

PEGASUS

AUTOMATIC SOLAR PANEL CLEANING SYSTEM



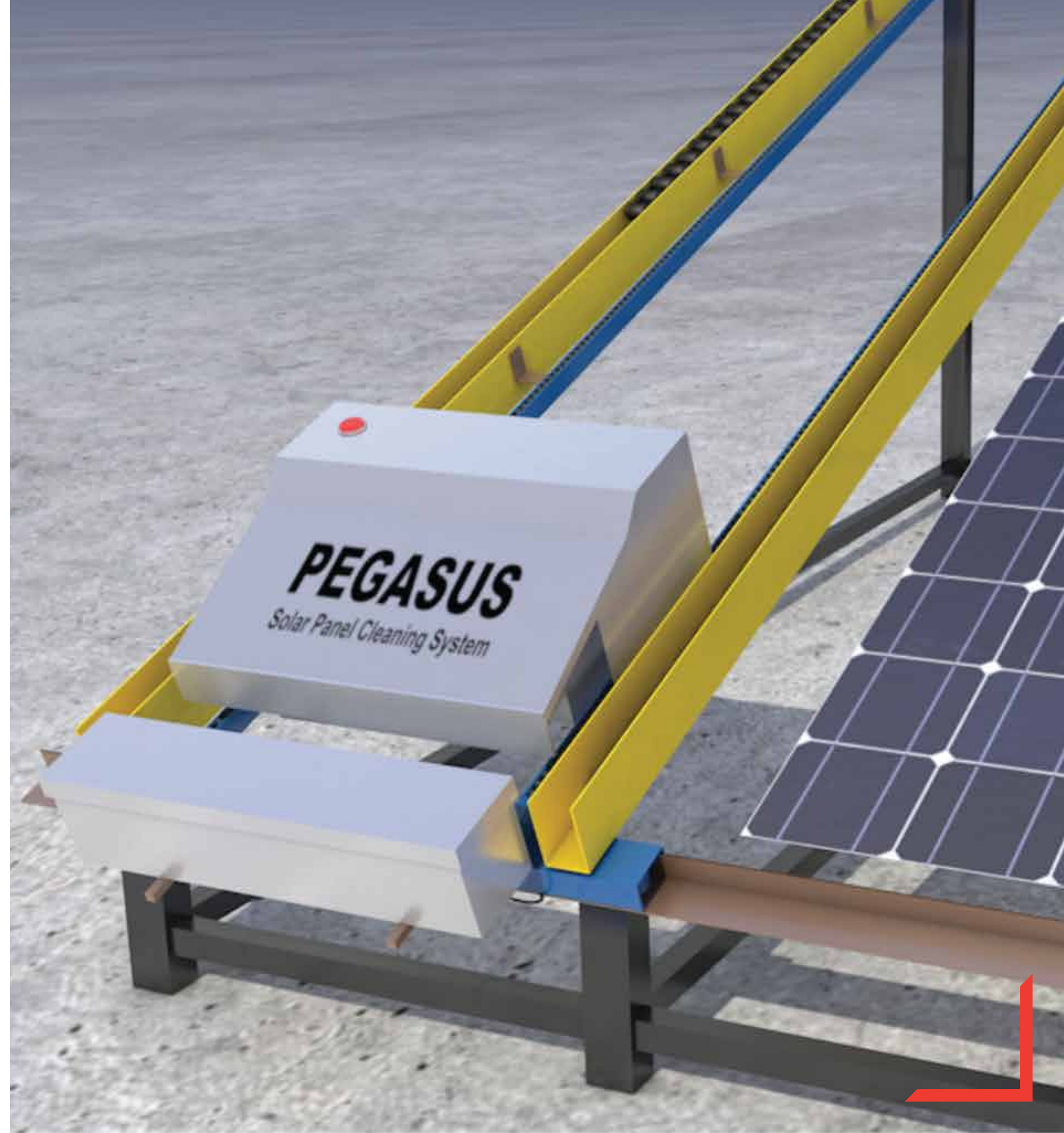
Siddhi Engineers

www.siddhiengineers.com

WHY PEGASUS

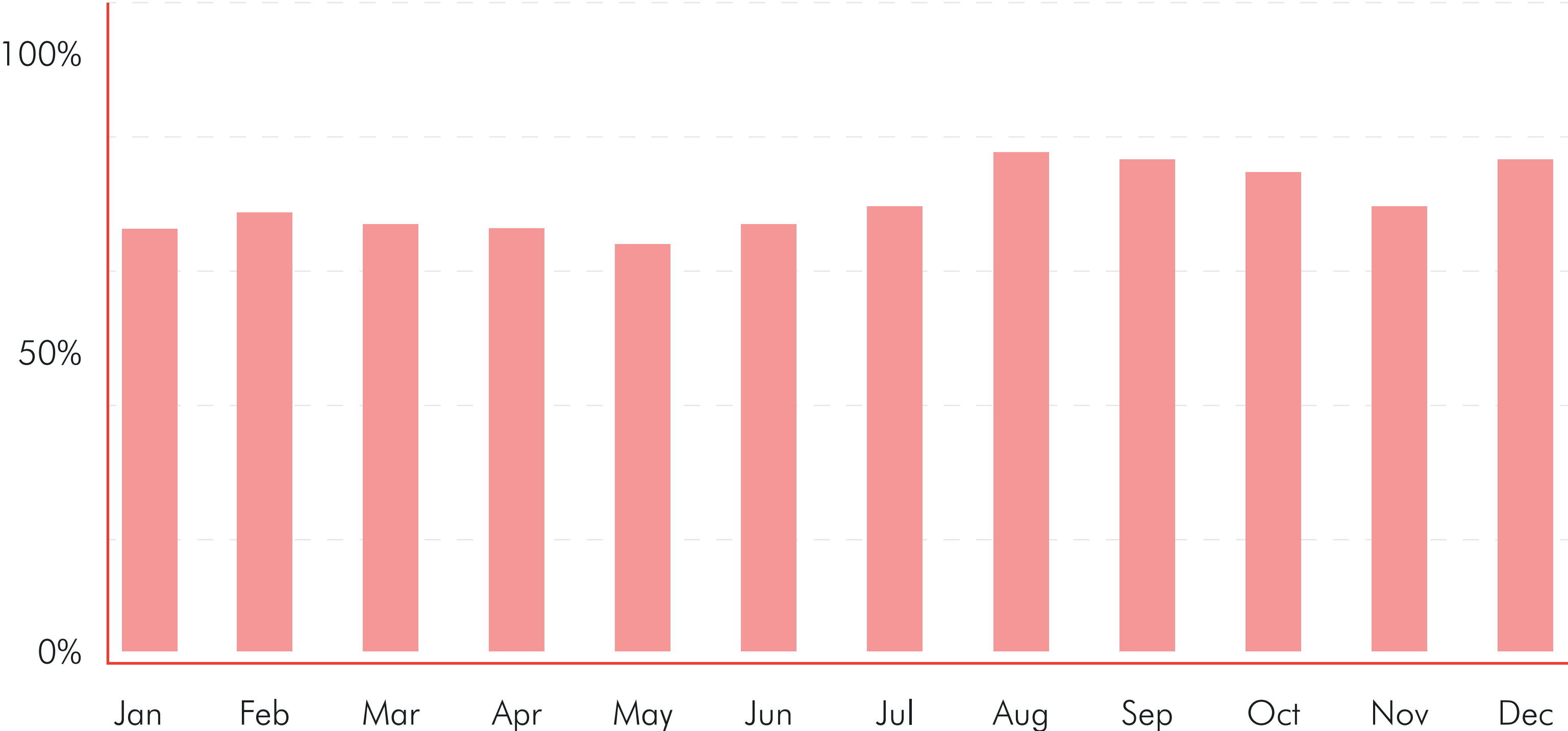
The Pegasus, an automatic solar panel cleaning system cleans the solar panel, that too on just a simple click by your finger tip. After many failed but enlightening experiences, we have implemented a optimized way to clean the array of solar panels. Pegasus moves along the length of array of solar panels, and cleans while moving across it. Keeping the safety of solar panels in mind, we choose to have separate track for the travel of Pegasus and specially designed motorized nylon brush for cleaning during the downward cycle, thus the collected dust is thrown at the bottom of panel array, saving the repetitive work. Design and selection of motors are in such a way that it consumes less energy thus makes it easy to operate in night time on in-build battery. The battery is provided with charging unit together with Solar panel, so no need of external power.

The Pegasus comes with both type i.e. DRY and WET cleaning, depending upon therequirements and the location of Solar Power Plant. Having a compact design assures the stability of system on the track and keeps it intact even in worst weather conditions. The electronic programmable controller ensures the automatic cleaning sequence, limit switch sensing & wireless control from a remote station .



IDEOLOGY

Solar energy is a renewable source of energy, which has a first great potential and it is radiated by the sun. Renewable energy is important to replace the using of electric energy generated by petroleum. Solar power has become a source of renewable energy and the mode of application should be enhanced. The solar PV modules are exposed to environment as it is it's basic requirement, which means it is going to be affected by the dust and the dirt. These accumulated agents blocks the incident light from the sun and thus reduces the power generation capacity. Cleaning is therefore an indispensable part of the maintenance. The optimized way of cleaning is necessary for better efficiency during the period of time.

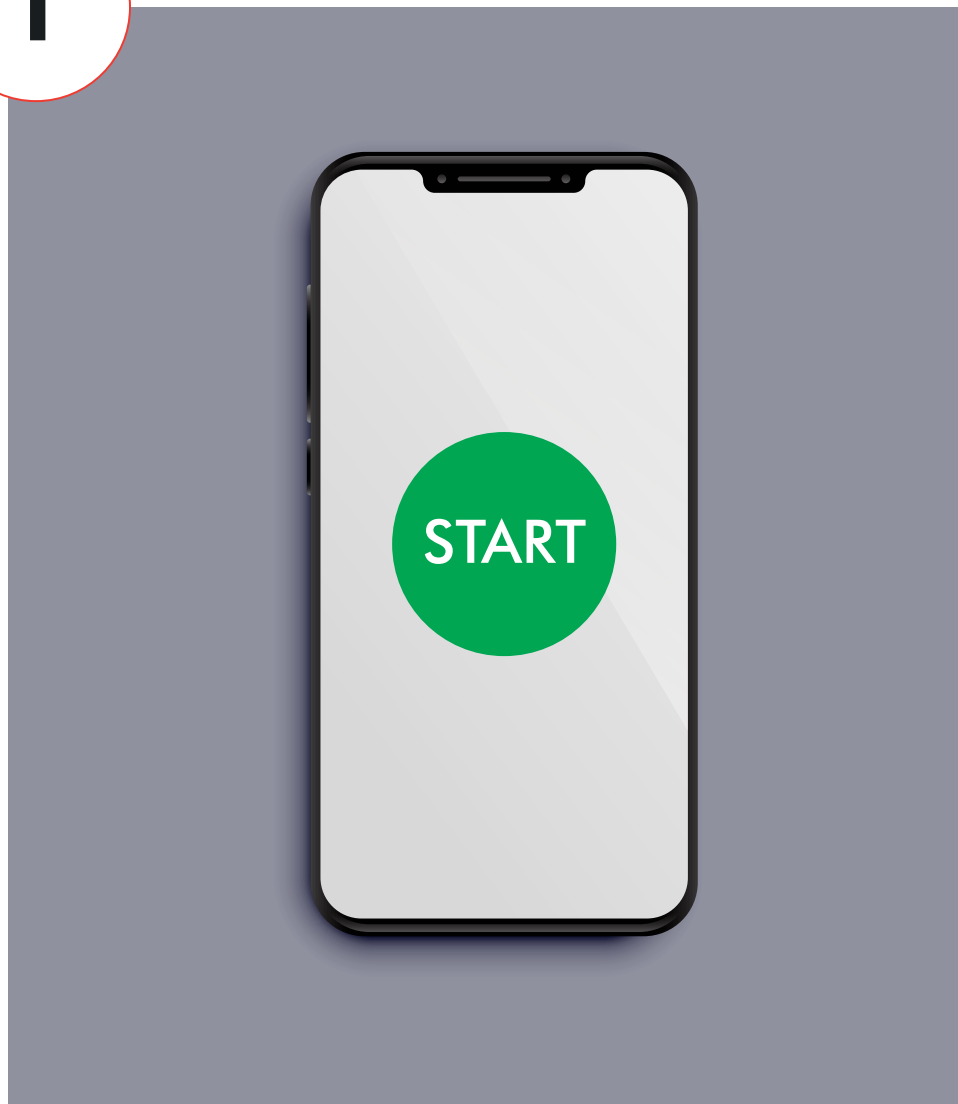


WORKING PRINCIPLE

PEGASUS

Automatic Solar Panel Cleaning System.

1



Switch On Press Button
from our Mobile App

2



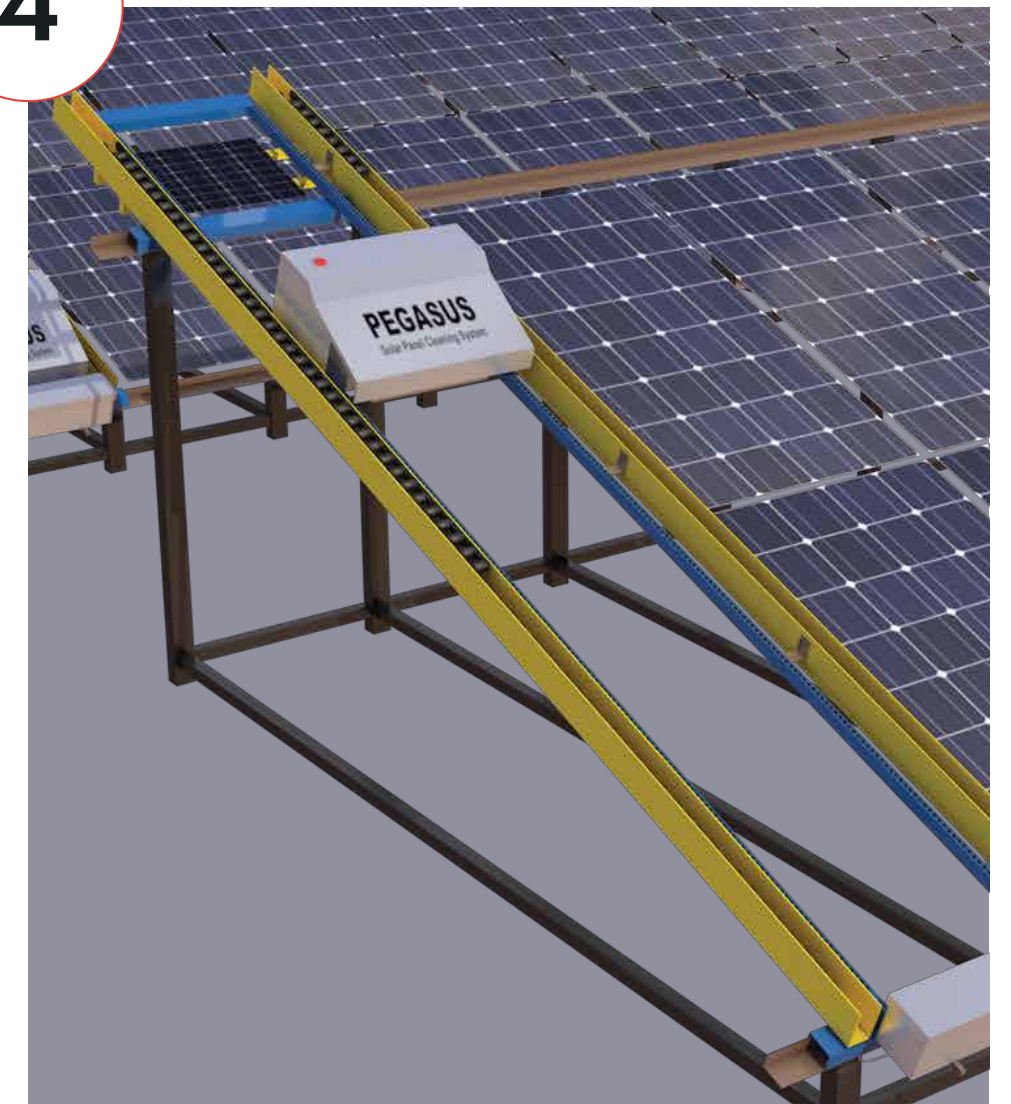
Start Cleaning of
Solar Panel

3

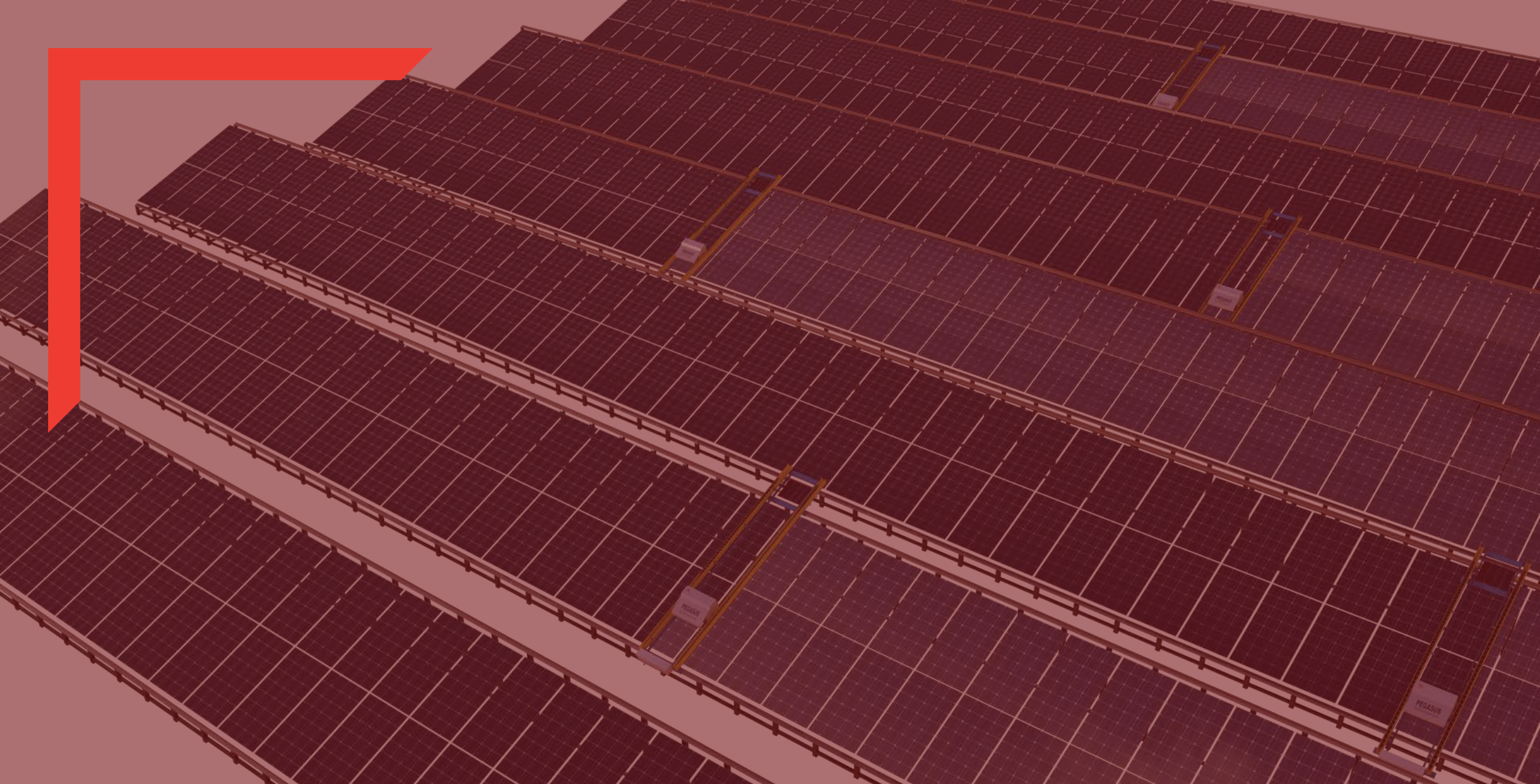


This process continuous till
the solar panel gets clean

4



And it's goes to its
parking bay.



KEY FACTORS

- Independent, as it has its own power house.
- Efficient, as precise design is used.
- No harm to exiting Solar panel system.
- Available in both wet and dry type.
- Highly durable as material used is result of number of iterations.
- Low maintenance as efficient and optimized design is used.
- Can be used in large range of temperature scale.

FEATURES

- Controlling a system is no more an complex task, as we have implemented the simple yet efficient way of controlling the system.
- Long battery life together with self power house.
- Customized Solar panel and battery used assures the smooth and complete cleaning cycle.
- Compact design assures less space acquisition.
- Panel Damage Guarantee keeps your every nightmare away.



PRODUCT SPECIFICATION

Factors	Details
Power Source	In-Built Battery and Solar panel and charging unit
Weight	Depends on the type and length, Ranges from 50Kg to 75Kg
Control	Automatic and Manual
Environmental Impact	No Impact
Recycling	Yes (95% parts are recyclable)
Length	Depends on the width of Solar panel array
Width	1 m
Height	350mm
Power	12V DC
Cleaning Type	Dry and Wet
Sound Level	Below 45Db
Operating Temperature	-6deg to 75 Deg
Operation	Needs separate tracks to work on, Tracks will be provided
Warranty	1 year for Electronics and 2 years for Structure, Onsite service will be provided.





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