Keeping up with the pace of change in today's clinical environments:



New options for improving your products

Whether it's improved patient care through effective access to EMR/HER or more ergonomic clinical workspaces as called for by the ACA, KV has the products to make it work. Our workstations, monitor arms, slides and hardware help keep clinics, labs and hospitals around the world responsive, safe and organized. We also develop solutions for healthcare office environments of every description.

Our functional components are built into mobile carts and headwalls by OEMs who define their business by quality performance under the toughest conditions.



Saving space in a confined application

When it comes to special design needs or design limitations, Knape & Vogt is here to help. We make your challenges our challenges, bringing a well-honed VA/VE perspective to every project.



Space-saving, wall-mounted ergonomic touch-screen solution

A large medical equipment OEM approached the Knape & Vogt design team with a very specific space issue they were facing in their market. They needed a solution for mounting a touch-screen monitor with superior ergonomic height adjustment in a limited-space hospital hallway.

We worked with the OEM to create a compact wall-mount sit-stand station featuring increased height adjustment over our existing product while reducing its profile to just over three inches.

A strong VAVE approach led to a solution that also supported the customer's specific aesthetic and ergonomic requirements. By using an already proven design, we were able to bring the product to market quickly and at a competitive price.

- Improved functionality over existing design
- Met customer's exacting design specs and market need
- Industry leading design





Point-of-care carts for dispensing medication, anesthesia, diagnostic devices and more

Easy access to tools and information in clinical settings is critical for smoother patient management and for achieving better clinical outcomes. Keeping technology at hand and out of the way is an urgent concern. This calls for smart designs that incorporate heavy-duty functional hardware to keep everything moving smoothly. Knape & Vogt slides provide the widest array of options to accommodate optimal profiles, heights, and capacities—along with motion control features essential for heavy-use mobile applications. When safety, security and reliability are critical, our slides deliver.



- Low-profile options maximize storage space and support streamlined designs
- Variety of attachment options
- Disconnect levers for cleaning and access advantages
- RoHS Compliant





Ensure that your products earn "must have" status within today's healthcare environments

For busy caregivers, having their tools and technology in the right place at exactly the right time is essential to productivity and workflow. If your products perform, they can easily become the brand-specified favorite for patient rooms or bedside charting.

KV products—and the expertise of our in-house engineers and product design professionals—can help make sure that you're innovating to lead.

If you're an engineer, designer, or procurement expert for a healthcare OEM, you need to find suppliers who can match your pace, meet your cost demands, and help you move ahead with confidence.

Knape & Vogt has been a trusted partner to many of the giant names in healthcare, delivering products, engineering expertise, practical manufacturing know-how, and a "can-do" attitude. And setting the standard for performance.



Designing a specific space-saving feature

The KV design team specializes in creating new designs to solve our customers' problems. Our engineered design solutions allow customers to create marketable features versus their competitors, allowing them added success in their market space.



Dual folding monitor arm for medical cart reduces width of monitors when in transit

A major medical cart manufacturer was experiencing a space limitation on their monitor carts. They were looking for a way to mount two monitors with an inward "fold" capability that would reduce monitor width when the cart was in transit, passing through doorways or entering/occupying elevators.

The KV design team worked with the OEM to create a patent pending mechanism that readily and simultaneously folded both monitor arms inward. The flexible design also was capable of accepting different sized monitors to improve the functionality of the monitor arm.

A strong VA/VE approach led to an option that solved the OEM's space limitation problem while supporting the customer's specific aesthetic and ergonomic requirements.

- Developed a new, patent pending mechanism
- Designed to meet customers aesthetics
- Industry leading design





Developing a monitor arm for superior adjustability

The Knape & Vogt design team specializes in adapting existing technology to reduce tooling costs and improve the time-to-market of the finished product.





Adjustable monitor arm positioning feature for an OEM medical cart

When a major medical cart OEM needed help creating a monitor arm for a new cart design that provided adjustability for a wide range of monitor weights, sideto-side swivel and integrated cable management, the Knape & Vogt design team went to work

Working side by side with the OEM we created a stable, aesthetically pleasing ergonomic solution that met all their design requirements.

Incorporating existing adjustable spring counter-balanced arm technology, the Knape & Vogt design team used existing and proven design concepts to create a solution to match the customer's needs. The approach saved tooling costs for the customer and substantially reduced development time, making the project a 'win-win' for the customer and for us.





Early stages

- Identify Trends
- Define Problem/opportunity
- Ideation
- Brainstorm project specs
- Explore existing solutions
- Share application expertise
- Refine concepts & designs

Development/Testing

- Benchmarking
- In-house prototyping
- In-house testing e.g. Key DVPR criteria
- CAD integration
- Sample production/support

Tooling/Manufacturing

- U.S. & International
- Pre-tool sample support
- Project management
- Schedule-driven

Deliver and Support

- Global QA & support
- On-time / On-budget
- Responsive services
- Proven logistics and inventory support

We can help advance your vision every step of the way

Working together with mobile cart manufacturers and designers, KV's motion engineers, testers, fabricators, and logistics personnel help ensure the success of your design, taking your idea from concept to shipment of finished components anywhere in the world.

Engage us at any point in the process and we'll quickly become a responsive and effective part of your team.

Knape & Vogt expertise includes:

- · Engineering, Modeling and Prototyping
- Project Management
- Fabrication and Manufacturing at-Scale
- Product Testing, QA and Regulatory Validation
- Value Engineering
- Global Supply Chain Support and Service



VA/VE Challenges: Finding ways to remove costs without sacrificing performance

Virtually all of our customers face ongoing pressure to lower costs and improve efficiency. After all, that's how most successful companies become leaders. Fortunately, more than 100 years of innovation have given us the ability to find new VA/VE opportunities—even within the most established brands and products. We've been able to help customers:

Explore Alternate Materials—Many healthcare environments are high traffic locations which need to have products designed to withstand infection control and operate under extreme conditions with regard to pandemic situations. We can offer some lower cost, highly effective methods for incorporating anti-microbial, high life cycle moving components and solutions into your finished goods.

Use or Adapt Standard Components—With some vision and creativity, high-volume/lower- cost products can be adapted to replace custom components. Savings accrue not only in the initial manufacture, but in subsequent service and repair.

"Right-size" Specifications—Moving from a 100-lb slide to a more-than-adequate 75 lb. slide has helped several customers achieve key economies. Being able to substitute shorter lengths or create custom lengths, can reduce material costs significantly—savings that extend to shipping and freight as well.

Optimize your Supply Chain—KV owns and manages manufacturing and distribution sites around the world. For one U.S. customer, "on-shoring" with KV trimmed their production lead-time window from 60 days to just 15—without any price increase. Our state-of-the-art ERP facilitates advanced JIT and demand-based logistics.

Elevate Brand Recognition—We offer a wide variety of customized labeling programs to suit individual customer preferences and their goals for brand recognition. And we're always open to offering more market differentiation for our customers. Current programs include: pad printing, private labeling, serialization, UPC coding and custom packaging.





Put us to the test

Knape & Vogt engineers are veteran problem solvers and welcome your challenges in security, access, storage, aesthetics and ergonomics.

In approaching any project, our multi-disciplined team (design, engineering, manufacturing, packaging, logistics) apply proven VA/VE principles to uncover more opportunities for refinement and improvement along every step in the value chain.

Along the way, our in-house testing capabilities ensure that you can stand behind the components and products you source from KV. We provide you with all the documentation required to satisfy regulatory and industry bodies such as:

ANSI

• HFES

BIFMA

• LEED

• CGSB

• MBDC "Cradle-to-Cradle"

Knape & Vogt's relentless pursuit of "the business of motion" will move your company forward—with confidence.





Everywhere you need us to be

Based in Grand Rapids, MI—with manufacturing in North America and Asia—Knape & Vogt exceeds the highest demands of global medical product makers, matching uncompromising quality with reliable logistics and superior customer support. Our global support network, is available to you at a moment's notice.

We welcome your inquiries

Whether you're just beginning to brainstorm a new design—or you're pressed to execute a project that's already underway, our engineers and healthcare experts stand ready to lend a hand. Please contact us and let us know how Knape & Vogt can help you create sliding systems that will set you apart.

