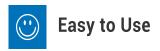


WATER-FED POLE & SYSTEM

- More light entry in panels facilitated thanks to cleaner panels.
- Light weight with shock proof protection
- Professional standards in cleaning

- Up to 20%*energy harvested in overall output
- Safe cleansing eliminates risk of fall
- Used by major 0&M in India





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FLASH ENERGY

Solar Photovoltaic Cleaning Solutions

Flash Energy Ensure optimal efficiency of Photovoltaic panels of plant for electricity production

Solar Cleaner ensures optimal efficiency of photovoltaic panels of plant for electricity production.

The lower yield of the photovoltaic plant soon becomes an economic loss for owners and users of the plant itself. With increasing number of instillation in Industrial Roof top & Ground Mounted solar systems in India. The deposited dust is round 30%* and cleaning of industrial dust is a great challenging task.

A photovoltaic plant with high accumulation of soiling on the surface of panels turns very quickly into a loss of productivity that can vary from 10% to 20%, depending upon the area where it is located and the type of production activities surrounding the plant. There are plants where in extreme cases the loss exceeds by far the 30% especially in factories like steel mills, cement, OIL, carbon, cast iron & generally farms, where cleaning should be performed frequently. Almost monthly. In certain environments, such as farms, particular attention should be paid to the cleaning products used, ensuring that their use is close to zero impact with the environment where the plants are located.

Giraffa-Wash Systems have created a range of products and services specifically designed for cleaning photovoltaic panels. Years of research and testing, first performed in the laboratory and then directly on the ground in different environmental situations, havegiven as excellent results Solar Cleaner, the ideal solution to eliminate any type of soiling accumulated on solar panel.

Recent report generated by a cleaning company shows the performance of solar module after cleaning the industrial pollutant using "Giraffa – Flash Energy solvent

RSPL	10:00 AM	10:30 AM	11:00 AM	11:30 AM	12:00 PM	12:30	13:00	13:30	14:00
New Module	6.1	2.4	3.2	4.6	6.7	7	5.9	4.2	3.2
Solution Applied Module	5.8	2.2	2.9	4.5	6.3	6.9	5.7	3.9	3
Affected Module	5.2	1.8	2.6	4.1	5.6	6.1	5.1	3.6	2.7

Our cleaning product "FLASH ENERGY", even by very low concentrations can clean the photovoltaic panels up to 12KW with 1liter of solvent with 10 parts of water. The action of the product is performed in one single operation, the special formula of Flash Energy works even after the cleaning process, as the products creates an antistatic effect which prolongs the time between cleaning operations, maintaining the full efficiency of photovoltaic panels. For panels with high soiling accumulations very tough, such as crystallized bird droppings, Metallic Powder, Carbon Powder, Zinc Powder, OlL, Cement, Lime scale powder etc. The product may be used RAW (without water mix) to guarantee the maximum effectiveness. The intervention of cleaning may be required several times a year because of the particular nature of surrounding pollutant.

Simple to use

- 1. Spray the solvent across the solar panel and wait for a minute or so
- 2. Using scrubber it should be stretched and massaged across the solar panel
- 3. Then rinse with normal RO water or if using TAP water the maximum calcium hardness should not be above 36 ° French. Your module is back ready for good electric generation.

Our Organization can provide support on training to companies who wish to do cleaning activities, specializing staff to proper procedure and execution of the work to get the maximum yield in energy generation. We also provide **water-fed pole & brush KIT** for cleaning solar module.