

Company profile

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SÜSS MicroTec and iX-factory: qualified process and equipment support for development, research and production – made in Germany

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1 The Lithography Academy, mission and goals

In order to pursue innovative ideas and conduct successful research tasks it is inevitable to have unrestricted access to functional micro/nano devices or to reproducible guidelines in order to fabricate required micro/nano devices. The production of a micro chip requires various technology steps such as lithography, structuring, deposition, bonding and many more. In order to deliver this knowhow to researchers and users the Lithography Academy offers process training and consultancy for the area of micro and nano fabrication.

The Lithography Academy is the pioneering approach of a close cooperation of SÜSS MicroTec and iX-factory. Delivering hands-on training on nano and micro technology instruments, equipments, and infrastructures has been set as the most critical goal of the Lithography Academy. Specifying the diverse range of requirements of the infrastructure and equipment within a cleanroom environment is proven to be a challenging step. On the one hand, equipment suppliers, such as SÜSS MicroTec, especially for large investment projects need concise specifications and a clear idea in order to plan infrastructure. On the other hand, the desired processes on the chosen equipment need to be developed and implemented by an experienced and knowledgeable team, for instance iX-factory, in order to ensure smooth work flows. The Lithography Academy further acts as a reliable consultant with qualified insight and sound experience in order to formulate new working proposals, purchasing equipments and/or planning future activities.

2 A short history of the companies

SÜSS MicroTec was founded by Karl Süss 1949 in Munich/Germany. In 1963, the company together with Siemens, developed a photolithography machine for the production of transistors, leading to the development of the first ever Mask Aligner, seen as the first step into the upcoming semiconductor industry. With the company expanding and working on related solutions in terms of wafer processing new business segments such as wafer bonding and test systems were opened up. In the 1980s the company expanded to a global footprint by establishing a global production, service and application organisation with offices in Thailand, Japan, Taiwan, China and Korea. In May 1999, the company Karl Süss went public as SÜSS MicroTec AG. Today SÜSS MicroTec is listed in TecDAX (Top 30 German technology companies) with two production facilities in Germany; and more than 8000 systems installed worldwide.

iX-factory was founded in 2007 and its team members hold 20 years of experience and profound expertise in the micro and nano technology industry. Moreover, the company participates actively in national as well as European subsidiary projects. On the one hand, iX-factory offers apprenticeships to young talents to gain the qualification as micro technologists after a period of three years practical and theoretical training. On the other hand, interns and students are welcome to gain experience for their future lives through small research projects to take their Diploma/Bachelors/Masters. iX-factory is a multicultural enterprise, which states quality as the key factor for sustainable success, which has been stressed by gaining quality management qualifications *ISO 9001* and parts of *TSA 16949*.

SÜSS MicroTec is a leading supplier of equipment and process solutions for micro structuring in the semiconductor industry and related markets. In close cooperation with research institutes and industry partners SÜSS MicroTec contributes to the advancement of next-generation

technologies such as 3D Integration and nano imprint lithography as well as key processes for MEMS and LED manufacturing.

iX-factory holds special expertise by the highly experienced engineers in the technology area of sensors, micro fluidic and MEMS devices. Moreover, the company actively participates in numerous research projects covering a high diversity of industries. This range of industries consists of medical/diagnostics, automotive, environment, pharmaceutical, data and telecommunication, life sciences and biotechnology industries.

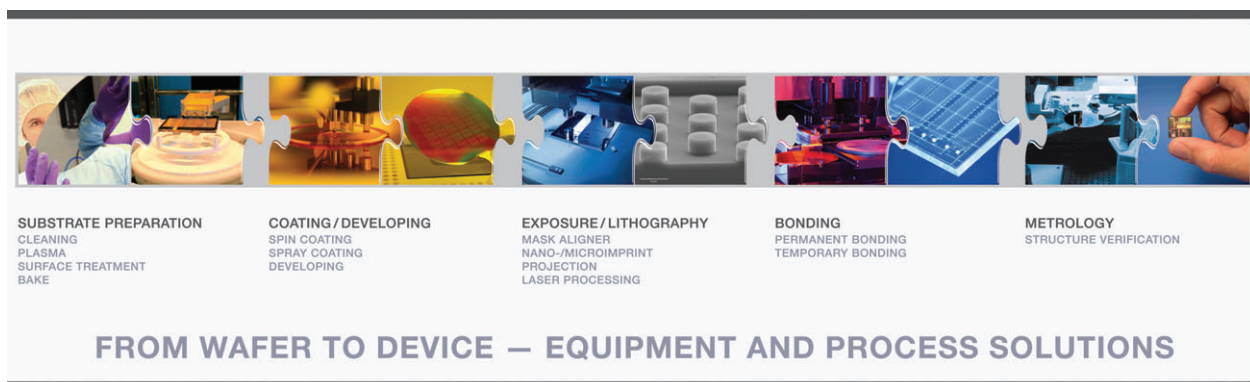
3 Product range

SÜSS MicroTec's product range includes equipment needed for photo lithography and related front- and backend processes.

R&D partners. Lithography Academy aims to support R&D groups and universities globally from the very beginning in order to enable and assist spin-off/start-up activities as soon as possible.

5 Our staff

Dominique Bouwes today is the CEO of the iX-factory. Dominique Bouwes earned her degree as Master of Engineering at the University of Applied Science of Kaiserslautern. Her main field of study was in micro system technology/engineering specialising on micro- and nano technologies. Whilst in diverse research semesters she was scientific assistant at Fraunhofer Institute for biomedical engineering, as well as process and research engineer with the scope on micro needle-based medical devices, MEMS-based hair flow sensors as model systems



4 Future plans

From self-gained experience we know the outstanding potential of start-up companies and research institutes especially in niche markets. Based on current market reports and outlook, especially the market of sensors, micro fluidic and related MEMS devices shows the opportunity for innovation with unique functions and special technical solutions. This field of business offers the possibility to players to enter the market and define its own special niche as well as diversification within different markets. Therefore, SÜSS MicroTec and iX-factory are eager in providing equipment, application and/or process related training within European training centres, lab facilities as well as by using its network of industry and

for acoustic perception studies and miniaturised multi wire proportional chamber using CMOS wafer scale post-processing. Further, she gained great experience in planning and integration of new process lines covering aspects such as tender for cleanroom equipment, e-beam line, nano imprint line, litho area and entire cleanroom environments.



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