



## WET INLINE LOADER & UNLOADER

Wet chemical processing is a very cost effective manufacturing process for the c-Si PV industry. It is extensively used for removing saw damage, surface texturing, cleaning, and removing oxidation layers. As the industry pushes for thinner wafers, automatic handling becomes more of a challenge. The Jonas & Redmann automation solution for wet inline processing meets this challenge. Our WIL/WIU systems deliver the highest throughput and the lowest breakage rates, while simultaneously improving quality with our “single-sided” handling concept.

- configurable and customizable to automate any inline wet process equipment.
- “single-sided” handling concepts, perfect for front-side contact restrictions or back-side passivated solar cells
- proprietary handling technology that ensures the lowest breakage rate and the highest throughput – up to 8,400 wafers / hr.

## Features and Options



LOADING OUT OF	ADAPTABLE TO	QUALITY AND PROCESS CONTROL	UNLOADING INTO	OPTIONS
stack boxes, e.g. Jonas & Redmann Magazine  Carrier, e.g. Jonas & Redmann Automation Carrier  Others on request	5/ 8/ 10 lanes	incoming inspection WHQ: 2-D optical control and TTV  etch rate determination	Wet Chemical Carrier, Jonas & Redmann Automation Carrier  Others on request	MES connection, e.g. Secs GEM, XML
	Wafer Cleaning			interlinking with automated transport and storage
	Saw Damage Removal			operator languages English, Chinese
	TEX (Texturation)			wafer flipper
	PSG (Phosphorous silicate glass removal)			
	Others, e.g. plating			

Products (customized configuration on request)	Configuration										Performance wafer/hr
	Wafer loading		Wet bench					Quality control		Wafer unloading	
	magazine	carrier	TEX	PSG	5 lanes	8 lanes	10 lanes	WHQ	Etch rate	Carrier	
WHQ-WIL/WIU (TEX)	s		s		s	o		s		s	3600
WIL/WIU (TEX)	s	o	s		s	o	o		o	s	4200 - 8400
WIL/WIU (PSG)		s		s	s	o	o			s	4200 - 8400

(s = standard, o = option)