Solar photovoltaic power generation in smelter

Overview

This paper investigates the economic feasibility of utilising energy flexibility in aluminium production as a viable solution to leverage electricity surpluses arising from the increasing number of photovoltaic (PV) system installations. Electricity used during alumina refining and aluminum smelting accounts for more than 90% of the industry's carbon emissions. It is estimated hat there are 8 kgs of the metal per panel. So, in the developmen ergy from the sun rays into thermal energy. The project is a partnership between Samancor, CGN Africa Energy—a Chinese company. aic panels at its aluminum smelter in Bahrain. EGA will. With the commissioning of a $360-million smelter expansion project and the first 35 MW phase of its $37-million solar PV power programme having been finalised, platinum mining company Zimplats has entered into a “new era of industrial growth and sustainability”, says Zimplats corporate affairs head.

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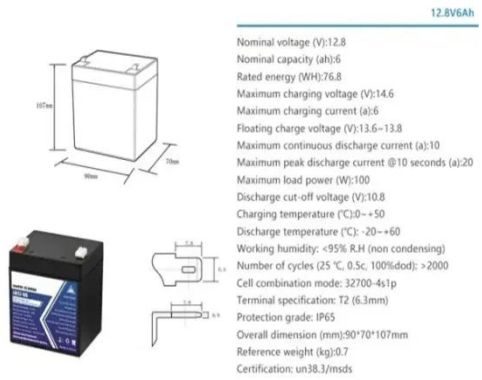

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