

1America Solar, LLC

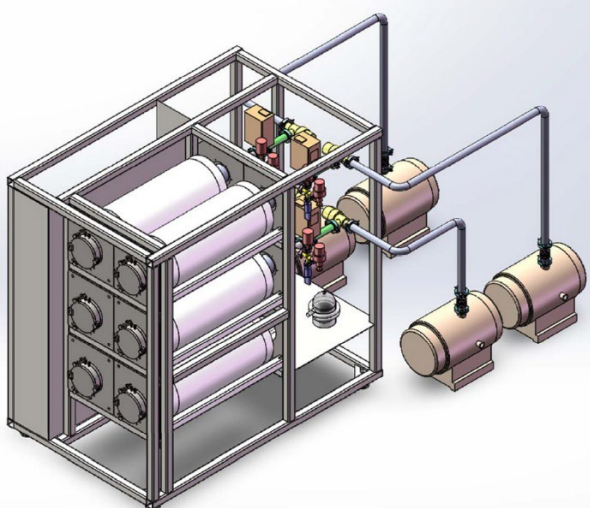
1America Solar, LLC (1A-Solar), a US Company based in Toledo, Ohio, develops and supplies turn-key research lab for the fabrication of advanced c-Si solar cells (TOPCon, HJT, XBC, PERC), Perovskite solar cells, and c-Si/PVK tandem solar cells. Our founders are pioneers in the development and manufacturing of solar cell research and production equipment and have built mass production equipment for HJT, PERC, TOPCon, Perovskite, and a-Si solar cells both in the US and in China.

TOPCon/TBC Lab	Making 3"x3" TOPCon, PERC and TBC cells
HJT/HBC Lab	Making 4"x4" HJT and HBC cells
PVK Lab	Making 4"x4" PVK cells

Key Equipment for TOPCon Lab

Lab-scale 6-tube equipment for Topcon solar cell

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|--------------------------|---|
| 1. Boron diffusion | 2. LPCVD for SiO ₂ /poly Si |
| 3. Phosphorus diffusion, | 4. ALD for Al ₂ O ₃ |
| 5. PECVD for SiNx | 6. Annealing |



Key Equipment for HJT Lab

Lab-scale 7-chamber equipment for HJT solar cell

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|--------------------|-------------------|
| 1. Load Lock | 2. i-a-Si:H PECVD |
| 3. p-a-Si:H PECVD, | 4. n-a-Si:H PECVD |
| 5. Sputter-ITO | 6. Sputter-ZnO |
| | 7. Sputter-metal |



Equipment Built by Founders in the Past

World's first dynamic-mode inline
PECVD production equipment for HJT



World's first 3.3GW TOPCon
Equipment (sold to Jolywood 2018)



PERC cell production equipment



Perovskite Cell Production Line



25MW a-Si cell production equipment in
Toledo, Ohio



Ion Beam Sputter Deposition
System

