

WHO ARE WE?

ARTsolar proudly stands for **African Renewable Technologies**. Established in 2010 and 100% locally-owned. As pioneers in the industry, we provide trustworthy, dependable and cutting-edge turnkey solutions. We manufacture from a silicon based crystalline cell to module, assemble components and test offshore modules according to global standards. We are a certified OEM for various Tier 1 Manufacturers and an approved distributor of renewable energy products.



LOCAL. POWERFUL. GUARANTEED.



OUR PEDIGREE

Our modules hold local warranties and are utilized across projects ranging from residential, commercial, and industrial turnkey solutions to large utility scale projects throughout the African continent.

Our projects division consists of board qualified, professional engineers, technicians and skilled artisans who are certified in accordance with all global industry standards and practices. Our team undergoes consistent and extensive technical training and skills development to ensure that all turnkey solutions are efficient, compliant, and sustainable.



WE OFFER



Locally Manufactured/
Assembled Panels With A 30-Year
Linear Power Output Guarantee



Local Testing of Offshore
Modules



Compliant Bespoke
Turnkey Solar Solutions



Supply of Other Market Leading
Products (Panels, Batteries &
Inverters, Etc.) via our various
Distribution Channels



Certified And Accredited
Professional Engineers
& Installers



Solar Energy
Feasibility, Design &
Financial Study



LOCAL EXPERTISE | LOCAL SUPPORT | LOCAL GUARANTEES | LOCAL JOB CREATION



www.artsolar.net



sales@artsolar.net



+27 31 100 1019



WHY artsolar?



Regulatory And Compliance Report



Project Execution From Inception To Project Completion



Local Content for Public Procurement



Solar Energy Metering & Energy Audit



Solar Energy Technical Services Corrective Engineering



SANS compliant Installations.



Providing Technical Support To Third Party Installers & Business Partners



Solar Energy Monitoring And Maintenance

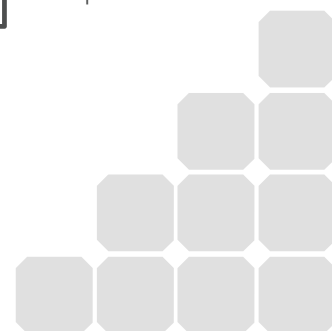


Long-lasting Solar PV performance



Local Warranties

LOCAL EXPERTISE | LOCAL SUPPORT | LOCAL GUARANTEES | LOCAL JOB CREATION





OUR PRODUCTS CREATE



LOCAL JOBS

We are able to provide direct employment opportunities for both skilled and unskilled individuals and indirect employment opportunities through suppliers, contributing to the livelihood of South Africans.



LOCAL OPPORTUNITIES

We create opportunities for numerous local companies and organizations that provide products and services to the solar PV industry.



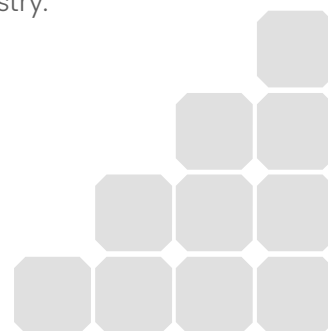
LOCAL ECONOMIC TRANSFORMATION

As a proudly South African company, we utilise the services of various local suppliers. We take pride in our ability to influence the local economy and actively contribute to South Africa's goal of economic transformation.



LOCAL EXPERTISE

We have significantly empowered young South Africans with extensive technical training and skills, enabling them to network and gain exposure within the industry.



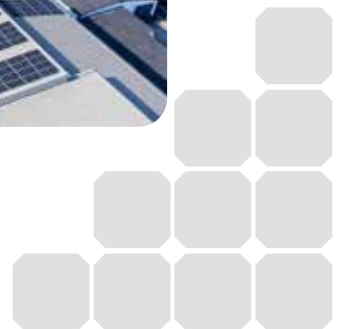
OUR PROJECTS DIVISION

ARTsolar provides bespoke turnkey renewable solutions for residential and commercial projects. Our solar solutions have been designed to meet your aesthetic and performance requirements, from our sleek, full black mono pergium mono-facial modules to our bi-facial modules.

RESIDENTIAL PROJECTS



COMMERCIAL PROJECTS



OUR MANUFACTURING PROCESS



1. NDC Cutter

NDC Cutting is Non-destructive Cutting, by a Thermal Laser to cut solar cells without damage. ARTsolar uses a 300W laser to cut solar cell by Thermal Stress.



2. Glass Loader 1

This machine automatically picks up the glass and places it on the conveyor, to be transported to the layup machine.



3. EVA Placement

The operator places the EVA on to the glass on this station.



4. Solar Cell Stringer

The PV Cell Soldering Stringer fully automates the soldering of cells into strings.



5. Robot Layup

The robotic arm is used to lay up the strings from the stringer. These machines ensure an accuracy level up to 0,01mm while creating modules with dimensions up to 2450mm long.



6. Auto Bussing

The DH180H Automatic Bussing Machine is used to solder the individual strings of the cell together, into a connected module.



7. Automatic Taping

This machine places the tapes on the strategic point of the modules. The purpose of the process is to keep cell to cells spacing within the specification that is set.



8. POE/Back Sheet Placement

The operator places the POE/back sheet on this station.



9. Glass Loader 2

The Second Glass Loader automatically picks glass and places it on the partially completed module.



OUR MANUFACTURING PROCESS



10. EL Inspection

The 1st EL (Electro luminance) machine is used before the modules are laminated to ensure no defects occur during the lamination process. The quality of the module depends on the quality of the laminate.



11. Lamination

This machine uses heat and pressure to bond different layers of the PV module together. The laminator makes sure that the solar cells are sealed within the protective layers of the solar module, creating a strong bond.



12. Visual Inspection

Visual inspection conducted by trained individuals as per IEC 61215 to inspect for any defects such as lamination bubbles or cell spacing.



13. Framing & Beading

Automatic framing of each module and installation of long and short extrusion with silicone beading on a laminate which makes a completed module.



14. Junction Box Placement & Soldering

Placement of Junction Boxes in preparation for junction box soldering. Connecting all circuits and bus bars through soldering.



15. Potting of Junction Box

Filling the junction box with silicone to ensure the correct IP68 rating in line with the IEC Standard.



16. Curing Tunnel

This area is used to dry the potting glue, silicone. Estimated time is 4 hrs for this process to be complete.



17. Sun Simulator

The sun simulator is a device that provides illumination approximating natural sunlight. The purpose of the sun simulator is to provide a controllable indoor test facility in-line with standard testing conditions.



18. Hi Pot

Involves applying high voltage and checking terminals and checking for any electrical leakage or breakdown.



19. Final EL

(Electro Luminescence)
The Machine is used to check the quality of the modules after all the processes have been completed when manufacturing the module. The final EL detects the defect that will not be picked up with a naked eye. The operator will grade the modules according to the given criteria.



OUR TIER 1 PARTNERS





OUR UTILITY SCALE SUPPLY

REIPPP Supply to BW3

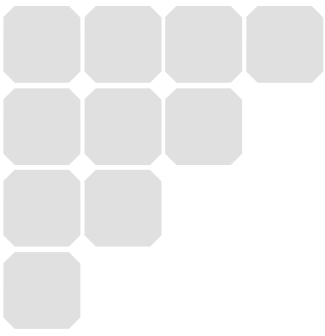


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OEM for Tier 1 Partner – JA Solar



Proudly produced by **ARTsolar** under license with **JA Solar**, powering the **TotalEnergies Hydra Project**.



OUR PROUDLY SOUTH AFRICAN SHAREHOLDERS



Mr Eshu Seevnarayan

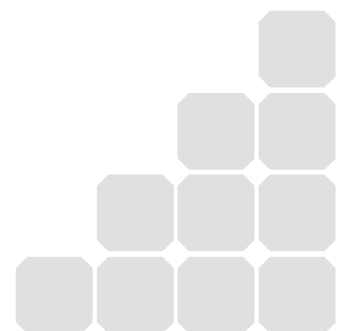


Mr Patrick Goss



Mr Nhlanhla Zondo

“Our customer-centric approach ensures you receive only the highest quality products, service excellence and 24 hour technical support from our committed and dedicated team.”





artsolarTM
local | powerful | guaranteed

