



VectorGuard™



# VectorGuard™

## **INTRODUCING VECTORGUARD, A 21<sup>st</sup> CENTURY STENCIL TECHNOLOGY**

Flexible, cost-effective, innovative, superior performance, easy-to-use. These are just some of the words you can expect to hear associated with DEK's VectorGuard stencil technologies. Put simply, VectorGuard is a unique patented tension system offering significant advantages over traditional, mesh-mounted systems. Informed at every level by customer demand, and backed up by 24-hour customer support from DEK, the entire VectorGuard range is focused on print process optimisation and first pass yield.

## **SAVING TIME, COST AND COMPLEXITY**

At DEK, we understand the demands pulling on the resources of today's manufacturers. We know that you simply cannot afford to invest time and money into a system that is needlessly complex. Fortunately, as a technology leader, we have the capacity to eliminate the hassle from complex processes. With VectorGuard, this is exactly what we have done.

**Unique tensioning system** - Unlike other tensioning systems, VectorGuard is not air pressure dependent. This means that tensioning is simple and automatic, independent of traditional pneumatic assistance processes.

**Space efficient storage** - As a lightweight and compact frameless stencil technology, VectorGuard offers manufacturers enhanced storage

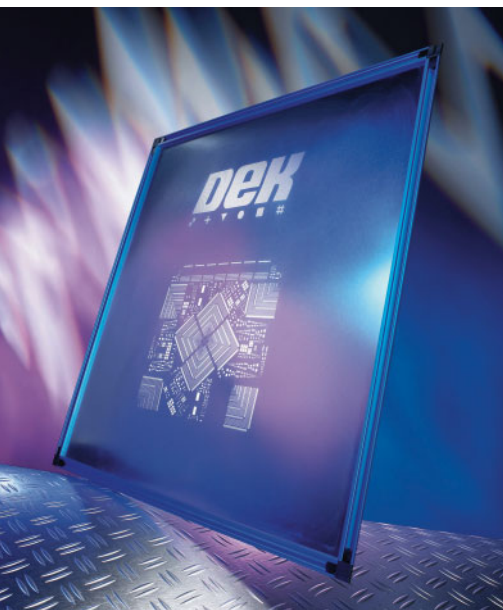


convenience. In fact, by storing foils in their designated protective cassettes, you can reduce storage space by up to 75% compared to conventional stencils. DEK also supplies a range of storage cabinets providing instant access to your required foil.

**Safer handling and enhanced rigidity** - The VectorGuard system features an extruded aluminium guard, securely attached to each edge of the foil using interlocking moulded plastic corners. The enhanced safety and rigidity this offers means that you can now retrieve, tension and adjust the foil with absolute confidence.

**Easy to use** - Mounting the foil in the VectorGuard frame system takes only a matter of seconds - requiring little training or physical effort. Easy to set up and compatible with virtually any modern platform, VectorGuard eliminates the need for complex alignment procedures. Foil tensioning is both accurate and automatic, guaranteeing you perfect repeatability even by the most inexperienced of operators.

**Re-usable, recyclable** - Mesh mounted systems simply cannot live up to the advances VectorGuard has made in stencil technology.





## ***HIGH PERFORMANCE STENCILS, SUPERIOR PRINT RESULTS***

To optimise the manufacturing flexibility presented by DEK's VectorGuard proposition, the system is compatible with a wide range of VectorGuard foil technologies. So, from lead-free to adhesive printing, VectorGuard really has got it covered.

### ***VectorGuard Blue***

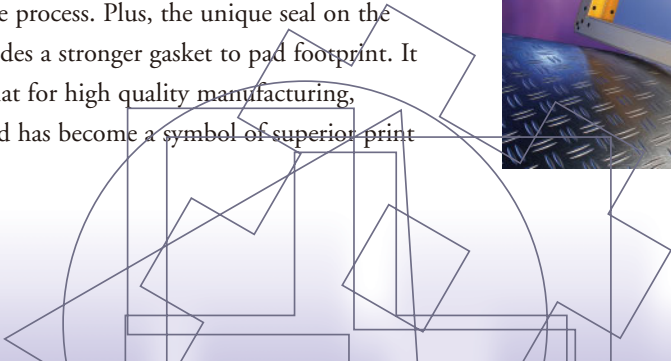
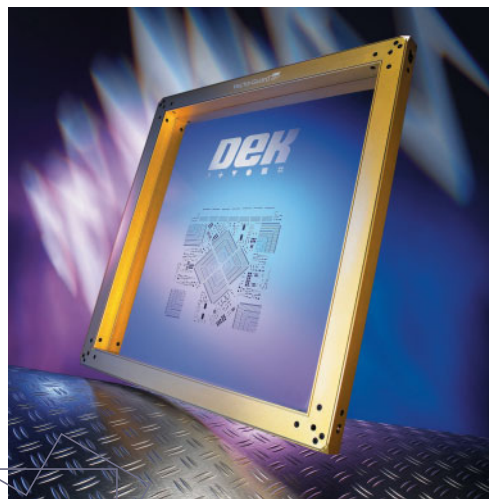
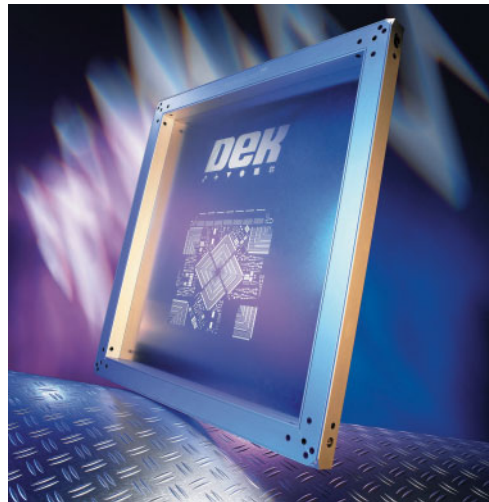
The original successor to MicroMount stencils, VectorGuard Blue forms an important part of the VectorGuard portfolio. Based on proven, stainless steel technology, these cost effective laser-cut VectorGuard foils are ideal for high quality manufacturing environments requiring an exceptionally fast delivery time.

### ***VectorGuard Silver***

With the lead-free deadline and changing paste properties just around the corner, reliable stencil technology is now more important than ever. DEK's extensive research into this area has proven that pure nickel stencils are optimised to achieve the highest levels of paste volume repeatability. Building on the low coefficient of friction in relation to nickel, VectorGuard Silver nickel laser-cut stencils will deliver optimal process efficiency for your manufacturing environment.

### ***VectorGuard Gold***

Building on the innovative performance delivered by VectorGuard Silver, VectorGuard Gold takes this one step further for manufacturers requiring exceptional aperture wall definition. With all the printability and paste release advantages associated with Nickel, DEK's electroformed stencil technology is smoother, a direct result of its renowned additive process. Plus, the unique seal on the contact side provides a stronger gasket to pad footprint. It is little wonder that for high quality manufacturing, VectorGuard Gold has become a symbol of superior print performance.







### *VectorGuard PumpPrint*

The PumpPrint process marks a further evolution in screen printing, combining a standard printing machine and VectorGuard stencil technology to provide a convenient and flexible alternative to traditional adhesive dispensing. Based on an acrylic material that can be easily and accurately machined, PumpPrint stencils facilitate the deposition of a wide range of adhesive patterns, while also providing bottom-wide routing to clear underside-mounted components and through-hole leads that have been cut and clinched.

## **ENABLING TECHNOLOGIES**

Every part of the VectorGuard range has been informed by customer demand. In short, our customers asked, and we delivered. As a consequence, our specific enabling technologies are reflective of the diversity present in today's industry.

### *FixFrame*

While VectorGuard has revolutionised stencil technology, we recognise that some manufacturers are not yet ready to transition from the mesh mounting technology they know, to VectorGuard. So, by blending the efficiency of VectorGuard with the robust rigidity of the aluminium frames used in mesh mounting, FixFrame provides an effective transitional technology.

### *MicroMount Adapter*

Following the launch of VectorGuard, some manufacturers were reluctant to relinquish their investment in MicroMount foils altogether. Recognising these concerns, DEK came up with a solution to enable these manufacturers to retain their old foils within a VectorGuard system. The MicroMount adapter provides an interface between MicroMount and VectorGuard, to satisfy specific manufacturing requirements.

### *Global Product Support Network*

As a DEK VectorGuard customer, you can be sure that your processes are supported around the clock by our global laser stencil design and manufacturing network. VectorGuard foils and frames are part of the DEK Process Support Products portfolio, meaning that you can order online, or by phone, 24/7. Our centres are located throughout the USA, Europe and South East Asia, so you can get the fastest possible turnaround – wherever you are in the world.

<b>VectorGuard Blue</b>	
<b>Thickness</b>	75µ / 3mil 100µ / 4mil 125µ / 5mil 150µ / 6mil 175µ / 7mil 200µ / 8mil 250µ / 10mil
<b>Frame sizes</b>	VG260 (23x23" / 584x584mm) VG 265 (23x29" / 584x736mm) VG 265wide (29x29" / 736x736mm) VG Asia (600x550mm)

<b>VectorGuard Gold</b>	
<b>Thickness</b>	All thickness available from 75µ up to 200µ in 10µ steps
<b>Frame sizes</b>	VG260 (23x23" / 584x584mm) VG 265 (23x29" / 584x736mm)

<b>VectorGuard PumpPrint</b>	
<b>Thickness</b>	3mm standard
<b>Frame sizes</b>	VG260 (23x23" / 584x584mm) VG 265 (23x29" / 584x736mm)

<b>VectorGuard Silver</b>	
<b>Thickness</b>	75µ / 3mil 100µ / 4mil 125µ / 5mil 150µ / 6mil 175µ / 7mil 200µ / 8mil
<b>Frame sizes</b>	VG260 (23x23" / 584x584mm) VG Asia (600x550mm)



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