

stiwa.com

LIFE SCIENCE

YOUR PARTNER FOR COMPLIANT HIGH QUALITY
AND PRECISION IN THE MEDICAL TECHNOLOGY
AND THE PHARMACEUTICAL INDUSTRY



Your partner for compliant high quality & precision in the medical technology and the pharmaceutical industry

The success of your Life Science product and manufacturing begins with uncompromising quality and extraordinary process reliability. Modern automation systems must combine GMP-compliant processes, complete traceability, and absolute precision in the various cleanroom environment levels. This is exactly where STIWA Automation comes in: We turn complex challenges and strict regulatory barriers into a decisive competitive advantage.

What does this mean for you as a partner? You receive a **GMP-compliant, high precision and extreme quality** automation solution that not only increases productivity but also lowers total cost per unit ownership. As an experienced partner, STIWA accompanies you through the entire design, build, **validation and qualification process**. We proactively deliver all the necessary documents and thus significantly accelerate your market launch.



Your benefits at a glance: Competence and expertise for your production

CLEANROOM EXPERTISE

VALIDATION

PROCESS
EXPERTISE

SCALABILITY

SUPPORT



Cleanroom competence for your machine project

The manufacture of **highly technical** medical and pharmaceutical products requires a deep understanding of **Regulatory Compliance** and **GMP** such as, **particle prevention, materials and chemical compatibility and tolerance effects**.

Cleanroom compliance and competence are implemented in our systems which are designed for deployment in cleanroom **classes A-D** or **ISO 5-9**. Sophisticated designs with high-quality materials such as **stainless steel, passivated metals, and compliant polymers** along with easy **access** for cleaning and maintenance are standard.

Reliable partner for validation

The responsibility for the **timely** execution of acceptance tests (FAT/SAT) and delivery of validation **documentation supporting** qualification steps (DQ, IQ, OQ) are in experienced hands at STIWA. The **validation phase** is often a critical bottleneck that can jeopardize a timely launch. We transform this process from a potential barrier into a precisely planned milestone. Your benefits: Accelerated **commercial acceptance**, secure **data integrity**, and **minimized project risk**.



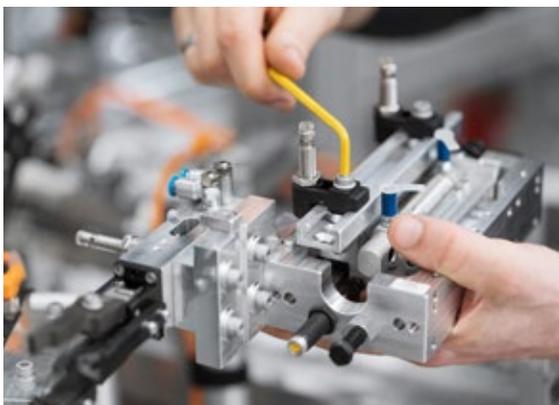
Process expertise for maximum safety

True process reliability arises from a deep **understanding** of the product in each phase. STIWA systems handle the entire process – from precise **feeding, assembly and packaging** to integrated quality control.

Particular attention is paid to the sensitive handling of **fragile or valuable products**, secured by vision systems and inline measurement technology.

Scalable to meet varying needs

The market requirements in the medical technology and pharmaceutical industry are changing rapidly – from new **product variants** to fluctuating production volumes. The answer to this is not a rigid **system** concept, but a well-thought-out **modular system** that enables **fast setup times** and simple **product changes**. Each machine is designed to grow with your needs and integrate seamlessly with higher-level **IT systems (MES)**.



Sustainable support for long-lasting equipment

Successful automation does not end with the start of production. STIWA sees itself as a reliable long term partner throughout the entire **life cycle** of your machine and offers **global service and support**, including the optimization of integrated **software solutions**. A high degree of standardization ensures **short delivery times** for spare parts and upgrades. What does this mean for you? A high level of **machine availability**, long-term support and the security of having a competent contact person even after the end of the project.

The process diversity of STIWA automation

Process area	Specific applications	Your advantage for safety & compliance
Feeding & Handling	Automatic feeding, bulk material feeding, robot handling, magazine tables, conveyor belts, palletizing systems, and autonomous guided vehicles (AGV)	Controlled, precise material flow as the basis for stable processes
Joining & Processing	Ultrasonic welding, laser soldering, laser engraving, hot sealing, cutting, bending, punching, magnetizing, corona treatment	Reliable and durable bonding and precise material forming according to specifications, monitored force-displacement joining
Dosing & Application	Silicon coating, gel/glue/powder dosing, spraying, greasing, dosing control e.g. by check weigh cell	Highest repeatability and process control in the application of substances
Check & Quality Assurance	Flow and leak testing, force/displacement/torque testing, tensile force testing, functional testing, end-of-line testing	100% in-process control and monitoring for maximum product specification compliance, safety and complete documentation
Image Processing & Vision Systems	Camera inspection, type and function control, error detection, quality control (with customizable camera systems)	Optical control to ensure quality and correct assembly
Special Processes & Finishing	UV hardening, drying stations, evacuation and joining under vacuum, single piece sorting	Mastery of sophisticated special technologies for specific product requirements
Packaging & Labeling	Flow wrapping, erecting/filling/sealing of cartons, labeling in continuous operation, inserting into racks, palletizing	Secure, efficient and fully automated end-of-line processes

Powerful automation

for your Life Science product



857 tubes / minute
Blood collection tubes

455 parts / minute
Injection cannula

180 vials / minute
Vial Handling

Precise assembly, careful handling, thorough inspection

Highly automated STIWA machines set standards in the medical technology and the pharmaceutical industry.

Continuous production under the strictest clean-room conditions ensures maximum product compliance to cleanliness, efficacy and safety. Comprehensive quality controls at every stage of production guarantee smooth process flow and flawless product quality.



References

See more Life-Science-Automation Solutions

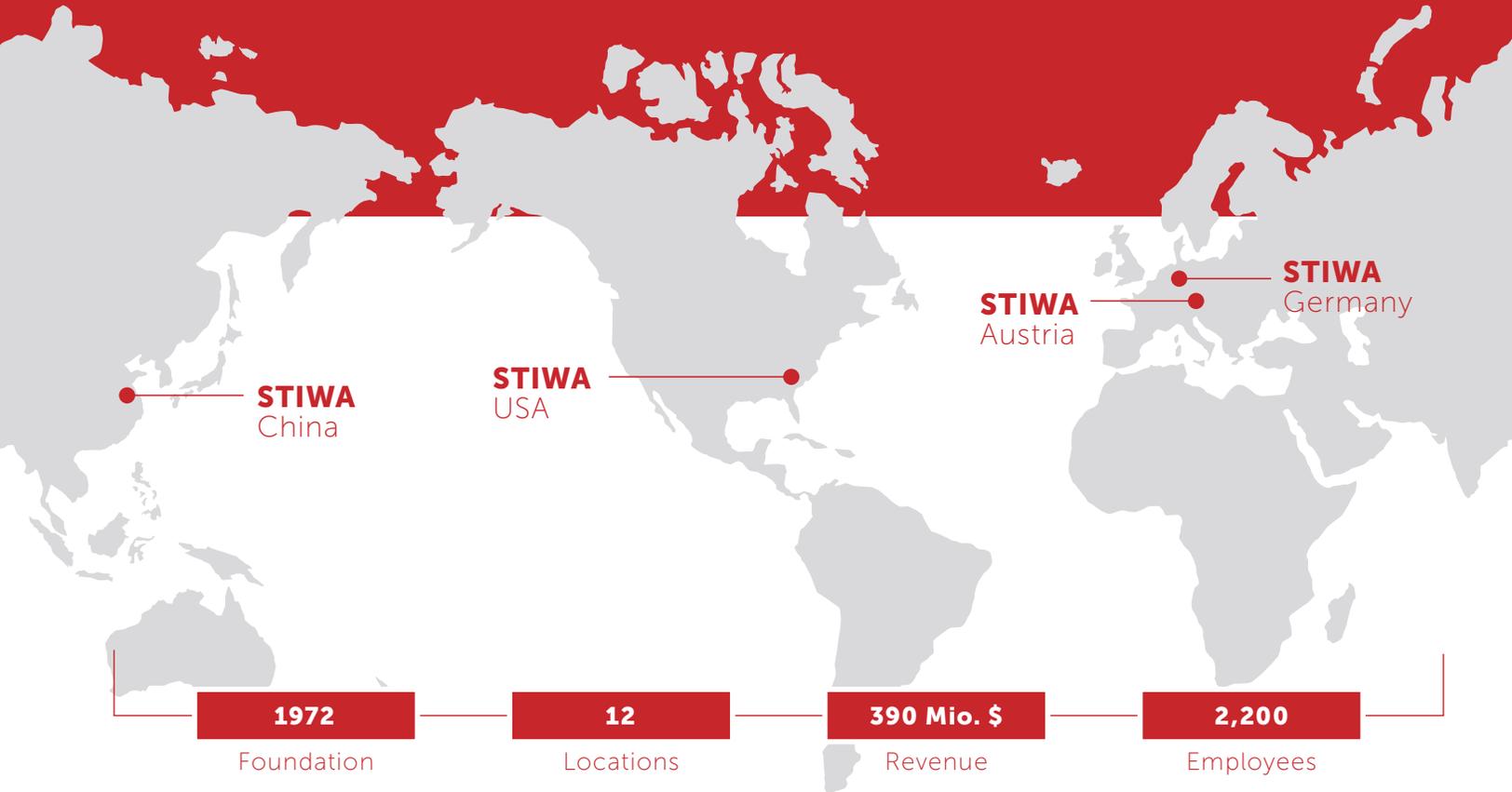
AUTOMATION

MANUFACTURING

SOFTWARE

innovative solutions from a single source

The unique combination of **cutting-edge automation technology, efficient high-performance production technologies, and powerful software tools** enables **STIWA** to help strengthen the market position of its customers around the world. We incorporate our comprehensive know-how from **product conception to full-scale series production** into the development of new products. This is how we raise the bar in the field of **digital and fully automated production** on a daily basis.



We showcase our extensive **automation, production and software** competence by cooperating with customers from a diverse **range of industries:**



Industrial Applications



E-Mobility



Life Science



Consumer Goods



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STIWA **Automation**

