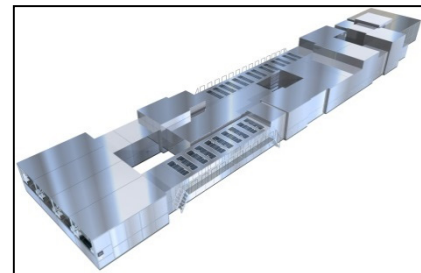


SCREEN Develops Specialized Systems for OLED Panel Production

Launches First Coater/Developers for 6th Generation Substrates

Kyoto, Japan – November 15, 2017 – SCREEN Finetech Solutions Co., Ltd. (SCREEN FT) has finalized development of its E series equipment for the production of OLED panels. The SK-E1500G and SK-E1500H, the first two specialized coater/developer systems specifically developed for 6th generation substrates, will be released as part of its new E series lineup. The SK-E1500G is designed for use in OLED backplane manufacturing while the SK-E1500H is intended for touch sensor panel (TSP) production processes. The models will be available from this November.



SK-E1500G/H

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www.screen.co.jp/eng/press/download/FT171115.zip

OLED displays offer outstanding image quality and flexibility. This has driven rapid growth in the use of particularly televisions and mobile devices such as smartphones. The market is predicted to expand by around 50% by 2020, reaching a value of around \$48 billion.¹ However, the manufacturing stage of the panels presents various challenges in implementing measures to control organic contaminants and microparticles and also to suppress static electricity. As a result, stable product supply has become a significant issue.

With these needs in mind, SCREEN FT has drawn on its many years of expertise as the world's number one producer of coater/developer equipment for LCDs to create a range of systems purpose-built for the production of OLED panels. The soon to be launched SK-E1500G and SK-E1500H are specifically designed to handle 6th generation 1,500 x 1,850 mm substrates. The systems make full use of mini-environment² technologies to effectively control contamination created by suspended particles in gas and chemical elements and static electricity occurring during the production process. Their impressive reduction in substrate contamination improves yield rates significantly.

Both the SK-E1500G and SK-E1500H feature SCREEN FT's Levicoater slit type coating unit. The Levicoater uses a levitated transfer system equipped with twin nozzles to handle the two kinds of photoresist that are essential for OLED manufacturing. The unit allows the systems to keep pace with the reducing thickness of glass

support substrates³ and miniaturization of TFT arrays,⁴ ensuring compatibility with a rapidly diversifying range of device production processes. The SK-E1500H also incorporates advanced transport technologies that enable it to perform simultaneous processing of two 6th generation half-substrates.⁵ This ability delivers significant improvements in production efficiency.

SCREEN FT plans to further expand its E series lineup with cutting-edge new models. The systems are expected to play an important role in achieving stable mass production of OLED panels.

1. Based on SCREEN FT research
2. Clean room method that allows the creation of a localized environment with dramatically higher levels of cleanliness than the surrounding area
3. For thickness of 0.3 mm
4. For line/space (L/S) of 1.5 μm and below
5. As substrates that are up to half the size of 6th generation devices can be handled during deposition preprocessing for TSP production

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