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DEK NeoHorizon iX platform

Maximum flexibility for the intelligent factory

ASMPT

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FLEXIBLE CONFIGURATIONS, RELIABLE PROCESSES

Important decisions are often made at the starting point, and your SMT line is no exception. Your screen printer plays a critical role in your level of quality, productivity and yield.

Fortunately, you can't go wrong with the DEK NeoHorizon iX, the highly flexible solder paste printer that lets you master all challenges of modern SMT production. With its modular design, you can configure DEK NeoHorizon iX platform for any need. Whether you are engaged in high-volume production or must deal with tiny lot sizes, frequent NPIs and product changeovers, pin-in-paste, super-small components and super-fine apertures, stepped stencils, circuit boards with exotic substrates, or different nozzle types – our DEK NeoHorizon iX won't let you down. And your printer will operate with maximum precision even at the highest speeds. After all, each unit gets externally certified prior to delivery.

With its standardized interfaces, the DEK NeoHorizon iX fits seamlessly into ASMPT's intelligent factory concept and exchanges data with quality assurance systems such as ASMPT's Process Lens and WORKS Optimization.

ASMPT combines all these features with custom-tailored services such as training, maintenance, process optimization, stencil production, clamping systems, and many more. With the printing specialists from ASMPT you have the global experts for printing and SMT processes at your side.

DEK NEOHORIZON iX FLEXIBLE AND RELIABLE



Back-to-back Dual-track option

The back-to-back setup makes for a uniquely flexible dual-track solution. With its three lanes, the DEK High-Throughput Conveyor lets you move circuit boards into and out of the printing area simultaneously.



DEK All-Purpose Clamping System

Top-down, lateral, or a combination of both: the new DEK APC system keeps even unusually high boards and shapes securely in place and lets you print extremely close to the edge.



DEK Typhoon understencil cleaning

Perfectly designed for today's and tomorrow's printing requirements, the DEK Typhoon is our most flexible and powerful understencil cleaning system. It is quick and thorough – even with stepped stencils, coated stencils and mixed components.



DEK NEOHORIZON iX SOLDER PASTE PRINTING FOR ANY REQUIREMENT

High-precision printing

Each machine's wet-printing accuracy of up to ±20 microns @ > 2.0 cpk (±6 sigma). An automatic dispenser for glue or solder paste ensures the correct supply of the printing medium.

Maximum flexibility

The DEK NeoHorizon iX is suitable for high-throughput applications with a back-to-back setup as well as for frequent NPIs and product changeovers.

Speedy operation

The DEK NeoHorizon iX operates with cycle times of up to 6.5 seconds plus process time. DEK Multiple Alignment of Singulated Substrates (MASS) improves the throughput.

Optimal process stability

The machine's stiff frame design with its high self-resonant frequency ensures longevity and a constant degree of accuracy.

Easy integration

Standardized interfaces make it possible to seamlessly transmit data in the Intelligent Factory.





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Quick and easy stencil changeover

With the width-adjustable stencil holder, stencils can be replaced automatically or semi-automatically. This option ensures proper positioning with no operator interaction – ideal for speedy product changeovers.



DEK HawkEye[®] Solder paste deposit control

The DEK HawkEye[®] system makes it possible to perform an initial inspection of the printing results in the machine. The camera-based system is freely configurable and capable of optically verifying up to 100 percent of the paste deposits.



DEK V9 station software with intuitive user interface

Thanks to the graphical touchscreen interface, even newcomers can operate the machine without a lot of training and program a new product in less than two minutes.

DEK NeoHorizon iX platform at a glance

Standard configuration	DEK NeoHorizon 03iX	DEK NeoHorizon 01iX
Machine alignment capability*	±12.5 μm @ > 2 cmk (±6 Sigma)	±12.5 μm @ > 2 cmk (±6 Sigma)
Wet print capability (cpk)	±25 μm @ > 2.0 cpk, (±6 Sigma)	±20 μm @ > 2.0 cpk, (±6 Sigma)
Standard cycle time	8 seconds + process	6.5 seconds + process
Maximum printing surface	510 mm (X) × 508.5 mm (Y)	510 mm (X) × 508.5 mm (Y)
Maximum PCB size	620 mm (X) × 508.5 mm (Y) - Long Board Option	620 mm (X) × 508.5 mm (Y) - Long Board Option
User interface	Touchscreen, keyboard and trackball, Instinctiv DEK V9 Software	Touchscreen, keyboard and trackball, Instinctiv DEK V9 Software
Camera	DEK HawkEye [®] 750 digital camera with 2-way LED illumination	DEK HawkEye [®] 1700 digital camera with 2-way LED illumination
Squeegee adjustment	Motorized with squeegee pressure feedback	Motorized with squeegee pressure feedback
Stencil loading	Semi-automatic	Automatic, incl. squeegee drip catcher
Stencil alignment	Motorized (actuators); aligned on X- and Y-axis and rotation	Motorized (actuators); aligned on X- and Y-axis and rotation
ProFlow	Optional	Optional
Understencil cleaning	IUSC 300 mm/400 mm/520 mm	DEK Typhoon 300 mm/400 mm/500 mm
Technical documentation	Printed documents: User manual, installation instructions, circuit diagrams. Technical instructions and videos that explain all operating steps are preinstalled.	
Compressed air supply	5-8 bar at ~5 liters/minute	
Power supply	100 Volts to 240 Volts ±10 %. Single phase 50/60 Hz	
Weight	Approx. 690 kg depending on selected options	

* The machine and repeat accuracy qualification will be conducted using production-typical process variables. Machine dimensions in millimeters



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