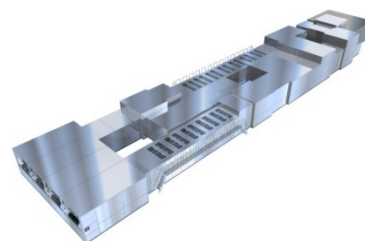


SCREEN Launches Coater/Developer for Forming Process of Color Filters for Rollable and Foldable OLED Displays

Kyoto, Japan – November 12, 2020 – SCREEN Finetech Solutions Co., Ltd. (SCREEN FT) has developed the SK-F1500H, a new coater/developer specially designed for the film forming process of color filters with anti-reflective properties. These color filters are intended for use in flexible organic EL displays (OLEDs) with structures that are rollable or foldable. SCREEN FT expects the SK-F1500H to make a significant contribution to the improvement of yield rates for OLED panels.



SK-F1500H

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www.screen.co.jp/en/about/nr-photo_2020

The development of rollable and foldable capabilities for OLED displays has advanced rapidly in recent years, particularly for applications focusing on mobile devices. However, the multi-film laminated structure used for these displays is thought to be one of the causes of the wrinkles that occur in areas where they are bent. This phenomenon has made the reduction of film layers an urgent challenge for the industry.

To make this possible, manufacturers are quickly adopting color filter (CF) films with anti-reflection functions as a replacement for multi-layered circular polarizers. As well as reducing the number of layers required, CF films provide high transmittance and resultant energy efficiency that is expected to noticeably increase the operating life of displays.

Against this background, SCREEN FT has developed the SK-F1500H coater/developer, which is specifically designed for the forming process of the CF films used for rollable or foldable OLEDs. In doing so, the company has leveraged its extensive experience in creating market-proven coater/developers specialized for the manufacture of OLED panels.

The SK-F1500H is designed to form CF films on the substrates with an OLED luminescent layer. It is able to achieve outstanding efficiency by executing the entire process from coating through development of CF films in a single integrated line.

The coating section incorporates SCREEN FT's Levicoater™ slit-type coating unit, featuring a levitating conveyor system. The proprietary substrate transfer technology enables continuous processing of two sixth generation half-substrates.¹ With this wealth of features, the SK-F1500H is expected to deliver major improvements in production efficiency.

SCREEN FT also plans to continue expanding its lineup of systems for OLED panels going forward. This commitment is expected to support stable mass production by the industry over the long term.

1. During production, the largest substrate that can be handled in the preceding vapor deposition process is half the size of a sixth generation substrate.

*Levicoater is a registered trademark and/or trademark of SCREEN Holdings Co., Ltd.

Lineup of Systems Specially Designed for Production of OLED Panels

- SK-P series coater line for flexible substrate production
- SK-E1500G coater/developer for backplane production
- SK-E1500H coater/developer for touch sensor panel production
- SK-F1500H coater/developer for film forming process of color filters

Product introduction page: www.screen.co.jp/ft/en/products/oled

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