

Press Release

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Kinoton Makes the Sun Blaze in a Laboratory

Installation of a Compact Solar Simulator at SABIC in the Netherlands



The compact sun simulator from Kinoton is used to reproduce the long-term effects of continuous exposure to sunlight.

Kinoton is installing a compact solar simulator in the lab of the Energy Center of Excellence operated by SABIC Innovative Plastics, subsidiary of the Saudi Arabian chemical and metal conglomerate SABIC in Bergen Op Zoom in the Netherlands. Kinoton specially developed the simulator to very uniformly illuminate surfaces. It is designed to apply the same energy as the sun to a square meter of surface, for example of a solar collector panel. This makes it possible to reproduce and study the long-term effects of continuously exposing materials to sunlight in a laboratory environment.

Kinoton's extensive expertise and decades of experience with high-pressure xenon lamps were invaluable for developing the innovative solar simulator. It consists of three short-arc xenon lamps, each of which has an output of 4500 watts. The light they give off includes visible, infrared and ultraviolet frequencies and passes through a carefully designed optical system to produce radiation that very closely resembles actual sunlight. The simulator meets class A requirements for reproducing the spectral content of solar radiation. It also achieves class B spatial irradiance uniformity and temporal stability - excellent values for a system of its size. The lamps are fed by three KEX 170 electronic power supply units, each of which can be controlled via an integrated LDU user interface or remotely via special KEX control software. The entire solar simulator is accommodated in a compact, space-saving console. The clearly organized control panel is located on one side of the console where it is readily accessible. The simulator also integrates easy-to-use cooling and safety systems.

The Energy Center of Excellence belongs to the Innovative Plastics business unit of SABIC (Saudi Basic Industries Corporation), which supplies special granulated plastics to the automotive and other industries. The parent company SABIC was founded in 1976 to process natural resources, especially petroleum and natural gas. Its European operation is based in Sittard in the Netherlands and its headquarters is in Riyadh, the Saudi capital. The SABIC I.P. Energy Center of Excellence is mainly devoted to developing materials and applications for solar collectors made of high-performance polymers. The medium-term goal is for them to replace the costly materials - such as copper, aluminum, steel, and glass - that are currently utilized to make solar collectors.

About Kinoton

Over sixty years of experience make Kinoton, headquartered close to Munich/Germany, one of the world-wide leading manufacturers of professional equipment for processing and projection of film and digital content. Kinoton offers complete projection systems for cinema and studio applications as well as for all kinds of customized solutions. Kinoton's DCS Digital Cinema Solutions consist of premium D-Cinema technology and can be flexibly tailored to meet virtually any requirement. The extensive product range also includes the innovative Litefast 360° LED Display systems for advertising and digital signage. The well-established system provider with a staff of 160 employees and in-house manufacturing keeps impressing professional circles with technical innovations. An extensive international service and support network with competent partners guarantees reliable customer proximity all over the world. More information about Kinoton is on the Internet at www.kinoton.com.