DATA SHEET

SOLAR InSiOx

Inline single side SiO_2 removal

The InSiOx removes the thermal SiO_2 layer from one side of the cell in an inline single side etching step. It leaves the oxide layer on the other side undamaged e.g. as passivation layer for high efficiency cells. The excellent selectivity of the system also makes it highly suitable for single side oxide removal on drilled wafers, e.g. for the manufacturing of EWT cells. Together with the InPolish and InOxSide tools, it completes RENA's toolbox for rear-side passivated cells.

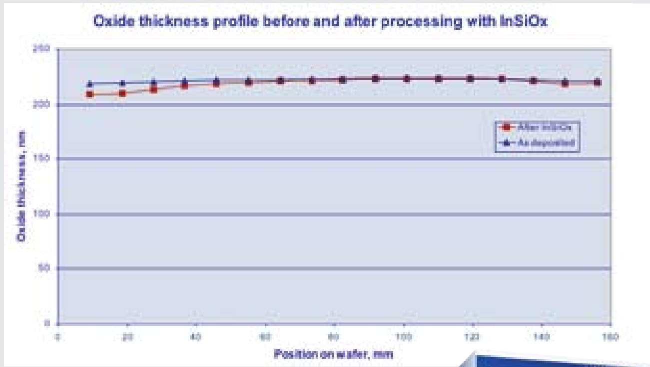
Areas of application

- Single side SiO_2 removal for high efficiency solar cells
- Designed for multi- and monocrystalline wafers
- Wafer transfer systems available for automatic loading and unloading

Features and benefits

- Enables processing schemes for rear-side passivated cells
- Inline single side process:
  - No masking of the front side required
  - Easy automation integration and combination with other RENA inline tools
- Technological leadership
  - Process start up by RENA
  - Excellent selectivity: no attack on the front side of the cell
  - Suitable also for drilled wafers e.g. for EWT cell concepts

R|E|N|A|



Front view InSiOx

Technical Data InSiOx

	InSiOx ST • 5 lanes for 156 mm wafers	InSiOx HT • 5 lanes for 156 mm wafers
Process	Single side SiO_2 removal for high efficiency solar cells	
Dimension	4800 x 2150 x 2350 mm (length x width x height)	6000 x 2150 x 2350 mm (length x width x height)
Throughput	1875 wafers/h gross • wafer size 156 mm	3000 wafers/h gross • wafer size 156 mm
Wafer thickness	> 150 µm	> 150 µm

RENA April 2010

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

www.rena.com