

Monocrystal's new paste for HJT PV panels increases solar cells efficiency by 0.05%

Stavropol, Russia, September 11, 2019

Monocrystal, a leading global manufacturer of synthetic sapphire and photovoltaic metallization pastes, announced today successful industrial tests results for its new low-temperature polymer MX series paste for silver metallization of heterojunction (HJT) solar cells. The tests were carried out on the HEVEL's production line, the largest Russian integrated company engaged in solar energy industry.

The new composition of MX series paste, based on an improved chemical organic binding agent combined with Monocrystal's own silver powder, allowed to achieve a number of advantages, including high-speed printing and zero gaps in the fingers, when printed using a mask with openings smaller than 30 um. Thanks to improved sintering of silver particles, specific resistivity was reduced by 25%.

According to the results of the tests carried out by HEVEL, the only European manufacturer of HJT solar modules, reduction of solar cell optical shading due to minimization of the finger width, combined with low linear resistance, resulted in increase of average solar cells efficiency by 0.05%, as compared with the HEVEL's baseline production rate.

"We always provide our customers with innovative solutions. MX-series paste is specially designed to provide improved printing performance, coupled with excellent effectiveness in a module. The possibility to transport and store the paste at standard temperatures is an additional advantage of this new product, which helps to minimize logistics costs", - said Oleg Kachalov, Monocrystal's CEO.

"Applying Monocrystal's MX-1701 paste will not only improve solar cells efficiency, but also increase equipment throughput and labor productivity" – Alexander Dubrovsky, HEVEL's Solar Module Plant Manager, pointed out.

The Hevel Group of Companies was founded in 2009. It is the largest integrated company in the solar energy industry in Russia. The company is comprised of three divisions: a manufacturing plant of solar modules in Novocheboksarsk (Chuvash Republic), a development department, which designs, builds and operates solar electric plants, and the Science and Technology Center for Thin-Film Technologies in the energy sector (Saint-Petersburg), which is the largest specialized scientific organization in the field of photovoltaics in Russia.

Since 2014, the company has built 414 MW of solar grid generation in the Altai, Bashkortostan and Buryatia republics, as well as in the Astrakhan, Volgograd, Orenburg and Saratov regions. By 2022 HEVEL's grid generation projects are expected to reach a total volume of 907.5 MW in Russia and 238 MW in the Republic of Kazakhstan.

www.hevelsolar.com

Press contact: Monocrystal
Elena Ostroverkhova
Phone/Fax: +7 8652 56 28 71
Email: info@monocrystal.com