



Our new batch tool for high throughput wet processing



# **MAXIMUM YIELD**

# HIGH TROUGHPUT, COMPACT DESIGN, UNINTERRUPTED PRODUCTION FLOW, FAST PROCESSES, REDUCTION OF PARTICLE GENERATION & CONTAMINATION

The main feature of batch processes for the production of semiconductor devices and microelectromechanical systems (MEMS) is the simultaneous processing of multiple wafers on the front and back side. Due to the perfectly coordinated interaction of product design, automation and the required chemicals, our wet process solutions for batch processing offer maximum process reliability, optimized process times, cost efficiency and maximum flexibility.

In response to the growing demand for faster and more efficient wet process tools, NexaStep was designed to streamline and accelerate the wafer processing workflows. By integrating cutting-edge technology and automation, NexaStep promises to significantly enhance the productivity and reliability of processes, marking an substantial leap forward in the field of semiconductor industry.

The fully automated high-throughput NexAStep platform offers more functions in a more compact space for maximum yield.

# **NEW PLANT DESIGN**

### MORE FUNCTIONS IN A MORE COMPACT SPACE

- Optimal use of the clean room due to compact design of the wet bench
- Efficient arrangement of chemical supply, drains, receiver tanks and control cabinets in the module footprint
- Modular concept enables fast set-up, dismantling and conversion
- Improved access through axis in the front area and thus reduction of particle generation
- Signal lamp integrated into the paneling for 180-degree visibility

# **CUTTING-EDGE SOFTWARE TECHNOLOGIES**



## EMPOWERING PROCESS THROUGH TECHNOLOGICAL INNOVATION

- Use of a state-of-the-art and user-friendly HMI
- High throughput through automatic control and loading
- Reduction of operator errors through intelligent software modules
- Manual operation and loading possible for maximum flexibility
- Wide range of evaluation options through logging of process data
- Intelligent safety control for collision avoidance in conjunction with sensor for process carrier detection





























### INCREASED PRODUCTIVITY BY EFFICIENTLY HANDLING A WIDE RANGE OF TASKS

- Automated loading and unloading via the connected transport system (OHT)
- Highly dynamic axis system for wafer-friendly transport and fast empty runs
- Low maintenance due to linear motor axis
- Integrated warehouse with up to 75 storage locations for uninterrupted production flow
- Up to 12 LMC carriers of 100 wafers/halfpitch (8 inches) each for efficient processing
- DI water flow of up to 80 l/min for fast basin filling and shorter rinsing times





### MAXIMUM EFFICIENCY AND PRECISION FOR FASTER PROCESS

- Combination of established drying processes: Marangoni effect and NID hot drying
- Filling and process recipes (precisely) individually programmable and selectable according to product
- Optimized extraction of the process chamber, thus reduced contamination
- High process temperature of up to 170°C for faster process







# SEY OUR AREYOLD RARE PARTNER FOR WET PROCESS EQUIPMENT