

ASM



ENABLING THE DIGITAL WORLD

DEK TQ

Maximum performance for the Integrated Smart Factory

DEK TQ STENCIL PRINTER

MUCH MORE THAN A NEW PRINTER

The DEK TQ marks the next generation of stencil printers. Newly designed from the ground up, this new generation of DEK printers is more precise, more powerful, more open with extremely low-maintenance. New linear drives, off-belt printing and innovative clamping systems ensure a new level of accuracy and deliver a stable printing process – even for the latest 0201 metric components. In the new DEK TQ, precision and speed are inseparable to meet your future requirements. A new 3-stage transports and the unique ASM NuMotion controllers with fiberoptic based communication reduce the cycle time to 5 seconds and deliver high-precision performance in the smallest possible footprint.

The DEK TQ is even more impressive in operation. With a newly developed under-stencil cleaning system, its innovative printhead with integrated paste height control, and a fully integrated paste dispenser, the DEK TQ runs on average for 8 hours between operator assists. In order to supply you full transparency about all kind of information by your printer, DEK TQ supports many interfaces and communication standards being used in the smart SMT factory.



DEK TQ INNOVATIONS



Newly developed USC

With an extra-large fabric roll, an easily replaceable cleaning body, a new dispenser system for the cleaning media, its independent linear driven axis, and a non-stop supply cleaning fluids



Innovative printhead

Integrated paste height controller and new improved squeegee pressure controller



Linear drives, clamping systems, and innovative transports

A fully flexible 3-stage transport system with the new off-belt printing for a fast, precise and stable printing process



THE DEK TQ GIVES YOU A COMPETITIVE ADVANTAGE



Open and integrated

Many interface and communication standards will be supported



Multi Factory Level
IIoT Applications & Services, IIoT Portal

Factory Level
Material & Process Flow, MES

Shop Floor Level / Machine-to-Host – Connectivity
Comprehensive Integration

Equipment Level / Machine-to-Machine – Communication
Smart Equipment, Automation

Cloud Services



ASM WORKS
THE SMART FACTORY SUITE

ASM
BEST-IN-CLASS EQUIPMENT

Maximum precision

Wet print accuracy up to $\pm 17.5 \mu\text{m}$ @ 2 C_{pk}
solder paste printing for 0201 metric components



Maximum throughput

Core cycle time: 5 seconds



Fast and flexible 3-stage transport

Linear drives, innovative clamping systems, off-belt printing, ASM NuMotion controller



Up to 8 hours without assist

New USC with extra-large fabric roll and cleaning fluid supply, new printhead with new paste management system



Open, easy to integrate

IPC-Hermes-9852, closed-loop to SPI, ASM OIB, IPC CFX



Efficient programming

Fully new Intuitive software and ASM Offline Printer Programming



Best floorspace performance

Takes up only 1.3 square meters



Back-to-back

The perfect solutions for dual-conveyor lines



More about the DEK TQ



DEK TQ



Machine type	DEK TQ
Standard configuration	Specifications
Machine alignment capability	> 2.0 C _{mk} @ ±12.5 μm, (±6 sigma)
Wet print capability	> 2.0 C _{pk} @ ±17.5 μm, (±6 sigma)
Core cycle time	5 seconds
Maximum print area	400 mm (X) × 400 mm (Y) (single-stage mode)
Machine control	NuMotion control System
Camera positioning	Linear motors and high-precision encoders
Squeegee pressure mechanism	Software-controlled, motorised with closed-loop feedback
Stencil positioning	Automatic loading incorporating squeegee drip tray
Substrate size (min.)	50 mm (X) × 40.5 mm (Y)
Substrate size (max.)	250 mm (X) × 400 mm (Y) (3-stage mode)
	400 mm (X) × 400 mm (Y) (single-stage mode)
Substrate size (max.)	400 mm (X) × 400 mm (Y) (3-stage with optional transport extensions)
Approximate dimensions	1,300 mm (L) × 1,000 mm (W) × 1,600 mm (H)

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