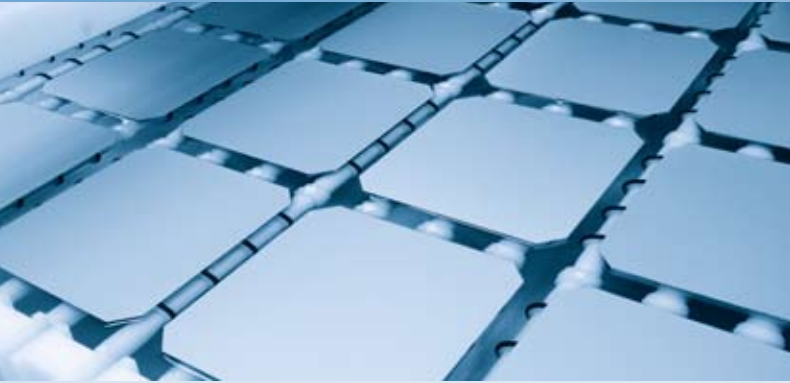


SOLAR InOxSide®

R | E | N | A | .



Integrated PSG removal and junction isolation

The InOxSide® tool performs PSG removal and junction isolation in one single tool, thus improving the process integration and workflow in the line. The junction isolation is performed by etching the rear side of the cells while leaving the front surface dry. The patented process not only leads to superior junction isolation performance but also simplifies the production of passivated rear side cells by entirely removing the emitter from the rear side.

Areas of application

- PSG removal and junction isolation of solar cells
- Designed for multi- and monocrystalline wafers
- Automation systems available for loading and unloading

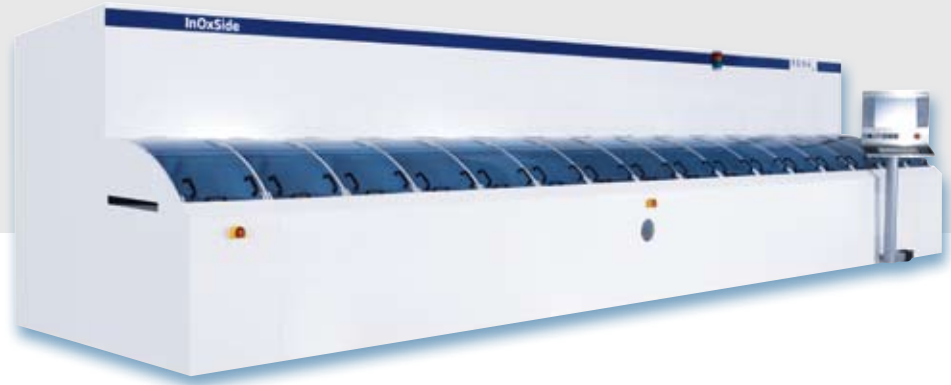
Features and benefits

- PSG removal and junction isolation in one single tool
 - Ideal process and work flow integration
- Junction isolation performed by rear side emitter removal
 - Enables processing schemes for rear-side passivated cells
- Patented process
- Process proven on more than 20 GWp/year installed production capacity
- Cell efficiency increase of 0.1% compared to other junction isolation methods
- Straight line footprint
- Technological leadership
 - Process start up by RENA
 - Excellent process yield
 - Outstanding process performance





Single side etching



Front view InOxSide®

Technical Data InOxSide®

InOxSide® HT					
Platform	<p>NIAK</p> <p>5 lanes for 156 mm wafers</p>				
Process	Inline PSG removal and junction isolation				
Dimensions	10800 x 2150 x 2350 mm (length x width x height)				
Throughput	<p>3600 wafers/h gross *)</p> <p>wafer size 156 mm</p>				
Wafer thickness	> 150 µm				
Media consumption	<table border="0"> <tr> <td>• DI water</td> <td>270 ml/wafer</td> </tr> <tr> <td>• Acid</td> <td>1.1 ml/wafer</td> </tr> </table>	• DI water	270 ml/wafer	• Acid	1.1 ml/wafer
• DI water	270 ml/wafer				
• Acid	1.1 ml/wafer				

*) Tool with reduced throughput available upon request.