Southco, Inc. is the leading global designer and manufacturer of engineered access solutions. From quality and performance to aesthetics and ergonomics, we understand that first impressions are lasting impressions in product design.

**DIVERSIFIED TECHNOLOGY INDUSTRIES**

**TRANSPORTATION INDUSTRIES**
Aerospace, Automotive, Bus, Caravan & RV, Marine, Off-Highway Vehicles, Railway, Truck, UTV/ATVs, and More.

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**KATO FASTENING SYSTEMS, INC.**

The original inventor and manufacturer of the bi-directional Tangless® screw thread insert.

KATO manufactures the revolutionary Tangless CoilThread® inserts, tanged CoilThread inserts, LockOne® and Hexatorq® (constant torque) hinges.

Did you know...? KATO offers more Tangless CoilThread insert sizes and more tooling options than any other insert manufacturer!

Only KATO, utilizing advanced micro-manufacturing technology, can produce the world’s smallest unified and metric Tangless inserts 0-80, 1-64, and M2.

The newest innovative product from KATO, LockOne is a positive locking fastener designed to prevent a standard nut from loosening free under vibration. LockOne replaces nylon nuts, double nuts (jam nuts), cotter pins and safety-wire.

Satisfaction-Plus™ is the KATO initiative to provide customers with the best products, services and support in the industry!

P: 757.873.8980  E: sales@katofastening.com  W: www.katofastening.com
WELCOME TO AEROSPACE

KEY PRODUCTS & SERVICES:
ENGINEERED FASTENERS • MIL-SPEC/AEROSPACE • CERTIFIED HARDWARE
KITTING & VALUE-ADDED ASSEMBLIES • MECHANICAL & ELECTRONIC • ACCESS HARDWARE
CABLE ASSEMBLIES • HAND TOOLS & AUTOMATED • INSERTION EQUIPMENT
ABRASIVES • INVENTORY MANAGEMENT SOLUTIONS • BIN STOCKING, AUTO-REPLENISHMENT • AND MORE

Since our inception in 1963, AERO-SPACE Fasteners and Electronics has worked hard to establish ourselves as a world-leader in providing fastening solutions, electro-mechanical components and supply chain solutions for a vast OEM and CEM base.

A Diverse Customer Base:
We are a family-owned and operated business in a third generation. Our ability to respond to customer challenges is unsurpassed, which has led to many quality awards. AERO-SPACE was nominated by Lockheed Martin for the Small Business Administration Subcontractor of the Year offered by the United States Government. We won the award, which was presented in Washington D.C.

AERO-SPACE is committed to the success of each and every customer. We continue to invest in our people and processes to ensure optimum performance on investment. We are very aggressive in growing product lines as well as locations to better serve our valued customers.

If you are new to AERO-SPACE or did not recognize our full product lines and services, our team is eager to earn your trust and respond with world-class service to exceed your operation’s expectations and standards.

AEROSPACE distributes best-in-class products, integrating our registered AS9120B and ISO9001:2015 quality systems with decades of technical expertise to provide diverse, high-value solutions to leading original equipment and contract manufacturers. We will achieve sustainable growth for our customers, principals and the company while remaining committed to maintaining a work-life balance for our employees.

AEROSPACE • Defense • Transportation • Food & Beverage • Medical • White Goods • Instrumentation • Automotive • Play Structure • Enterprise Hardware • Telecommunication • Alternative Energy • Gaming • Many Others

Certified ISO 9001:2015 and AS9120B

Exceeding Customer Expectations Since 1963
When you employ highly skilled people, partner with the best-in-class manufacturers and perform at a world-class level for decades, you eventually earn the trust of decision makers that depend upon critical performance with assets and equipment.

Many of our staff members have 25 years of experience, which delivers prompt and accurate responses to inquiries and ultimately recommendations for the right product for the specific application.

Recognizing the need for high-quality, high-volume competitively priced products, we founded AERO Global Sourcing Solutions (AGSS). Along with AERO-SPACE, we are able to identify products that come from countries that offer lower cost manufacturing that meet the needs of our interested customer base. We have a full-time employee assigned in Bangkok, Thailand, who solely seeks and maintains contact with manufacturers there that meet our standards.

AERO-SPACE does not take our stringent quality standards lightly. All of the products we represent must go through an extensive quality process during manufacturing and again when the product arrives at our facility—and again, before items are released for sale. All products sold through AERO-SPACE require lot traceability and are recorded and maintained for up to ten years. We stand behind the products and the manufacturers we represent.
nVent SCHROFF’s Bitcher and Calmark product lines are the industry leaders in the manufacture of ruggedized components that hold boards in place and transfer heat in demanding defense and aerospace applications. The product lines include card guides, Card Lok retainers, PCB retainers, and metal inserters/extractors.

### DESIGN FLEXIBILITY

Different lengths, individual wedge dimensions, the relocation or addition of mounting holes, or even different hardware, materials, and finishing - our product range provides a broad variety of configurations allowing us to meet your application needs.

### VITA 48.2 RETAINER CONFIGURATIONS

**Primary-side placement** Retainers (Card Loks, Wedge-Loks) oriented on the primary side of the PCB. The main thermal interface to the cold-plate slot is through the secondary-side cover flanges.

**Secondary-side placement** Retainers oriented on the secondary side of the PCB. The main thermal interface to the cold-plate slot is through the primary side cover flanges while providing a better thermal path from the PCB components to the cold plate; this implementation reduces the available PCB area.

### INNOVATIVE HIGH PERFORMANCE PRODUCTS FOR THE TOUGHEST APPLICATIONS

- **High Clamp Force Card Loks**
  - 3x clamp force over traditional Card Loks
  - Family of small profile, high clamp force Card Loks that are drop-in replacements

- **Large selection of off-the-shelf nylon and metal inserters and extractors**

- **High Thermal Card Loks**
  - Achieve 15% increased thermal performance over similarly sized Card Loks
  - Drop-in replacements

### BENEFITS AT A GLANCE

- **Secure:** Maximum clamping force for high shock and vibration resistance
- **Efficient:** Maximum thermal heat transfer for cold-wall applications
- **Usable and Swappable:** Sophisticated design for easy insertion and lighter weight
- **Flexible:** Special lengths, finishes, screw-head styles or other design options available

### CONDUCTION COOLED ASSEMBLIES (CCA’S)

- nVent SCHROFF Conducted Cooled Assemblies are designed for circuit boards requiring cooling in severe environments where convection cooling cannot be used. The assembly also provides needed structural support of the plug-in module in high shock and vibration environments.
- Downloadable standards compliant CAD templates for easy modification
- Includes peripheral components such as Card Loks and extractors 3U and 4U templates available for VITA 46, VITA 48.2, VME, and CPCI
- Save time and sourcing costs by managing the entire assembly with one part number
- ESD protected packaging available
- Kits include thermal pads, EMC gaskets, and labeling per customer requirements

### IN-HOUSE DESIGN ENGINEERING EXPERTISE

- Collaborate with our experts to perform thermal analysis using software such as ESIGMA and overcome cooling challenges
- Partner with our experienced engineering team to ensure your design is compliant with required standards
- Accelerate your design process with 3D printed CCA’s and frames for fit checks

### DESIGNED FOR TWO-LEVEL MAINTENANCE

- The need to simplify and streamline maintenance has resulted in Two-Level Maintenance requirements. Conduction cooled assemblies can be equipped with Torque Limiting Card Loks and Series 311 Tolerance Compensating Extractors to better meet Two-Level Maintenance Requirements.
- Series 311 extractors provide:
  - Self-compensation for board tolerances
  - Positive pressure on connectors during Card Lok actuation
  - Compliant with VITA 48.4 & 48.2
  - Provides 10:1 mechanical advantage

### Europe

- Straubenhardt, Germany
  - Tel: +49 7902.794.0
- Botschdorf, France
  - Tel: +33 389.90.64.90
- Anagni, Italy
  - Tel: +39 02.5776151.224

### North America

- All locations
  - Tel: +1.800.525.4682

### Middle East & India

- Dubai, United Arab Emirates
  - Tel: +971 50 55 19823
- Bengaluru, India
  - Tel: +91.61.6715.8000
- Istanbul, Turkey
  - Tel: +90 545.284.09.08

### Asia

- Shanghai, China
  - Tel: +86 21.2412.6543
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- Singapore
  - Tel: +65 6768.5800
- Shinh Yokohama, Japan
  - Tel: +81.45.476.0271

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**Value-Added Services**

**Kitting** – We have automated kitting equipment that allows us to build your kits with any combination of different parts and quantities quickly and cost effectively. This service allows our customers to purchase exactly what they need, bagged and labeled for use in manufacturing or sent with their finished assembly.

**Service** – We are an authorized Haeger/Pemserter repair company. We not only provide initial start-up and training, but we will also keep your presses running smoothly year after year with ongoing preventative maintenance.

**Specialty Packaging** – Eliminate the need for additional handling or low-value-added process steps at your facility. We can customize box size, box weight, bag size, bag quantity and custom labeling to get you what you need for exceptional value.

**Vendor Managed Inventory (VMI) & Consignment** – Our Inventory management programs place our stock directly in your facility. Just scan product used in production with a handheld scanner we provide. We'll invoice consumed inventory periodically and replenish stock at a set frequency. This service greatly reduces the burden on your purchasing, accounts payable, receiving and inventory control staff when compared to placing and processing of discreet purchase orders.

**Just-in-Time (JIT)** – Some customers prefer our JIT Inventory Management service which allows them to create purchase orders by simply scanning the parts they are using and uploading the file. This process doesn’t require any special in-house location for our inventory storage like a VMI does.

**We offer a complete line of installation tools** including Break Stem Rivet tools, Speed Fastening tools, Blind Threaded Insert and Coiled Threaded Insert tools.

All tools and our Hager 824 press are available for testing and evaluation at our corporate headquarters in Minneapolis, Minnesota.
Stanley® Engineered Fastening—a division of Stanley Black & Decker—is the global leader in precision fastening and assembly solutions. Our industry-leading brands, Avdel®, Integra™, Nelson®, Optia®, POP®, Stanley® Assembly Technologies and Tucker® elevate what our customers create. Backed by a team of passionate and responsive problem-solvers, we empower engineers to create the future.

Engineered fasteners, structural and speed rivets for specialized applications

Premium engineered blind rivets, rivet nuts and hand tools

Industrial tools and systems for precision threaded fastening and blind rivet applications

Engineered threaded fastening solutions for critical and custom applications

Heli-Coil® inserts are now part of Optia® strategic brand

Contact your AERO-SPACE representative for all your fastening needs!

stanleyengineeredfastening.com
Exceeding Customer Expectations Since 1963

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