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 understencil 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

**Maximum precision**
Wet print accuracy up to ±17.5 µm @ 2 Cpk 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

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**Open and integrated**
Many interface and communication standards will be supported

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**Cloud Services**
- Multi Factory Level
- IIoT Applications & Services, IIoT Portal

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**Factory Level**
- Material & Process Flow, MES
- Device / Machine – Communication
- Ethernet, IIoT, Communication

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**Level / Machine – Connectivity**
- Critical Manufacturing
- IIoT

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More about the DEK TQ
## DEK TQ

<table>
<thead>
<tr>
<th>Machine type</th>
<th>DEK TQ</th>
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<tbody>
<tr>
<td><strong>Standard configuration</strong></td>
<td><strong>Specifications</strong></td>
</tr>
<tr>
<td>Machine alignment capability</td>
<td>&gt; 2,0 C_{max} @ ±12.5 µm, (±6 sigma)</td>
</tr>
<tr>
<td>Wet print capability</td>
<td>&gt; 2,0 C_{min} @ ±17.5 µm, (±6 sigma)</td>
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<tr>
<td>Core cycle time</td>
<td>5 secs</td>
</tr>
<tr>
<td>Maximum print area</td>
<td>400 mm (X) × 400 mm (Y) (single-stage mode)</td>
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<tr>
<td>Machine control</td>
<td>NuMotion control System</td>
</tr>
<tr>
<td>Camera positioning</td>
<td>Linear motors and high-precision encoders</td>
</tr>
<tr>
<td>Squeegee pressure mechanism</td>
<td>Software-controlled, motorised with closed-loop feedback</td>
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<tr>
<td>Stencil positioning</td>
<td>Automatic loading incorporating squeegee drip tray</td>
</tr>
<tr>
<td>Substrate size (min.)</td>
<td>50 mm (X) × 40,5 mm (Y)</td>
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<tr>
<td>Substrate size (max.)</td>
<td>250 mm (X) × 400 mm (Y) (3-stage mode)</td>
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<tr>
<td></td>
<td>400 mm (X) × 400 mm (Y) (single-stage mode)</td>
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<tr>
<td></td>
<td>400 mm (X) × 400 mm (Y) (3-stage with optional transport extensions)</td>
</tr>
<tr>
<td>Approximate dimensions</td>
<td>1,300 mm (L) × 1,000 mm (W) × 1,600 mm (H)</td>
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