



Your business is what **drives** us



www.dek.com





The rearview mirror and the road ahead

For decades, DEK has enabled robust automotive electronics manufacture through the assurance of state-of-the-art printing processes. We count some of the world's most well-known automotive companies as our customers and it is their success that drives us to innovate advanced technologies for the next-generation of automobiles. New levels of fuel efficiency, in-cabin entertainment, safety, lighting, navigation and more are enabled by reliable, repeatable, accurate print technology. Leveraging our rich history and broad knowledge base, DEK is delivering the printing solutions the automotive industry requires for the exciting road ahead.

 [Click here for more information](#)





Precision in the curve

There's no room for error on the road. In automotive electronics, defect-free, reliable and accurate printing are the central components to a high-quality result. Automotive devices cannot fail, making the originating point of electronics assembly – the print – critical. Platform accuracy and repeatability, zero defects and superb print quality within ever-decreasing dimensions have been and continue to be the cornerstones of DEK's development efforts.

DEK has engineered a suite of print platforms that boast the market's best alignment capability of 2 Cpk @ $\pm 12.5\mu\text{m}$ 6-Sigma for extreme precision and accuracy. Innovations like ProActiv technology that push solder paste transfer efficiency to new levels are allowing ultra-fine pitch devices to be robustly printed alongside large components using a single thickness stencil. Our ProDEK dynamic closed loop process control system works in tandem with market-leading solder paste inspection (SPI) equipment to deliver automatic alignment adjustment and understencil cleaning optimization for exceptionally high yields.

Much like an automobile with components that work in unison, it's the combination of multiple systems and technologies working seamlessly together that deliver a fail-safe, accurate and reliable print.



Defect-free, reliable and accurate printing are the central components of a high-quality result.





From zero to sixty

DEK understands the need for speed. Behind the wheel, it's about getting there fast. With automotive electronics manufacturing, it's about producing more good boards per hour for maximum throughput. Reducing cycle time accelerates profitability.

Our award-winning print platforms are the market's fastest. From the Horizon iX's 8-second cycle time to the Galaxy's 7-seconds, DEK systems can print more good boards per hour than any other machines in the industry. Fast understencil active cleaning capability with Cyclone ensures minimal time loss and maximum process stability. Combine this with exceptionally quick changeover and unique innovations like HawkEye post-print verification that runs at 1700mm/second with the industry's largest field of view and DEK's processing speed leaves the others in the dust.

But print process speed is built on more than robust motors. The ability to run processes in parallel means maximum equipment utilization and DEK has driven parallel processing to new levels. Automatic paste replenishment that occurs simultaneously with understencil cleaning and system-controlled paste loading, provide exceptional productivity and supremely fast cycle times.

Drivers don't like stop signs and neither does DEK.



Our award-winning print platforms are the market's fastest.





Keeping you
up to **speed**





Intelligence under the hood

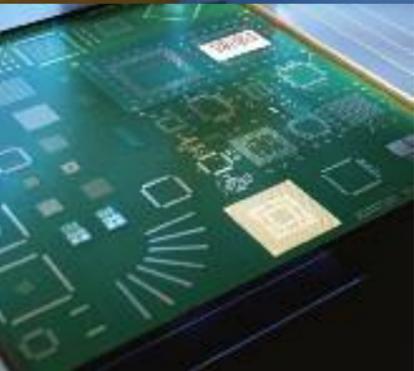
The automotive engineering community continues to push the boundaries of today's vehicle capability. The latest headlines tell of cars that can "drive themselves". With 360° parking assistance technology, remarkably accurate navigation tools and next-generation hybrid-electric vehicles already in widespread use, driverless autos may not be that far off. In many cases, reducing operator control often leads to better results.

DEK's platforms, with exceptional system-controlled processing ability and instinctual machine interface software, define machine intelligence. Our company's 40+ years of expertise are built into each platform to deliver unmatched capability, smart process decision-making and intuitive command of multiple operations simultaneously. The more the machine can control, the better the outcome. Reducing operator intervention means less chance for error.

The ultimate aspiration is a printing process that is totally 'lights out' and DEK is well on the way to achieving that reality. Technologies like ProDEK that automatically adjust offsets and cleaning regimens on-the-fly, Automatic Paste Dispenser II and Universal Paste Roll Height Monitor that offer a completely 'hands off' paste control system are but a few examples of DEK's leadership in printing intelligence.



The more
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Mapping your route

Control behind the wheel and clear direction ensure safe arrival at your destination. For automotive electronics manufacturers, process control and pre-production verification of all printing elements safeguard against error and guarantee a high-yield result.

DEK has pioneered some of the electronics assembly industry's most unique and effective process control technologies, all designed to accelerate productivity and reduce defects. We were the first to engineer an enclosed head paste system. Our award-winning ProFlow technology is widely recognized as the market's best solution for pin-in-paste processes, material integrity through diminished environmental exposure and reduced operator intervention. DEK also makes it easy for automotive electronics manufacturers to leverage critical verification and traceability data, pinpointing exact process parameters for specific boards and assemblies. Our Verification and Traceability software suite guarantee the proper consumables are used for each product run and links verification data to individual board identity for seamless traceability.

When safety and reliability are critical, process control and documentation are non-negotiable.



The driving experience begins at **ignition**

The automotive electronics manufacturing experience begins at the print.
Start the journey with DEK.

