4218 5770

rene.laschak@mcie.de

Project of



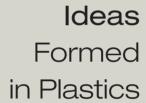








Innovative Plastic Solutions for the Industry













אנו מציעים מגוון מוצרים לאחסון, עיבוד וייצור של חומרים אגרסיביים. בהתאם לאפיוני החומרים, המוצרים שלנו עשויים מפיברגלס -פלסטיק משוריין סיבי זכוכית (FRP) או מרוכבים נוספים (FRP עם חומרים תרמופלסטיים או פלואורופלסטיים).



www.plasticoncomposites.com

Plasticon Germany GmbH was founded in 1969. It is located in the west of Germany. Our company is specialized in the development and manufacturing of tanks, piping, apparatus and other components.

Plasticon Germany is part of the Plasticon Composites group which has a global network of more than 3 0 sales and operations offices in all the continents of the world, covering the regional and international markets. Our multilingual staff, equipped with international and local certificates, aim to promote optimum communication with our customers.

Products / Services

Vessels:

- FRP and composite tanks
- Pressure vessels
- Process tanks

Apparatus:

- Process columns
- Scrubber systems for flue gas treatment
- Internals and spray headers
- Wet-ESPs

Piping:

- Process Piping types B, D, E in compliance DIN 16965/966
- Ducts & Stacks

Lining systems for steel components:

- Sheet Lining, Loose Lining, Fixpoint Lining
- Service
- Daily Service and maintenance
- Refurbishments
- Installations

References and export activities

Our end customers are the following:

Chemical Industry: ICL, Adama, Jordan Bromine, Qapco, Aramco, BASF SE, Venator Germany GmbH, Solvay GmbH, Currenta GmbH & Co. OHG, Covestro AG, Lanxess, Kronos Titan GmbH, Grillo AG, Grace GmbH

Semiconductor: GlobalFoundries, Infineon, Intel

Mining & Metals: Aurubis AG

Target group

Our products and services are used in a wide range of industries:

Chemical industry, semiconductor industry, fertilizer industry, water treatment, refinery, pulp production, high purified waters, energy technology, waste incineration plants and many more.

We are organizing our sales activities as direct sales or sales using partners worldwide.

Competitive advantages

Strength and special skills of our company are most of all our expert knowledge to our products and our extensive experiences in the upper mentioned application fields. Our experienced and qualified employees ensure that all works are performed in compliance with high quality standards.

Purpose of participation in the project

We are interested in new contacts on the israeli market with companies which are working in the upper mentioned application fields.

In general our interest is related to all projects where aggressive media are stored, processed and manufactured.

Plasticon Composites GmbH

Dieselstraße 10 46539 Dinslaken Germany

www.plasticoncomposites.com

1. Contact person **Gunar Krause** Senior Sales Manager Phone: +49 2064 499 235

Mobil: +49 172 75 32 239 g.krause@plasticoncomposites.com

Languages: German, English

2. Contact person Svenja Kaczmarek Marketing & Sales Support Phone: +49 2064 499 201

Mobil: +49 160 962 042 31 s.kaczmarek@plasticoncomposites.com





For quality assurance





WE HEAR QUALITY



www.rte.de

RTE is a leader in acoustic testing technology for series production.

Since it was founded in 1986 as a spin-out from the Fraunhofer Institute, the company has been developing, manufacturing and supplying products and test devices based on acoustic evaluation methods.

The RTE systems are all based on the proprietary software system SonicTC.

RTE cooperates with research companies and development partners for the continuous further development of acoustic test technology in its applications and areas of application.

RTE sees itself as a specialist in acoustic test systems and has 14 employees.

Target group

- Automotive suppliers, Railway industry, Medical industry
- Processors of powder metal, casting, hybrid materials
- Drives, pumps, turbines, fans
- Automation and machine builder.

Competitive advantages

Own software development. Inteligent and powerful SonicTC softwaresystem. 100% quality inspection. Full level of automation.

USP: acoustic material testing.

Easy integration in automatic serial production.

Products / Services

- · Acoustic material testing
- Noise and vibration analyzes and testing
- Function test based on vibrations and noises
- Natural frequency analysis
- Acoustic process monitoring for predictive maintenance
- Software development for test systems and automation
- Advice and conception of test solutions and systems

The services include the creation of feasibility studies (product samples) for acoustic product testing as well as training courses for users.

Purpose of participation in the project

Cooperation partners for artificial intelligence methods. Distribution partners.
Venture capital

RTE Akustik + Prüftechnik GmbH

Gewerbestrasse 26 76327 Pfinztal Germany

www.rte.de

Contact person Jörg Ritter CEO

Phone: +49 721 946 50 60

j.ritter@rte.de

Languages: German, English, French

References and export activities

Indien: RTE Transweigh India Ltd. Continental: Germany, Mexico, China

Nidec: world wide





Winding solutions for every application





High Performance Fibers



Carbon Fibers



Converting



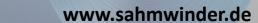
Tapes/Monofilaments



Coating

Summary

פתרונות חדשניים בטכנולוגיות לסלילת חוטים ותהליכי ויצור לפני ואחרי הסלילה. יצרנית מובילה של מכונות סלילה אוטומטיים לסיבים מיוחדים ולחוטים טכניים.



SAHM is an international enterprise based in Eschwege, Germany. SAHM offers innovative solutions in winding and unwinding technology, and support for upstream and downstream processes. SAHM is a technology leader in automatic winding technology for high performance fibers.

Founded in 1945 by the engineer Georg Sahm, the reputation and the name SAHM have been synonymous with quality, expertise and reliability worldwide. Service offices in Fountain Inn, SC, USA and Guangzhou as well as a worldwide network of expert agencies ensure rapid availability. Since 2002, SAHM has been affiliated with the Starlinger Group based in Vienna, Austria.

Products / Services

Take-up winders (manual and automatic doffing precision cross winders) Rewinders, Parallel Winders.

We offer winding technology for various applications, e.g. Multifilaments, Monofilaments, Tapes, Carbon Fibers, Towpregs, Technical Yarns, High Performance Fibers, Film & Foils and Security Tapes.

Automatic doffing and transport systems for spools (mobile and stationary systems).

References and export activities

Our winders are worldwide in operation.

With branches in Fountain Inn, SC/USA and Guangzhou, China, and supported by a global network of competent agents, we show strong presence on international markets and maintain reliable proximity to our customers on all continents. This close contact with customers and local agents keeps us prepared for individual customer wishes and helps us realise them.

Target group

- High-tech yarn producer
- Companies which needs or offers production lines for prepreg or composite production
- Firms which offer processing of industrial yarns for ex. coating, dipping, intermingling, oiling, chemical treatment of yarn
- Companies which process woven material for composite

Competitive advantages

Factors such as yarn tension, winding speed and winding precision determine whether a technical yarn will be fit to be made into a perfect high-tech product.

With "Made with SAHM Winding Technology" we give customers our quality promise: You are getting the perfect basis for all downstream production and finishing processes.

Purpose of participation in the project

SAHMs purpose to participate in this project is to establish new contacts and to extend the market.

Main target is to be a step forward in applications of technical yarns and filament in several industrial sectors and the development and realisation of new projects.

Georg Sahm GmbH & Co. KG

Sudetenlandstrasse 33 37269 Eschwege Germany



www.sahmwinder.de

1. Contact person Timea-Mona Köcher *Area Sales Manager*

Mobile: +49 5651 804 - 215 Phone: +49 160 654 6127 tkoecher@sahmwinder.de

Languages: German, English

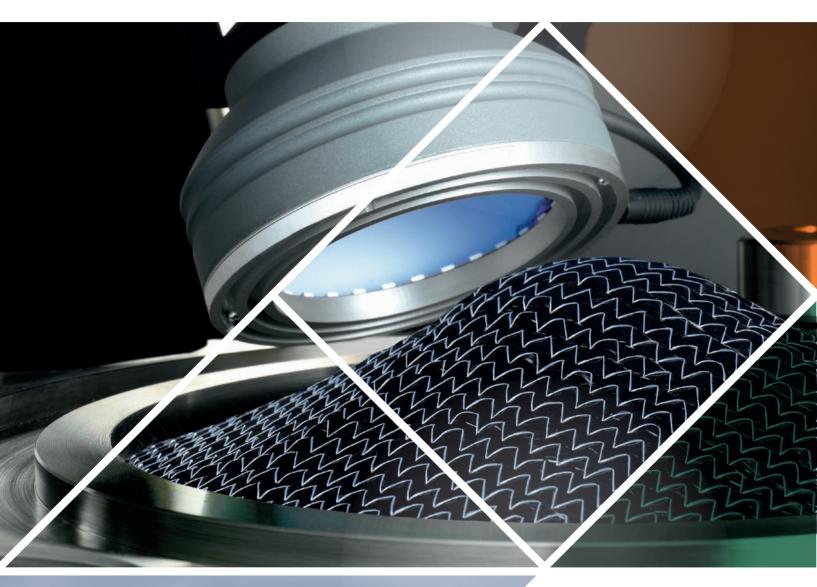
2. Contact person Bena Manasieva

Phone: +49 5651 804-246 bmanasieva@sahmwinder.de

Project of







APPLICATION FIELDS FOR TEXTECHNO TESTING INSTRUMENTS



Summary

ציוד בדיקה איכותי וחדשני לחומרים מרוכבים וסיבים משריינים כמו גם סיבים וחוטים סינטטיים.

כלים לכל סוגי הבדים כולל בדים טכניים. כמו כן החברה מבצעת שירותי בדיקה.



For more than 70 years, Textechno's testing devices have formed the basis of an efficient production control in the textile and man-made fiber industry. Our instruments are characterized by numerous innovations and provide important impulses in research and development for our customers. Textechno, together with its subsidiary Lenzing Instruments in Austria, is the global market and technology leader in the field of man-made fiber and yarn testing. The goal of Textechno is to expand its global activities serving the lightweight construction industry. For this reason, innovative testing systems for reinforcement fibers and composites have been developed and established on the market in the recent years.

Products / Services

Composites:

- Testing systems for the measurement of the fiber/matrix-adhesion,
- Testing systems for the measurement of single-fiber properties,
- Determination of the process properties of glass or carbon rovings,
- Characterization of the 3D deformability of reinforcement textiles,
- Testing service for composites and reinforcement fibers.

Textile- and chemical fiber industry:

• Instruments for the determination of all relevant mechanical and thermomechanical properties of fibers and yarns.

References and export activities

Textechno is serving customers worldwide. Our customers include leading producers of man-made fibers and filament yarns (including Nilit, DuPont, Hyosung, Reliance, Indorama, Rhodia, Teijin, Toray, SGL etc.), as well as numerous companies and institutes in the field of composites (including Michelman, Johns Manville, FITI, Oak Ridge Labs, Deakin University, ITA Aachen etc.).

Target group

We are particularly interested in contacts, developers and decision-makers for the production of composites, glass and carbon fibers and sizings. Moreover, we are also very interested to get in contact with institutes and universities working in the areas described above. We are also looking for a sales and service agency in Israel.

Competitive advantages

Our innovative and extremely reliable test systems are unique worldwide, especially in the field of composite testing. They offer a high degree of automation, are very user-friendly and can be easily linked in a network. We offer turnkey testing solutions including design, commissioning and training.

Textechno develops and manufactures its entire product range completely in-house: our instruments are 100% "Made in Germany".

Purpose of participation in the project

We would like to present our product range and our approach to effective testing to existing and potential customers and partners in Israel.

TEXTECHNO Herbert Stein GmbH & Co. KG

Dohrweg 65 41066 Mönchengladbach Germany



www.textechno.com

1. Contact person
Dr. Stefan Fliescher
Assistant Managing Director
Phone: +49 2161 65990
s.fliescher@textecho.com

2. Contact person
Markus Hardelauf
General Manager Sales
Phone: +49 2161 65990
m.hardelauf@textechno.com

Languages: German, English

Project of

systems for business solution









- > VEHICLE & AUTOMOBILE >BOAT, YACHT & SHIP >WIND & SOLAR ENERGY > INTERIOR & FURNITURE > BUILDING & CONSTRUCTION

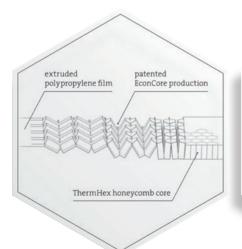




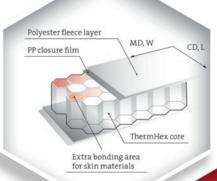








made in Germany



Summary

יצרן של ליבות חלת דבש מחומרים טבעיים ליישומים קלי משקל.

YOUR THERMHEX **ADVANTAGES:**

- > Major cost reduction
- > Significant weight saving
- > High compression and shear strength
- > Energy absorbent
- > Resistant to moisture, acids and bases
- > Easy resource-friendly converting
- > 100% recyclable

www.ThermHex.com



Thermhex Waben is a leading producer of polypropylene honeycomb cores, the proved and tested core material for sandwich elements and lightweight composites. Our honeycomb cores are distributed worldwide in more than 45 countries. With the international patented, continuous ThermHex production process we produce a broad range of high quality, durable and economic honeycomb cores, which are available in different cell thicknesses, cell sizes and densities.

ThermHex was founded in 2009 and is a licensee of EconCore NV (Belgium), the technology leader for cost-efficient sandwich material production technologies.

Products / Services

We provide high quality polypropylene honeycomb cores which help our customers to produce better and, at the same time, more economic lightweight sandwich panels and parts for different applications. The cores have a standard density of 80 kilogram per cubic meter (5.0 Lbs / ft³). For applications with lower requirements to compression strength, we offer a lighter core with a density of 60 kilogram per cubic meter (5.0 Lbs / ft³). The cores are available in thicknesses from 3 mm to 28 mm with cell sizes from 3 mm to 9.6 mm.

Standard panel length is 2500mm, standard width is 1400mm.

The highly automated production process is extremely resource and cost efficient and enables the use of the cores even in applications where, mostly for cost reasons, the material hasn't been used yet. ThermHex honeycomb cores are used in many sectors e.g. for swimming pool construction, lightweight furniture, ship building, car interior parts or rigid truck boxes and many more.

References and export activities

Customers in Europe, the US-market and worldwide.

Target group

Companies in the composite-industry, distributors for sandwich panels or core material.

Competitive advantages

Our patented continous production process makes the difference. With this highly automated process we produce our lightweight but stable core material in-line and resource friendly which makes the product extremely cost efficient.

Purpose of participation in the project

We would like to gain new customers or distributors.

ThermHex Waben GmbH

Merseburger Straße 235 06130 Halle Germany



www.thermhex.com

1. Contact person
Dr.-Ing. Jochen Pflug
CEO

Phone: +49 345 1316270 info@thermhex.com

2. Contact person

Mona Boche-Würfel

Marketing Manager

Phone: +49 345 13162712 info@thermhex.com

Languages: German. English

Project of





Israeli Chamber of Industry & Commerce'. It was founded in 1967 and is a business-to-business organisation of numerous Israeli and German member firms. The Chamber's commercial services help an array of companies each year to start and expand their export activities by providing business contacts, information and advice.

The German-Israeli Chamber of Commerce stands for quality. Our employees are our most important asset. We offer subject-specific expert knowledge in combination with the Israeli-German language and cultural competence. We offer tailor-made support - from the first information to the daily support in your current business. We continue to evolve through critical internal discussions and continuous engagement with our members and customers. The aim of AHK Israel is to promote German-Israeli trade and to represent the interests of its members. We work hard for your success!

AHKs are closely connected to the Chambers of Industry and Commerce (IHKs) in Germany. Together, they support German companies with establishing and extending their business relations to foreign countries. The umbrella organisation of the IHKs is the German Association of Chambers of Industry and Commerce (DIHK), which also coordinates and supports the AHKs. Furthermore, cooperation with various German trade associations strengthens the link between AHKs, businesses and markets. The German-Israeli Chamber of Industry & Commerce is supported by the Federal Ministry of Economics and Technology in accordance with a Resolution of the German Parliament.

In 130 locations and 90 countries around the world, members of the German Chamber Network (AHKs) offer their experience, connections and services to German and foreign companies. AHKs are located in all countries which are of special interest for German companies.



SBS systems for business solutions is a 1999 established private consulting agency, with two decades of experience in the planning, development and implementation of international projects. Moreover, the company offers services such as workshops, events and individually organized B2B-meetings, as well as individual strategies for market entries and assistance for the coordination of international teams for the German-speaking and Italian market.

Since 2006, SBS has been organizing hundreds of internationalization projects from delegation trips abroad to big virtual conferences on behalf of several German ministries and other foreign governmental institutions. In addition, SBS has been honored by the Italian Ministry of Economic Development with the title of "Temporary Export Manager". A highly-skilled team of project managers with multinational backgrounds, based in Berlin and Rome, is sensitized for the topic of cultural differences and therefore knows how to approach difficult cultural issues. In fact, SBS applies cross-cultural thinking and designs custom-made solutions that overcome intercultural borders to find the right partners for their clients. Thanks to a strong partner network and more than 600 German and international clients, SBS is able to facilitate a successful market entry in the most emerging and attractive markets worldwide.

In collaboration with









Working Group Hybrid Lightweight Technologies



Business success through cross-culture thinking







Contact

info@sbs-business.com

Rome office

Via Appia Nuova, 666 p. +39 06 390 311 90 f. +39 06 390 311 61

Berlin office

Budapester Straße 31 p. +49 (0)30 5861 994-10 f. +49 (0)30 5861 994-99 sbs-business.com german-tech.org tecnologietedesche.it agrifood.german-tech.org