



FITFOR AUTOMATION RFID Solutions as Key Enabler for Automated Semiconductor Manufacturing



SMALL, SMART, SIMPLE

RFID is the first step on your journey to automation

In semiconductor manufacturing, automation begins with reliable digital identification. Even small steps - like tagging carriers or enabling tools to communicate - can significantly increase transparency, reduce errors, and lay the foundation for smarter logistics and scalable process automation. Many fabs still rely on manual or paper-based tracking, making it harder to evolve.

That is where Fabmatics comes in. With over 20 years of industry experience, we help you take the first step-fitting RFID solutions to your fab's infrastructure. Whether modernizing legacy systems or starting from scratch, we turn complexity into clarity and meet you where you are.



RFID Reader (product example)

RFID in Action –



Smart Foundations for Automation -**RFID Solutions by Fabmatics**

One partner. All you need

Hardware, software, integration & service from a single source

Start small - grow big

Fabmactic's RFID solutions lay the foundation for automation – from pilot projects to full fab rollouts, tailored to your automation roadmap

Built on trust

Over 100,000 RFID components installed in more than 60 fabs worldwide

Industry-proven

Fully SEMI-compliant, CE und FCC certified, highly reliable, and made for challenging fab environments



- > Mechanical Attachment
- > Ultrasonic Welding

(3) Transport System

> Conveyor

> RFID Trolley - new and retrofitting existing solutions

Step by Step to Fab Automation



Facts

Industry	Semiconductor or other high-tech industries
Type of Material Carrier	Wafer box (e.g. HA200) 4", 6" or 8" Wafer cassette 4", 6" or 8" SMIF FOUP / FOSB Reticle pods (e.g. single or multi)
RFID Application Areas	Identification of material carriers, trace and tracking in transport, storage and production
Transponder (TAG) Ultrasonic Welding	Wafer cassette 4", 6" or 8"
Transponder (TAG) Position	Specific to every kind of lot, multiple TAGs possible
RFID Technology	LF - Low Frequency 134.2 kHz HF - High Frequency 13.56 MHz Alternative solution: barcode with integrated RFID TAG
Software Interface	via RFID gateway e.g. SECS / GEM and others



(2) Storage System

- > RFID Racks new and retrofitting existing solutions
- > Stocker Systems new and retrofitting existing solutions

(4) Equipment

- > RFID Loadport retrofitting existing solutions
- > RFID Reader Station (Operator)







IDENTIFICATION RFID SYSTEMS

RFID SYSTEMS RFID RETROFITTING RFID BASED LOGISTICS SYSTEMS



FLEET MANAGER FOR MOBILE ROBOTS SOFTWARE INTEGRATION WEB GUIS



SERVICE CONSULTING & FEASIBILITY STUDIES TECHNICAL SERVICES THIRD PARTY SUPPORT



Europe

HQ: Dresden, Germany Phone: +49 351 65237-0 E-mail: info@fabmatics.com

USA

Location Utica, NY Phone: +1 315 316 1480 E-mail: info.usa@fabmatics.com

www.fabmatics.com

Partners in Asia

Singapore & Malaysia Phone: +65 9106 2386 E-mail: joseph.soo@micro-optics.com.sg

Taiwan & China Phone: +886 912531863 E-mail: jeff.chen@gbgtek.com.tw

Japan Phone: +81 92 473 6455 E-mail: info@brux.jp