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RENA Taiwan No.189, Sec 1 Fuxing 3rd Rd. 302 Hsinchu County TAIWAN Phone +886 3 5505 855 taiwan@rena.com THE WET PROCESSING COMPANY

| Semiconductor

| MedTech

| Green Energy

# **RENA Technologies GmbH**

# Leading supplier of equipment for wet chemical surface treatment

RENA products are used in future-oriented applications such as Semiconductor, MedTech and Green Energy.

RENA equipment typically treats or modifies the surfaces of semiconductor wafers, solar cells, optical substrates, dental implants or other high-tech products using wet chemical processing. RENA offers approved, standardized machines as well as systems tailored to specific customer requirements, process support and chemical performance additives (monoTEX®).

## **MILESTONES**

1993	Foundation of RENA GmbH
1994	Fully automatic semiconductor equipment
2002	First Inline texturing tool worldwide
2006	Integration of RENA Berg subsidiary
2007	Expansion of production facilities in
	Germany and Poland
2008	Start of RENA Technology Center Freiburg
2011	Launch of NIAK platform for wet
	chemical solar processes
2015	Foundation of RENA Technologies GmbH
2016	70% market share for PERC technology;
	RENA monoTEX® additive
2017	Design of machines capable of Industry 4.0
2018	Successful diversification: Semiconductor,
	MedTech and Green Energy;
	Technology development for lithium-ion
	batteries

# RENA - Your Partner along the Project Life Cycle

# Applied Research

- Process development & optimization
- Technology assessment

# Design & Engineering

- Modular design
- Customized engineering
- Platform optimization (TCO, uptime, throughput)
- · Construction of machine

# Production, Delivery and Start-up

- Manufacturing & assembly
- Shipment
- Move-in
- Commissioning and process start-up
- Qualification and validation

## After Sales

- Maintenance
- Spare parts supply
- Optimization and upgrades
- Onsite service
- Retrofits
- · Process support

# **Production Machines**

# for standard and customized solutions



## SEMICONDUCTOR



RENA can draw on more than 25 years of experience in semiconductor applications from wet-chemical etching and cleaning to electroplating of semiconductor wafers in state-of-the-art clean rooms. We manufacture standardized solutions as well as highly customized equipment for all wet process applications, while fully complying with the relevant SEMI standards.

### **MEDTECH**



Our qualifiable machine platform medSurface is the base for unique production solutions for dental implants, stents or optical substrates. Standardized applications perform for example etching or coating processes for dental implants. In addition, customized solutions and modifications according to special customer requirements are also feasible.

## **GREEN ENERGY**



Since the beginning of solar cell manufacturing, we have supplied production equipment and process solutions for the wet chemical treatment of solar cells. On our Inline and Batch platforms, we offer standard and customized solutions for the PV industry. More than 50% of all high-efficiency solar cells produced worldwide are processed on RENA equipment. With our innovative technologies we are ready for future trends such as HJT and IBC.

# SPECIAL WET PROCESSING SOLUTIONS

Based on flexible platforms or customized designs, RENA offers solutions for a complete range of special applications. From lab and pilot to high volume tools, RENA can rely on its experience to engineer equipment for wet processing tasks in challenging environments and handle a wide variety of substrate sizes and shapes. RENA's expertise in fluid dynamic simulation and process control ensures the best possible match of the equipment for the target process. Our proven software and MES systems enable effective manufacturing and full product traceability.

### **SERVICE**

Supplying good equipment only takes you half way to customer satisfaction. We maintain our partnership with our customers thanks to customer proximity at ten service locations around the world, good availability, qualified staff and a rapid spare parts service. Whenever necessary, we install upgrades or even customized modifications on-site.



RENA Batch platform





Customized solution

