

Waterless Solar PV Cleaning System

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Abstract: Traditionally, solar panels were cleaned manually, but this method has some problems, such as the risk of accidents, potential damage to the panels, difficulty moving equipment, and poor maintenance. The automatic dust cleaning system for solar panels solves these issues and offers an effective, water-efficient cleaning method. It also prevents damage to the panels and helps maintain their performance by removing dust. After cleaning, the efficiency of the solar panels will be measured at different time intervals-one day, one week, and one month-and compared to their efficiency before cleaning. In this project, we will develop a waterless cleaning technology for solar panels helps maintain their performance by removing dust. After cleaning, the efficiency of the solar panels will be measured at different time intervals-one day, one week, and one month-and compared to their efficiency before cleaning. In this project, we will develop a waterless cleaning technology for solar panels. This will help improve energy generation while saving water. The cleaning will be done using high-speed brushes and air blasts to remove dust. The quick cleaning process will save time, and we will also make sure that the panels are not damaged and that shading from the cleaning system doesn't affect the panel's performance

Keywords: solar panels