

PRESS RELEASE

FHR provides third-generation tube coating solutions for solar thermal absorbers in concentrated solar power plants (CSP) – highly productive sputtering systems to deposit complex thin film systems on tube surfaces

Ottendorf-Okrilla, 27 November 2014 – When it comes to functional layers for solar thermal applications, then greatest importance is attached to the best possible absorption of solar radiation while the emission of heat (IR radiation) shall of course be as low as feasible. These properties are achieved by way of coating the absorber tubes under vacuum with a special system of thin films consisting of metallic and ceramic layers. FHR Anlagenbau provides for the solar thermal energy market to their Taiwanese customer Xxentria tube coating solutions of the third generation which feature the physical vapour deposition technology (PVD). These cutting-edge, highly versatile and productive vacuum coating systems of the FHR.Line series are ideally suited for tube diameters ranging from 25 mm to 100 mm. The types of magnetrons used can be chosen freely and the sputtering targets can be arranged in an appropriate way, which makes for customer-specific optimisation of the sputtering configuration with view to both layer system and tubular geometry of the substrates. An absorptance of more than 95 per cent and lowest emissivity can already be achieved with an inexpensive standard layer system deposited on the absorber tube surfaces.

About FHR Anlagenbau GmbH

FHR Anlagenbau GmbH is specialised in the development of innovative thin-film coating technologies and vacuum coating equipment and renders various services in the field of thin-film technology. The enterprise was founded in 1991 in Dresden. It is now headquartered in Ottendorf-Okrilla, on the outskirts of Dresden, and has been part of the centrotherm group since 2008. The major field of business is the construction of

coating plants which feature a range of vapour deposition, sputtering, CVD and ALD technologies for industrial production and research applications. These systems are used in many branches of industry, including photovoltaics, in particular for CIGS solar cells and organic PV cells, solar thermal plants, optics, electronics, sensor technology, and in the automotive sector. The product portfolio includes modular cluster systems for stationary coating of substrates, inline systems with vertical or horizontal substrate transport for coating glass plates or tube surfaces, as well as roll-to-roll plants for coating flexible substrates such as metal strips or polymer films. FHR closely collaborates with renowned research institutions and industry partners world-wide. The company takes a leading market position, in particular in the field of roll-to-roll vacuum coating equipment. In addition to plant engineering, FHR manufactures planar and tubular sputtering targets and has a powerful service department.

FHR Anlagenbau GmbH
Am Huegel 2
01458 Ottendorf-Okrilla, Germany
Web: www.fhr.de

Contact

Michael Schneider
Marketing & Communications
Phone: +49 35205 520-302
E-mail: michael.schneider@fhr.de