DATA SHEET

# 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.

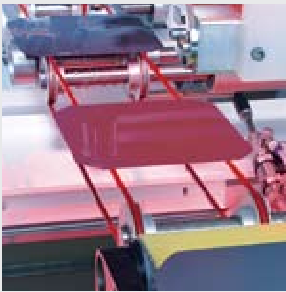
### Areas of application

- 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

R|E|N|A|.

Front view WaSep

## Technical Data WaSep

| | |
|---|---|
| Process | • Separation of rectangular silicon wafers<br>• Separation process directly out of pre-cleaning wafer basket<br>• Wet wafer surface throughout entire process chain<br>• Gentle transportation of each wafer out of the wafer basket<br>• Removal of wafer breakage and thick wafers |
| Dimensions | 1 module 5050 x 3200 x 2400 mm (length x width x height)<br>2 modules 5050 x 4500 x 2400 mm (length x width x height) |
| Throughput | Depending on number of separation modules and proportion of good wafers<br>1 module up to 3000 wafers/h<br>2 modules up to 6000 wafers/h<br>Wafer size 125 and 156 mm |
| Breakage rate | < 0,5 % |
| Wafer thickness | > 120 µm |
| Media consumption | • DI water 1 - 0.02 MOhm (1 - 50 µS/cm) temperature 18 +/- 3° C — 100 l/h<br>• Compressed air — 2 m³/h<br>• Electricity — 380 - 400 V AC +5 % 3Ph+N+PE, 50 Hz 16A |

RENA September 2011

RENA GmbH
Ob der Eck 5 | D-78148 Gütenbach
Phone +49 7723 9313-0