

# SOLAR

## PreWaClean

# RENA



## Cleaning for mono- and multicrystalline wafers

The first cleaning after sawing is the most important process in achieving an optimum wafer surface. The new design of the PreWaClean guarantees the best cleaning results, minimised water consumption and an outstanding throughput.

### Areas of application

- Cleaning of sawn mono- and multicrystalline wafers
- Removal of slurry and silicon residues from a sawing process
- Removal of silicon residues from a diamond wire sawing process
- Ungluing from the beam, ability to use different acids or hot water

### Features and benefits

- System prepared for the future generation of saws
  - Wafer basket:
    - Total access to the block during first cleaning step
    - Wafers are fixed after unglueing process
  - Maximum loading length 1080 mm per run
    - loading length 820 mm also available
  - Highest throughput, 4 runs per hour by minimal footprint
  - No removal of the beam connecting plate necessary during cleaning process
  - Full process control
  - Integrated ultrasonic step
  - Different recipes with free programmable process steps
  - RENA cleaning process know-how
  - Prepared for different unglueing processes
  - Cleaning support by low detergent concentration
- Optional:
- Connection to MES
  - Unglue tank usable up to 95 °C
  - Different power heaters
  - Tracking with Transponder / Barcode





Handling system  
for wafer basket



Wafer basket with  
brush concept



Front view PreWaClean

## Technical Data PreWaClean

<b>Process</b>	<ul style="list-style-type: none"> <li>• Cleaning and unglueing of rectangular silicon wafers</li> <li>• Gentle cleaning process</li> <li>• Ultrasonic clean</li> <li>• Unglueing tank</li> <li>• Integrated rinse system</li> <li>• RENA process</li> </ul>		
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• 6100 x 2400 x 3000 mm (lenght x width x height) by 820 mm loading length</li> <li>• 6100 x 2700 x 3000 mm (lenght x width x height) by 1080 mm loading length</li> </ul>		
<b>Throughput</b>	<ul style="list-style-type: none"> <li>• Maximum cleaning capacity per hour 4300 mm sawn material (RENA process), capacity depends on used process</li> <li>up to 12300 wafers/h</li> </ul>		
<b>Wafer thickness</b>	<ul style="list-style-type: none"> <li>• Proofed for 180 µm</li> </ul>		
<b>Media consumption</b>	Loading lenght	820 mm	1080 mm
	• DI water consumption cleaning mono wafer:	4.0 m <sup>3</sup> /h	5.0 m <sup>3</sup> /h
	• DI water consumption cleaning multi wafer:	2.0 m <sup>3</sup> /h	3.0 m <sup>3</sup> /h
	• Compressed air	1 m <sup>3</sup> /h	
	• Electricity	380 - 400 V AC +5 % 3 Ph+N+PE, 50 Hz	
		102 A full load current (with 48 kW Inline heater)	
	• PreWaCleaner Tegee		