



Federal Ministry  
for Economic Affairs  
and Energy



MITTELSTAND  
**GLOBAL**  
FOREIGN MARKET  
ENTRY PROGRAMME

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# Israeli-German Business Dialogue - Photonics

Digital Trade Mission – 8<sup>th</sup> to 11<sup>th</sup> November 2021

*Company Products and Services Catalogue*

*In collaboration with*



Deutsch-Israelische  
Industrie- und Handelskammer  
לשכת המסחר והתעשייה  
ישראל-גרמניה

*Project of*





The BMWi Foreign Market Entry Programme assists German Small and Medium-Sized Businesses during all stages of their export activities. Participating businesses receive widespread support from the initial stages of market exploration up to the making of actual business contacts, e.g., by providing first-hand market information, organizing exploration trips and building networks. Key element of this support is the personal assistance during preparation, implementation and follow-up of these measures to ensure that the business arrangements are of high quality and sustainable.

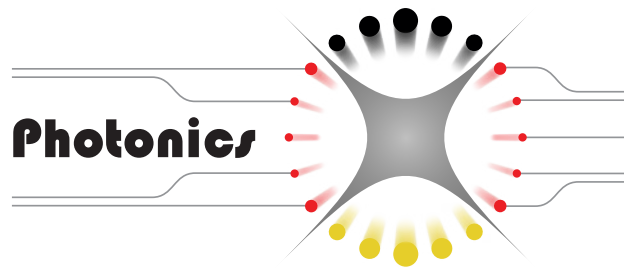
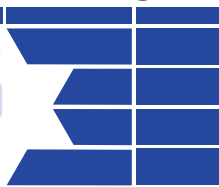
This visit is part of the “business matchmaking” module of the BMWi Foreign Market Entry Programme and will facilitate business contacts as well as provide important impulses for the further intensification of the fruitful co-operation between Israel and Germany.

On behalf of the German Federal Ministry for Economic Affairs and Energy I would like to thank the participants from Germany, and all multipliers, and other involved parties in Israel for their contribution to create a successful measure.

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**Mr. Christian Tippelt**

Director Foreign Market Entry Programme of the Federal Ministry for Economic Affairs and Energy (BMWi)  
Germany Trade & Invest



### German Companies

Art photonics GmbH .....

CDA GmbH .....

Cutting Edge Coatings GmbH .....

Grandperspective GmbH .....

Heidelberg Instruments Mikrotechnik GmbH .....

heracle GmbH .....

Innolite GmbH .....

JCMwave GmbH .....

JenLab GmbH .....

SIOS Meßtechnik GmbH .....

Vistec Electron Beam GmbH .....

The digital business trade mission to Israel is a funding project of the Federal Ministry for Economic Affairs and Energy (BMWi) with 11 selected German companies and suppliers in the field of Photonics components and solutions. The project is carried out by SBS systems for business solutions in cooperation with the German-Israeli Chamber of Industry and Commerce (AHK Israel).

We are pleased to invite you to our upcoming online event on innovative solutions in the fields of Photonics and an inspiring exchange between outstanding German and Israeli players of this sector.

Come and join us online on **Tuesday and Wednesday, 9th November 2021, 10.00-13.00am Israeli time** to discover exciting brands and products by outstanding German companies.

The digital pitch presentation event is taking place in the framework of the four-day virtual **business delegation of German companies to Israel from November 8th to 11th, 2021**, under the auspices of the German Ministry for Economic Affairs and Technology and with the purpose of an inspiring business dialogues and B2B meetings between small and medium-sized German companies and the excellence of the Israeli Photonic and Laser Industry.

This is a great opportunity for Israeli companies and institutions to explore new business and collaboration opportunities and to discover potential synergies with the German participants. We cordially invite you to join the presentation event and to contact us for the scheduling of individual meetings.

Please find on the following pages a short company profile with further information of each of the German participating companies and their business interest with Israeli partners.





**art photonics**  
broad spectra fiber solutions

FIBER PROBES  
COMPATIBLE  
WITH ANY  
SPECTROMETER

Diamond ATR

Raman

TransFlex

Reflex

ATR-Loop

Fluorescence

## Summary

Leading manufacturer of broad spectra fiber products for 0.3-16 $\mu$ m range - based on Silica & chalcogenide glass fibers and on selfmade AgHal polycrystalline fibers and hollow waveguides. Laser cables, imaging bundles and spectroscopy probes are produced for any laser types and all key spectroscopy methods used in industry, science and medicine.



made  
in Germany



[www.artphotonics.com](http://www.artphotonics.com)



## Company profile

Worldwide leader in fiber optics for a broad spectral range 0.3-16 $\mu$ m, including pioneering technology of Polycrystalline PIR-fibers for 3-16 $\mu$ m and production of Hollow Waveguides. These 2 types of flexible Mid IR-products in combination with various Silica, chalcogenide and fluoride glass fibers are used for assembly of specialty laser cables, customized bundles & spectroscopy probes to prove the motto "broad spectra fiber solutions" for many applications: for power delivery of any laser in 0.3-16 $\mu$ m and flexible Mid IR-pyrometry in industrial and medical applications, for process control in industry and spectral diagnostics of tissues in real time: detection of tumor margins, osteoarthritis of cartilage, etc.

## Products / Services

### FIBER CABLES, BUNDLES & COMBINERS

from PIR-fibers for 3-16 $\mu$ m, CIR-fibers for 2-6 $\mu$ m, Fluoride glass fibers for 2-4 $\mu$ m, Silica fibers for 0.3-2 $\mu$ m and Hollow Waveguides for Mid IR-range

### LASER CABLES AND COMBINERS

for any laser in 0.3-16 $\mu$ m: Diode & Solid State, DPSS, CO- & CO<sub>2</sub>-Laser, OPO- and for Inter Cascade & Quantum Cascade Lasers

### SPECTROSCOPY FIBER PROBES

for key spectroscopy methods: ATR, Raman, TransFlex, Fluo, Reflexion, - and their combinations: NIR-Raman, ATR+Fluo, Fluo+Reflex, etc.

### MIRROR AND LENS FIBER COUPLERS

for FTIR, FT-NIR, Raman, NIR-, Vis & UV-spectrometers + for LN-cooled MCT detectors and lasers of any type

### IR-IMAGING BUNDLES AND SPIDERS

for 2-6 $\mu$ m & 3-16 $\mu$ m used for IR-endoscopy and flexible IR-imaging

Since 1998 art photonics GmbH develops and produces broad variety of customized products worldwide, including leading companies like Siemens, Bayer, BASF, Syngenta, Infineum, Pfizer, Bruker, ABB, Boston Sci., Thermo Fisher Sci., RAFAEL, COHERENT, BP, Jenoptik, SCHOTT, GEA Pharma Systems, etc.

art photonics participates in many national and EU-projects for unique fiber solutions development - for ESA Darwin program, EU-programs Horizont-2020, EuroStar, etc.

## Target group

- Industry (Pharma - like TEVA, + chemical, food, biotech, agrochemical and other branches) using fiber spectroscopy for processes & quality control in-line (on-line);
- Medical product manufacturers using fiber components for laser, spectroscopy & IR-imaging equipment;
- Environment monitoring for water, soil, and gas pollutions.

Partners for joint projects - to develop fiber based products.

## Competitive advantages

AP, the single manufacturer worldwide providing customized flexible solutions made from 5 types of fibers: Silver Halide PIR-fibers for 3-16 $\mu$ m, Hollow Waveguides, Chalcogenide & Fluoride glass, Silica fibers including unique Al-coated and Cu-alloy coated Silica fibers. AP is No.1 in fiber optics for 0.3-16 $\mu$ m: IR-imaging bundles, spectral combi-probes, etc.

## Purpose of participation in the project

- To find key customers and system integrators for them - using fiber optics in 0.3-16 $\mu$ m for various applications.
- To find partners for joint projects to develop spectral fiber sensors and systems to be used for medical diagnostics, industrial and food process control, pollution monitoring in water, fuel and gas phase, in bio and pharma technologies.
- To find distributors for our fiber products to use in above listed applications.



## art photonics GmbH

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Languages: English

Project:

**Israeli-German**  
business dialogue  
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November 2021



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# CDA

We inspire and manufacture value



## Summary

Micofunctional Solutions (Consumer Electronics, Automotive and Industrial Automation), Flash Memory (NAND memory media for well-known automobile manufacturers), Impressing Solutions (CD, DVD, Blu-ray), 3D printing



made  
in Germany

[www.cda.de](http://www.cda.de)



## Company profile

CDA's roots are in the manufacturing of optical data media, such as CDs, DVDs and Blu-Ray discs. We still manufacture these products in our ImPressing Solutions division. Since 2005 we have succeeded in developing our know-how in such a way that we have been able to open up further business areas. Today, these include Flash Memory Solutions, where we flash NAND memory media for well-known automobile manufacturers. The second strongly growing area, Microfunctional Solutions, deals with the design and production of plastic micro-optics. With these products we serve the automotive industry but also consumer electronics and automation technology. In our newest business area, 3D printing, we manufacture prototypes and small series for a wide variety of applications.

## Products / Services

Products:

- diffractive optical elements
- dot and line generators
- diffractive Diffusers refractive Diffusers
- diffractive Lenses, refractive Lenses
- MLA
- Diffusers for Head-up-Displays
- Holographic Optical Elements
- Lighting Modules
- Portable storage / External Memory
- Fixed storage/ Internal Memory
- Embedded storage

Flash Memory services: Programming, customization, quality control, rework, one-stop-shop production, complaint management, laser marking, labeling, other types of packaging solutions.

Micro-optics services: Optic design, prototyping, serial manufacturing.

## References and export activities

CDA is active worldwide and supplies well-known international manufacturers in the consumer electronics, automotive and industrial automation sectors.

In the automotive sector, we are an OEM, Tier 1 and Tier 2 supplier.

We also have a joint venture in Shanghai, China.

## Target group

Our target group is primarily companies from the consumer electronics, automotive and industrial automation sectors.

We are looking for contact with large companies, medium-sized companies and start-up companies in the areas of 3D Sensing, AR, VR and Projection.

## Competitive advantages

From small quantity manufacturing to mass production. CDA offers the complete portfolio from optic design to prototyping and serial production.

Working with various polymers allow us to offer cost effective, high quality products and guarantee our clients a short time to market.

## Purpose of participation in the project

Our goal is to find and win new customers.



### CDA GmbH

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Languages: German, English

Project:

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systems for business solutions



# CEC

## Summary

Leading manufacturer of ion beam sputtering systems for high quality optical coatings.



made  
in Germany

[www.cutting-edge-coatings.com](http://www.cutting-edge-coatings.com)



## Company profile

Cutting Edge Coatings has been founded in 2007 in Hannover, Germany and develops customized coating machines using the process of ion beam sputtering (IBS). This process delivers very high quality optical thin films that are used in laser applications and other areas where very demanding specifications for optical filters must be met.

A unique feature of CECs coating systems is the ability to produce thin films of mixed materials and so called Rugate filters with a continuous variation of the refractive index. Because of the focusing on this high tech niche market, activities and customers are spread around the world (Asia, Europe, USA). More than 75% of our products are exported. We would be happy to discuss the technical details and the feasibility of your request for optical filters.

## Products / Services

Cutting Edge Coatings produces ion beam sputtering coating systems for research and industry.

Uniform coating areas with a diameter of up to 2x 600mm are available for IBS coatings of large substrates.

In-house production of ion sources and grid systems (Titanium).

All systems are fully automated and use a broadband optical monitoring system to control the growing process of the optical thin film.

Process development and coating design optimization is delivered together with the coating system to realize a successful production of optical coatings.

Special options such as assist ion source, heaters or load-lock are available.

## References and export activities

More than 40 customer projects around the world with an export rate of >75%.

## Target group

Institutes and companies in the field of the optical thin film technology that already operate other coating systems (maybe using different coating processes) or that want to establish an own production for optical coatings.

## Competitive advantages

- long experience with ion beam sputtering system
- high flexibility to realize customized systems for special needs
- large uniform coating areas
- ability to produce thin films with mixed materials or so called Rugate filters with outstanding optical properties

## Purpose of participation in the project

In Israel we are mainly looking for potential end-users which might be:

- companies working the field of production of optical coatings as potential end users of our product
- coating companies with outdated coating systems who want to upgrade their portfolio with an invest in new high quality coating technologies
- companies planning to establish an in-house coating facility



### Cutting Edge Coatings GmbH

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#### 1. Contact person

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#### 2. Contact person

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Languages: German, English, Russian, Chinese, Spanish

Project:

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Project of:



**SBS**  
systems for business solutions





# GRANDPERSPECTIVE



## Summary

Detect gas leaks in the chemical industry quickly and effectively. With early warning by remote sensing.  
Reliable. Fast. Analytical.



made  
in Germany



[www.grandperspective.de](http://www.grandperspective.de)



## Company profile

Grandperspective sees itself as solution provider for the early warning of gas emissions. The company was founded in 2018 by René Braun, Peter Maas and Alexander Herrmann. The founding team has more than 25 years of collective experience in the development and application of remote sensing technology. Today we count 20 employees.

## Products / Services

The scanfeld™ early warning system combines innovative sensors with intelligent software for the world's first remote monitoring of chemical plants. FTIR spectroscopy identifies hundreds of different gases from a distance of up to several kilometers. With just a few scanfeld™ sensor units, even large areas, warehouses and production facilities can be monitored in this way. Gas leaks are quickly detected and the formation of dangerous gas clouds is tracked, measured and visualized in real time. With the integration into the control room DCS and the intuitive map display of danger zones and source locations, we ensure safety in prevention and damage limitation in case of gas leaks.

## References and export activities

Installation of an early warning system for ammonia at OCI Nitrogen B.V., Chemelot Chemical Park, the Netherlands.

<https://www.grandperspective.de/de/anwendungsfelder/chemische-industrie/>

## Target group

Our customers are in the chemical industry, the ammonia industry, the fertilizer industry and the petrochemical industry.

We offer our customers on-site temporary pilot installations of our solution and are looking for project partners for business initiation.

## Competitive advantages

Grandperspective offers the scanfeld, the world's first early warning solution for hazardous gases that covers entire chemical plants. Based on our optical sensor units that identify hundreds of chemicals from the great distances of several kilometers, we visualize and localize hazardous gas clouds.

## Purpose of participation in the project

Searching for reference projects, pilot installations and cooperation partners in sales.



### Grandperspective GmbH

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Languages: German, English

Project:

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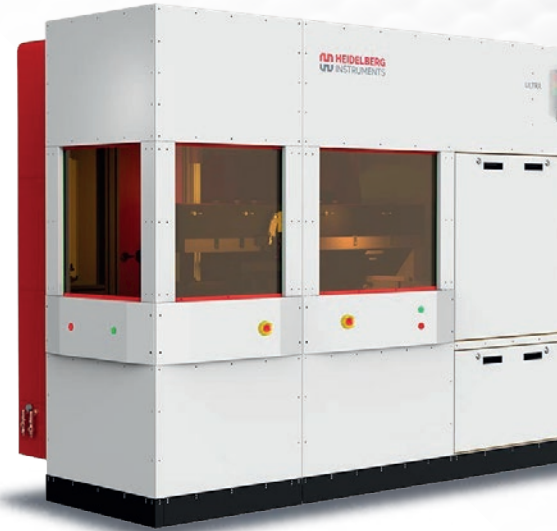
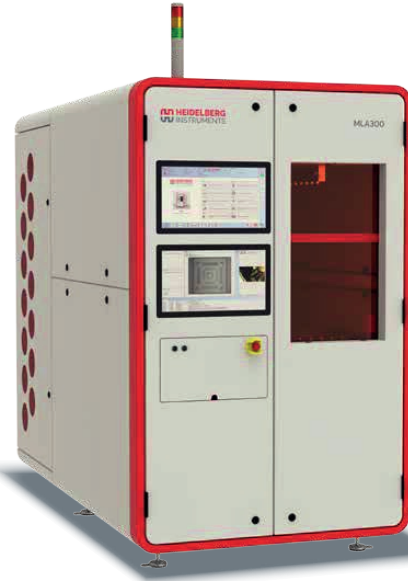
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systems for business solutions





## MLA300

The Maskless Aligner  
for Volume Production

## ULTRA

The Semiconductor  
Laser Mask Writer

## NanoFrazor Explore

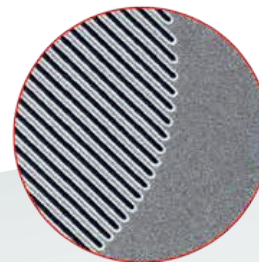
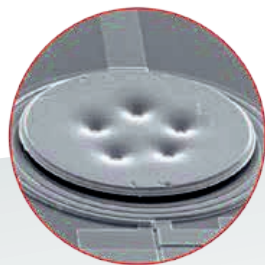
Revolutionizing  
Nanofabrication

## LithoProf3D®

### Summary

Design, development and manufacture of  
high-precision maskless laser lithography  
systems for nano- and microfabrication.

made  
in Germany



[www.heidelberg-instruments.com](http://www.heidelberg-instruments.com)  
[www.multiphoton.de](http://www.multiphoton.de)



## Company profile

Heidelberg Instruments is one of the leading international players in the design, development and manufacture of high-precision maskless photolithography systems for micro- and nanofabrication. The systems are tailored to meet specific customer needs in the academia and industry. Multiphoton Optics, a Heidelberg Instruments company and pioneer in 3D laser lithography via two-photon polymerization (TPP), closes the gap between conventional laser lithography - the basis of the company's strong core business - and the nanostructuring technology (t-SPL) offered by Heidelberg Instruments nano division.

Key facts: Founded in 1984, ~ 300 employees, more than 1,000 installed systems worldwide, represented in 7 countries at 11 locations, global partner network on all continents.

## Products / Services

The Heidelberg Instruments systems and technology pool comprises high-precision maskless aligner (MLA), laser lithography systems for direct writing of 2D and 3D microstructures to mask-making, and thermal scanning probe lithography (tSPL) for advanced nanofabrication. Multiphoton Optics' 3D laser lithography systems (TPP) enable the high-precision production with high throughput of complex functional microstructures in a single process step. The fields of applications are in micro-optics and microsystems technology, electronics, photonics, advanced packaging applications, MEMS, micro-mechanics and biomedical engineering.

In the Process and Application Labs (PAL) located in Germany, Switzerland and China, the engineers train and collaborate with customers to make the most of their Heidelberg Instruments equipment.

## References and export activities

With more than 1,000 installed systems worldwide in more than 50 countries, the products satisfy customers requirements in research and development as well as in the industry.

Heidelberg Instruments is organizing the sales activities as direct sales via own branches located in Americas, Europe and Asia, or via a global distributorship network, and represented in Israel by Paitech Ltd. (microfabrication tools) and Nano Instruments Ltd. (nanofabrication tools).

## Target group

Our focus interest on the Israeli market is the initiation and further development of sustainable cooperation with universities and application-oriented research and development institutes as well as manufacturers in the industry from the electronics, semiconductor, photonics and micro-optics sector. Further interest is on micromechanics as well as biomedical engineering and life sciences.

## Competitive advantages

With more than 36 years of innovation, and the extensive know-how in developing customized lithography solutions in the upper mentioned industries and applications fields, we support our customers from the very first design idea, via prototyping and small pilot series to industrial volume production.

## Purpose of participation in the project

Especially in the electronics, semiconductor and photonics industries, we are seeking for establishing new contacts to business partners and end-customers in the industry, as well as to partners in research and development and with universities. Our focus interest is on all projects, where maskless lithography and 3D laser lithography via two-photon polymerization (TPP) will contribute with a more optimized solution.



### Heidelberg Instruments Mikrotechnik GmbH

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**www.multiphoton.de**

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Local contact nanofabrication

**Nano Instruments Ltd.**

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Languages: English, French, German

Project:

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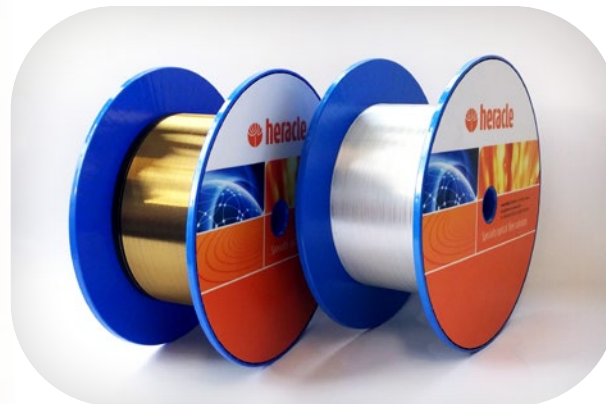
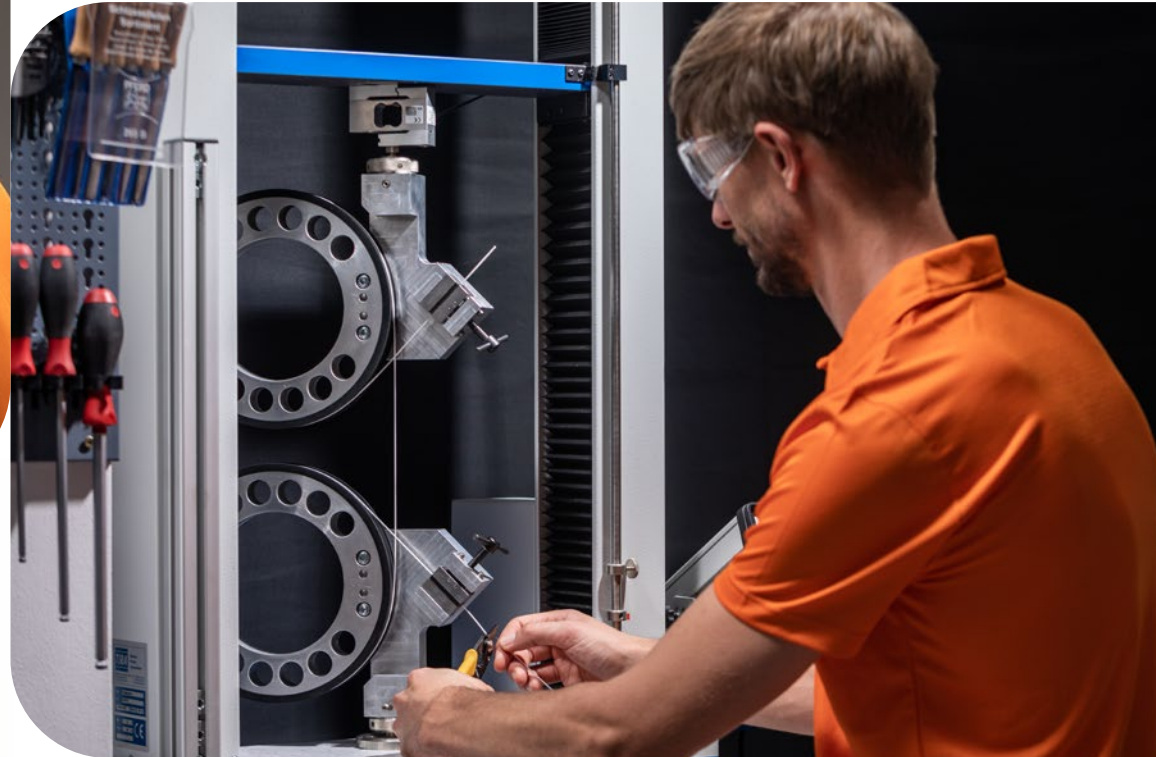
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**SBS**  
systems for business solutions





## Summary

We love to build the right fiber for your application in industrial, medical or sensor markets and also have a comprehensive portfolio of fiber solutions for fast delivery. We will be more than happy to assist you with our design, manufacturing and test services for specialty optical fiber and take care of reliable delivery.



made  
in Germany

[www.heracle.de](http://www.heracle.de)



## Company profile

Heracle, based in Jena, Germany, develops together with the customer special optical fibers for their applications in the field of industrial laser transmission, sensor technology and analytics as well as medical lasers, therapy and diagnostics.

The company was founded in December 2013, is certified according to ISO 9001: 2015 and today employs 9 people worldwide.

We develop a solution for the customer's fiber optic challenge and produce specialty fibers on the basis of contract manufacturing. We are technology-independent and benefit from a worldwide partner network as well as the integration into the Jena research landscape.

## Products / Services

Comprehensive Multimode fiber design portfolio

- For DUV - UV - VIS - IR and broadband wavelength ranges
- Graded and step index profiles
- Quartz / quartz and hard-clad fibers
- Core sizes from 50 to 1200  $\mu\text{m}$
- Various coatings: high / low index acrylates, silicones, polyimides; Metal coating: gold & aluminum
- Various buffer materials: (ETFE, Nylon; PFA)
- Quartz glass capillary

Comprehensive test services for optical fibers and preforms:

- Fiber proof test (tensile and bending test, dynamic & static fatigue)
- Measurement of optical parameters
- Measurement of geometry values
- Measurement of refractive index profiles

## References and export activities

Export to Europe, Asia and North America

## Target group

Our customers are manufacturers of optical systems (e.g. lasers, medical probes) that require optical fibers to be used with or for installation in the device. We prefer direct contact with the customer for short technical communication channels. We sell directly to the customer's factory.

## Competitive advantages

We develop and manufacture specialty fibers that are tailored to the special challenges in customer applications. We can offer a wide variety of fiber designs with coatings made of polymers (acrylates, silicones & polyimides) as well as metal (gold & aluminum).

## Purpose of participation in the project

We want to introduce the heracle product & service portfolio to new customers in Israel.



### heracle GmbH

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[www.heracle.de](http://www.heracle.de)

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Languages: German, English

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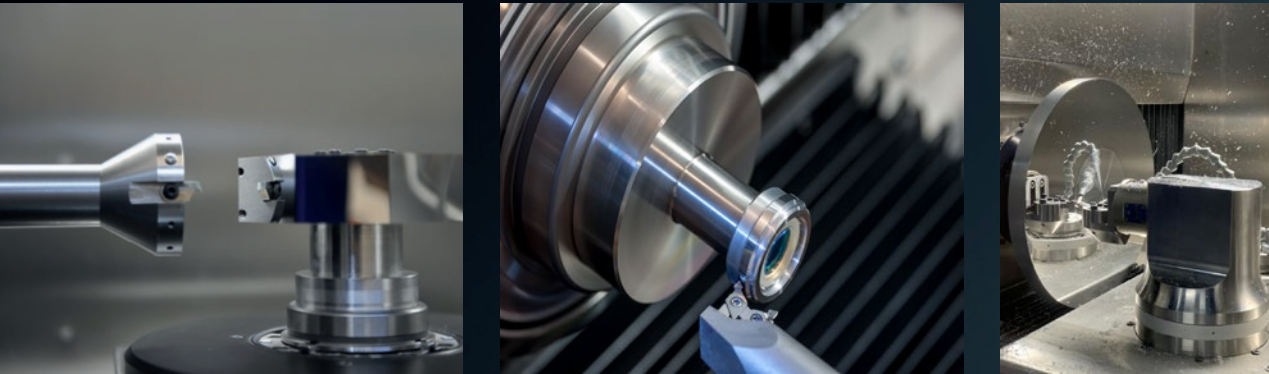


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# Ultra Precision Machine Tools

## Summary

Innolite GmbH – Driving productivity in ultra precision technology. Your expert partner for ultra precision machine tools, molds and optics.



  
made  
in Germany





## Company profile

Innolite GmbH – Driving productivity in ultra precision technology.

Since 2008 we produce polymer and metal optics and mold inserts for optical components. Moreover Innolite develops and produces there own ultra precision machine tools. Besides diamond turning we are specialised in the various fields e.g. direct cutting of steel and center turning of lenses.

## Products / Services

- Ultra precision machine tools
- ILSONIC (Cutting directly in steel)
- ILCENTRIC (Center turning of mounted lenses)
- Support in optical design
- Mold inserts for optical components
- Polymer optics
- Metal optics

## References and export activities

Main customers work in the field of:

- Smartphones (OEM and TIER1)
- Medical devices
- Military
- Automotive lighting
- R&D

Worldwide activities. Main markets are Asia, Europa and Northamerica

## Target group

- Photonics business in general
- Smart devices (OEMs and Tier1)
- Lighting especially for automotive
- Aerospace
- Optical medical devices

## Competitive advantages

- Fulfilling of highest demands on surfaces and accuracy
- Great know-how along the optical value chain
- Development focused on customer needs

## Purpose of participation in the project

Focus on an area with an outstanding know-how in optics



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Languages: German, English

Project:

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**SBS**  
systems for business solutions



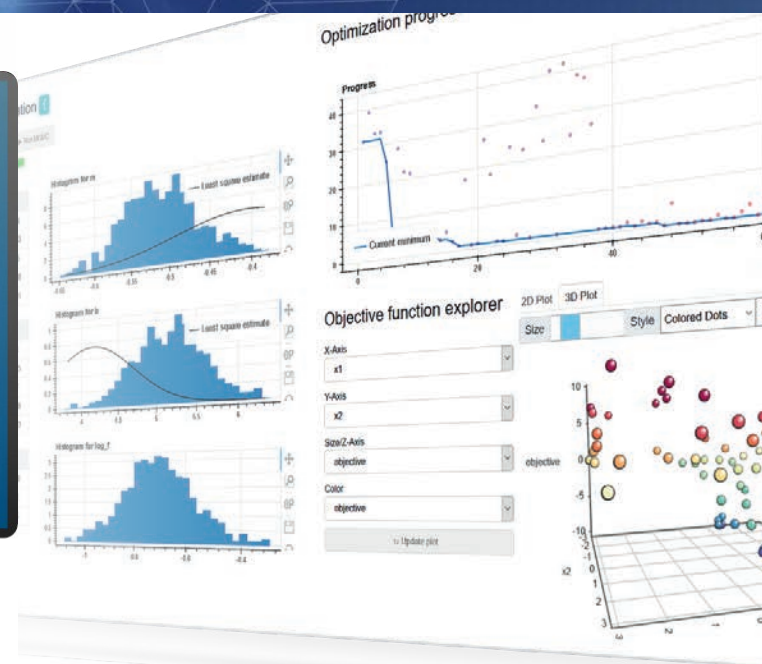
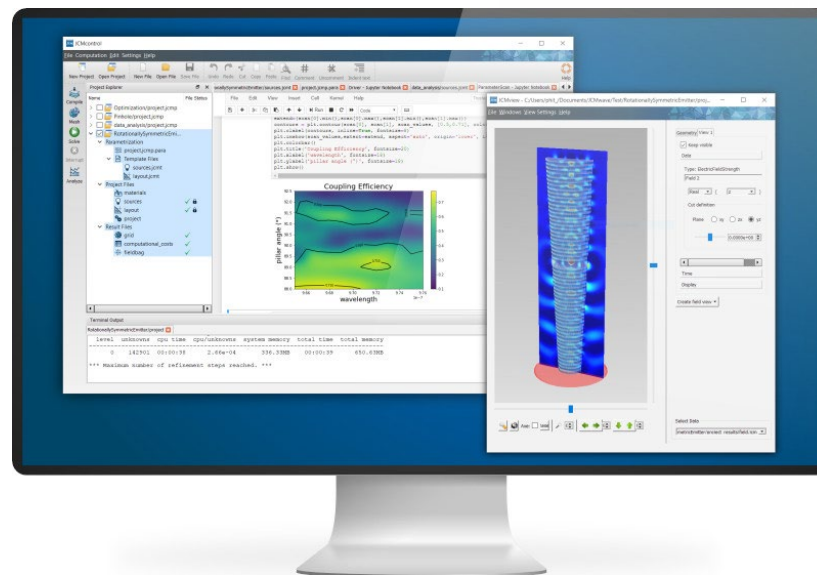
**german-tech**  
.org

# JCMsuite

The Simulation Suite for Nano-Optics

## Summary

A software manufacturer that provides services for the simulation, analysis and optimization of photonic and nano-optical devices. We continuously integrate leading edge research results of our partners in the fields of numerical mathematics and computer science into our products.





## Company profile

JCMwave GmbH, based in Berlin, was founded in 2002 as a spin-off of the Zuse Institute Berlin. The company focuses on the development of software and numerical technologies for photonic and nano-optical applications.

JCMwave collaborates closely with academic partners such as the Zuse Institute Berlin or the Physikalisch-Technische Bundesanstalt in order to continuously incorporate leading edge research results into its software. This enables the simulation and analysis of complex optical systems with high accuracy and speed.

## Products / Services

JCMSuite is a software package for the simulation of complex photonic and nano-optical systems. It combines efficient and accurate finite-element solvers for electromagnetism, continuum mechanics and heat conduction. Machine learning technologies enable rapid optimization, reconstruction, and analysis of optical device properties.

More information:

<https://jcmwave.com/jcmsuite>

Services:

JCMwave provides training and support for JCMSuite. Moreover, we develop dedicated software stacks to be used by our costumers or we analyse and optimize specific optical devices.

More information:

<https://jcmwave.com/services/consulting-services>

## References and export activities

JCMwave has an international customer base with a focus in Europe and the United States. Moreover, we are regularly partners in EU-funded research and development projects, including also projects with Israel.

## Target group

JCMSuite is used by companies, universities, and academic institutions with applications in, e.g., lithography, metrology, waveguides and fibers, photovoltaics, light sources, and nanostructured materials.

## Competitive advantages

JCMSuite includes a highly accurate and efficient FEM solver with a strong focus on nanophotonic applications. Specialized machine learning technologies enable a fast analysis, optimization and parameter reconstruction of optical systems based on few FEM simulations. Both technologies can drastically decrease the simulation-driven development time of nanophotonic devices.

## Purpose of participation in the project

JCMwave aims to make contact with potential costumers and with partners for joint research and development projects.



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Languages: German, English

Project:

**Israeli-German**  
business dialogue  
7<sup>th</sup>-11<sup>th</sup> DIGITAL  
November 2021

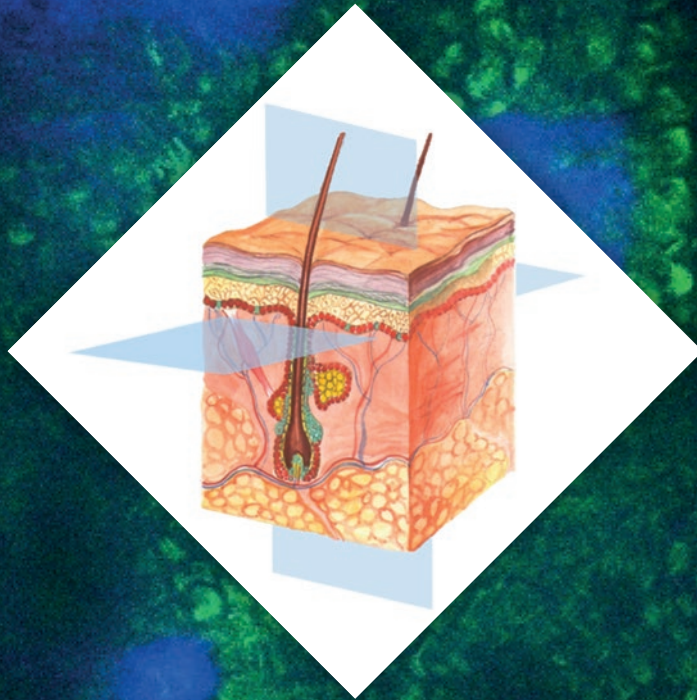


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Project of:





## Summary

Worldwide leading producer of multiphoton tomographs for the in vivo investigation of human skin ("optical biopsy") and provider of special microscopes.



made  
in Germany





## Company profile

JenLab was founded as spin off from the university Jena in 1999. Headquarter is Berlin. CEO is Professor Karsten König.

JenLab is the worldwide leading producer of multiphoton tomographs for the in vivo investigation of human skin ("optical biopsy").

Furthermore, JenLab provides special microscopes, e.g. for laser transfection and optical reprogramming of cells with femtosecond laser.

JenLab is a medical company.

## Products / Services

- Multiphoton Tomograph (Two-Photon-Imaging) for human use
- Multiphoton microscopes for animal research and label-free imaging of biopsies
- Femtosecond laser transfection
- Optical reprogramming / IPS production

## References and export activities

Costumers include GSK, L'Oreal, Shiseido, Beiersdorf, Eppendorf Hospital Hamburg, Charite, J&J, Kao, Medical Institute Nizhny Novgorod, Hospital Brisbane and the Beckman Laser Institute Irvine in California.

## Target group

Research institutions with interest on optical imaging of tissues (optical biopsies), in particular of skin.

Target groups are the cosmetical and pharmaceutical industry as well as dermatologists with expertise in early detection of Maligna Melanoma (black skin cancer).

## Competitive advantages

JenLab is the only producer of femtosecond laser technology for human tissue imaging .  
JenLab's multiphoton tomographs are used from leading cosmetic and pharmaceutical companies for product evaluation and from clinicians for the early detection of skin cancer.

## Purpose of participation in the project

Looking for costumers for the multimodal tomograph MPTcompact.



### JenLab GmbH

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Project:

**Israeli-German**  
business dialogue  
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Supported by:



Federal Ministry  
for Economic Affairs  
and Energy



**MITTELSTAND  
GLOBAL**  
FOREIGN MARKET  
ENTRY PROGRAMME

Project of:



**SBS**  
systems for business solutions



## Summary

**PRECISION IN MEASUREMENT**  
Our close proximity to science and research guarantees a high expertise for today and for the upcoming future. The focus of our measuring instruments is on laser interferometer. Measurement tasks: length, angle, straightness, vibrations, temperature.

made  
in Germany





## Company profile

True to the slogan "Precision in Measurement" SIOS Meßtechnik GmbH develops and manufactures laser interferometric and other precision measuring instruments for calibration and nano metrology for the measurement of length, angle, vibration and straightness, mass, force and other measurands with highest resolution and low measurement uncertainty.

Thanks to the flexible manufacturing process, SIOS Meßtechnik GmbH distinguishes itself as a globally active supplier and manufacturer of customized solutions for high-precision measuring and calibration devices for both science and industrial applications.

## Products / Services

For 30 years, SIOS has offered high-quality standard sensors, customized product developments as well as individual OEM solutions. Main products are laser interferometers for measurements of displacement, angles, straightness, vibrations.

The SIOS product portfolio:

- Length Measurement Systems
- Length and Angle Measurement Systems
- Calibration Measurement Systems
- Nanopositioning and Nanomeasuring Machine
- Laser Vibrometer
- Probes and Thickness Gauges
- Stabilized HeNe Lasers
- Climate Measuring Station

## References and export activities

Our customers include renowned industrial companies as well as national metrological institutes all over the world.

Over 25 international partners represent SIOS in Europe, North America, Asia, Africa and Australia.

## Target group

SIOS offers precision metrology for scientific institutes and research centers as well as for industrial applications in the fields of calibration, mechanical engineering, optics and semiconductor industry, medical technology, nano metrology and geoscience. SIOS measurement technology is used in quality control, calibration, fundamental research, traceable applications, metrological assemblies, vacuum and cleanroom and many more.

## Competitive advantages

A major competitive advantage of SIOS lies in the flexible corporate structure and high vertical range of manufacture. All important production processes from mechanical manufacturing to optics and electronics are carried out in the company. SIOS stands for precision and highest quality - made in Germany.

## Purpose of participation in the project

- Establishment of new customer relationships
- Presentation of possible technical solutions
- Overview of market prospects in the country



### SIOS Meßtechnik GmbH

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Project:

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business dialogue  
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# vistec

## | Electron Beam



### Summary

50kV Variable Shaped Beam lithography systems for semiconductor industry as well as advanced research, optics and several emerging markets.



made  
in Germany

[www.vistec-semi.com](http://www.vistec-semi.com)



## Company profile

Vistec Electron Beam GmbH is providing leading technology solutions for advanced electron-beam lithography. Based on the Variable Shaped Beam (VSB) principle, the electron-beam lithography systems are mainly utilized for semiconductor applications and advanced research as electron-beam direct write in semiconductor manufacturing, mask making as well as integrated optics and several new emerging markets. In addition to its headquarter and production facility in Jena Germany, Vistec Electron Beam maintains service and support centers in Europe, Asia Pacific and in the US.

## Products / Services

Vistec Electron Beam GmbH develops, manufactures, sales and services 50kV Variable Shaped Beam lithography systems, which serve customers in both, semiconductor industry as well as advanced research, optics and several emerging markets.

Our main products are the Vistec SB254 - 200mm platform and the Vistec SB3050-2 - 300mm platform lithography system.

## References and export activities

In addition to its headquarter and production facility in Germany, Vistec Electron Beam maintains service and support centers in Europe, Asia Pacific and in the US.

Installations in Compound Semiconductor facilities in Asia Pacific & the US.

Installations in Advanced Research among others in Fraunhofer Institutes in Germany (e.g. Fraunhofer ENAS & Fraunhofer IOF).

## Target group

Our main customers are semiconductor foundries worldwide and advanced research facilities in Europe, like CEA Leti in France and Fraunhofer Institutes in Germany. Vistec provides systems to both key semiconductor manufacturers as well as Universities and Centers of Excellence. Our systems can be used in a wide range of existing and emerging semiconductor and nanotechnology applications including silicon direct write, compound semiconductor, mask making, advanced research, integrated optics and Photonics.

## Competitive advantages

Vistec Electron Beam's roots go back to the 1950's when the company was part of Carl Zeiss Jena where the first electron microscope was developed. In 1974, the first commercial Variable Shaped Beam system was launched. Vistec Electron Beam GmbH has been active on the market in its current structure since 1996 with service and support worldwide.

## Purpose of participation in the project

We are seeking to establish new contacts in the photonics as well as the semiconductor industry and advanced research fields and projects where flexible and fast prototyping e-beam lithography will contribute to.

**vistec**  
I Electron Beam

### Vistec Electron Beam GmbH

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Languages: German, English

Project:

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MITTELSTAND  
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FOREIGN MARKET  
ENTRY PROGRAMME

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**SBs**  
systems for business solutions





Deutsch-Israelische  
Industrie- und Handelskammer  
לשכת המסחר והתעשייה  
ישראל-גרמניה

AHK Israel is officially registered as the 'German-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!



SBS

systems for business solutions

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.

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.

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*



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**Business success through cross-culture thinking**

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