

# SOLAR WaSep




## Reliable and stress-free wafer separation

The latest generation of the RENA WaSep series ensures a reliable and smooth wafer separation with maximum throughput of 6,000 wafers/h.

A wet ribbon separates the wafers direct out from a pre-cleaning wafer basket. A breakage detection sorts out broken wafers. The integrated distribution system allocates the wafers onto four or more lanes.

### Areas of application

- Separation of pre-cleaned rectangular silicon wafers directly out of the wafer basket using brush concept
- Loading of a downstream inline cleaning system
- Separates wafers coming from a slurry or diamond wire cutting process
- The wafer is kept wet throughout the entire process

### Features and benefits

- Direct separation out of the RENA PreWaClean wafer basket, timesaving and gentle process
- Wafer separation with water jet system
- Gentle transportation of each wafer out of the wafer basket
- Contactless wafer alignment with a waterslide
- Feed and bleed function for process water
- Equipped for the separation of 156 mm wafers (standard design)  
Optional: Conversion kit for 125 mm wafers
- Integrated wet wafer distribution system allocates wafers onto four lanes
- Throughput matches with RENA InWaClean
- Integrated breakage management and automatic removal of broken wafers in the transport area
- Removal of thick wafers
- Design also allows manually loading of downstream InWaClean
- Field improved
- Software package for material tracking available on request
- Patented
- Optional:
  - Tracking with Transponder / Barcode





Wafer breakage detection



Wet wafer distribution system

RENA



Front view WaSep

## Technical Data WaSep

<b>Process</b>	<ul style="list-style-type: none"> <li>• Separation of rectangular silicon wafers</li> <li>• Separation process directly out of pre-cleaning wafer basket</li> <li>• Wet wafer surface throughout entire process chain</li> <li>• Gentle transportation of each wafer out of the wafer basket</li> <li>• Removal of wafer breakage and thick wafers</li> </ul>	
<b>Dimensions</b>	1 module 5050 x 3200 x 2400 mm (length x width x height) 2 modules 5050 x 4500 x 2400 mm (length x width x height)	
<b>Throughput</b>	Depending on number of separation modules and proportion of good wafers 1 module up to 3000 wafers/h 2 modules up to 6000 wafers/h Wafer size 125 and 156 mm	
<b>Breakage rate</b>	< 0,5%	
<b>Wafer thickness</b>	> 120 µm	
<b>Media consumption</b>	<ul style="list-style-type: none"> <li>• DI water 1-0.02 MOhm (1-50 µS/cm) temperature 18 +/- 3°C</li> <li>• Compressed air</li> <li>• Electricity</li> </ul>	100 l/h  2 m³/h  380-400 V AC +5% 3Ph+N+PE, 50 Hz 16A