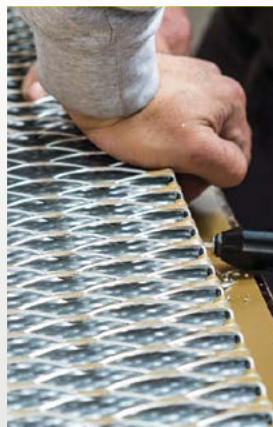


AERO-SPACE

FASTENERS AND ELECTRONICS



www.ASCS.com

southco®

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.



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MOUNTS



CAM & COMPRESSION
LATCHES



SWINGHANDLES &
MULTIPOINT



DRAW
LATCHES



HINGES



QUICK ACCESS
FASTENERS



CAPTIVE
SCREWS



PUSH-TO-CLOSE
LATCHES



ROTARY
LATCHES



CAM LOCKS



COUNTERBALANCE
MECHANISMS

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Consumer Electronics, Enclosures, Computer/Server and Telecommunications, HVAC, Lighting, Machinery & Industrial Equipment, Medical & Lab Equipment, Self-Service, and More.

TRANSPORTATION INDUSTRIES

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

Creating First Impressions That Last

southco.com

KATO®

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

KEY PRODUCTS & SERVICES:

- ENGINEERED FASTENERS •
- MIL-SPEC/AERO-SPACE
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.

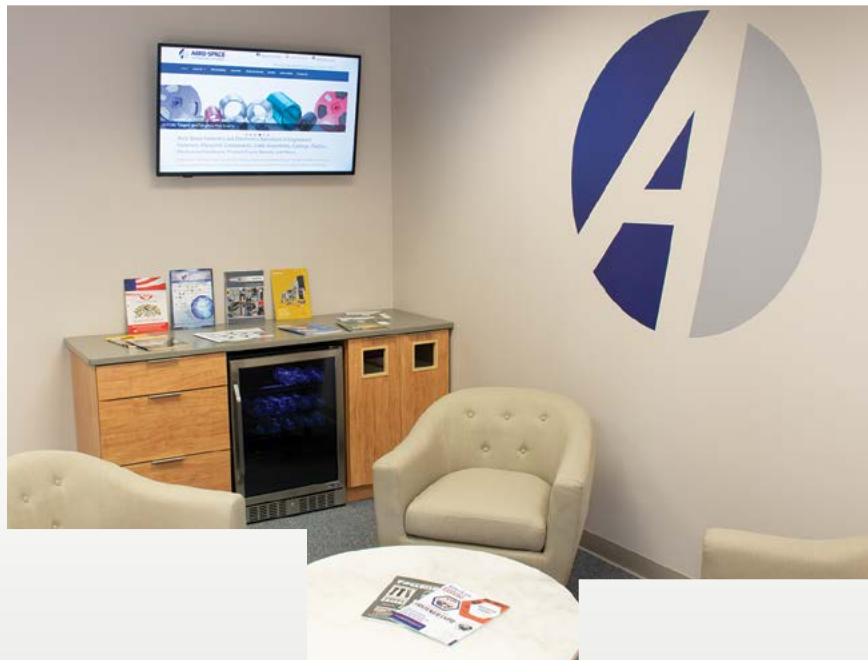
A Diverse Customer Base:

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

AERO-SPACE 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*

WELCOME TO AERO-SPACE



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.

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.

We Employ a Highly Knowledgeable Team!



WE HAVE THE CREDENTIALS

BEST-IN-CLASS QUALITY



Conflict
Minerals
Statement

Reach
Statement

RoHS/
RoHS2
Statement

DFARS
Statement



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.

Certified ISO 9001:2015 and AS9120B

Card Retainers and Conduction-Cooled Assemblies



RUGGED PRINTED CIRCUIT BOARD RETAINERS

nVent SCHROFF's Birtcher and Calmark product lines are the industry leader 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 areas.



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

High Thermal Card Loks

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

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



Secondary clamshell

Primary clamshell

BENEFITS AT A GLANCE

Secure:	Maximum clamping force for high shock and vibration resistance
Efficient:	Maximum thermal heat transfer for cold-wall applications
Usability and SWaP:	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 Conduction 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 6U templates available for Vita 46, Vita 48.2, VME, and CPCI

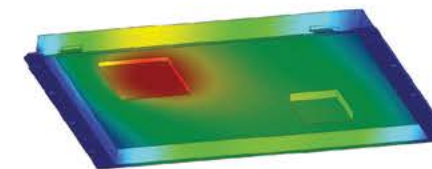
- Save time and sourcing costs by managing the entire assembly with one part number

- ESD protected packaging available

- Kits can 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 6Sigma 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

Torque Limiting Card Loks Eliminate the need for specialized or calibrated tools in the field.



Skylines and heat sinks can be machined per application requirements

Europe

Straubenhardt, Germany

Tel +49.7082.794.0

Betschdorf, France

Tel +33.388.90.64.90

Assago, Italy

Tel +39.02.5776151.224

North America

All locations

Tel +1.800.525.4682

Middle East & India

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Bengaluru, India

Tel +91.80.6715.8900

Istanbul, Turkey

Tel +90.545.284.09.08

Asia

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Qingdao, China

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Singapore

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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.

VALUE-ADDED SERVICES

Exceeding Customer Expectations Since 1963



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.

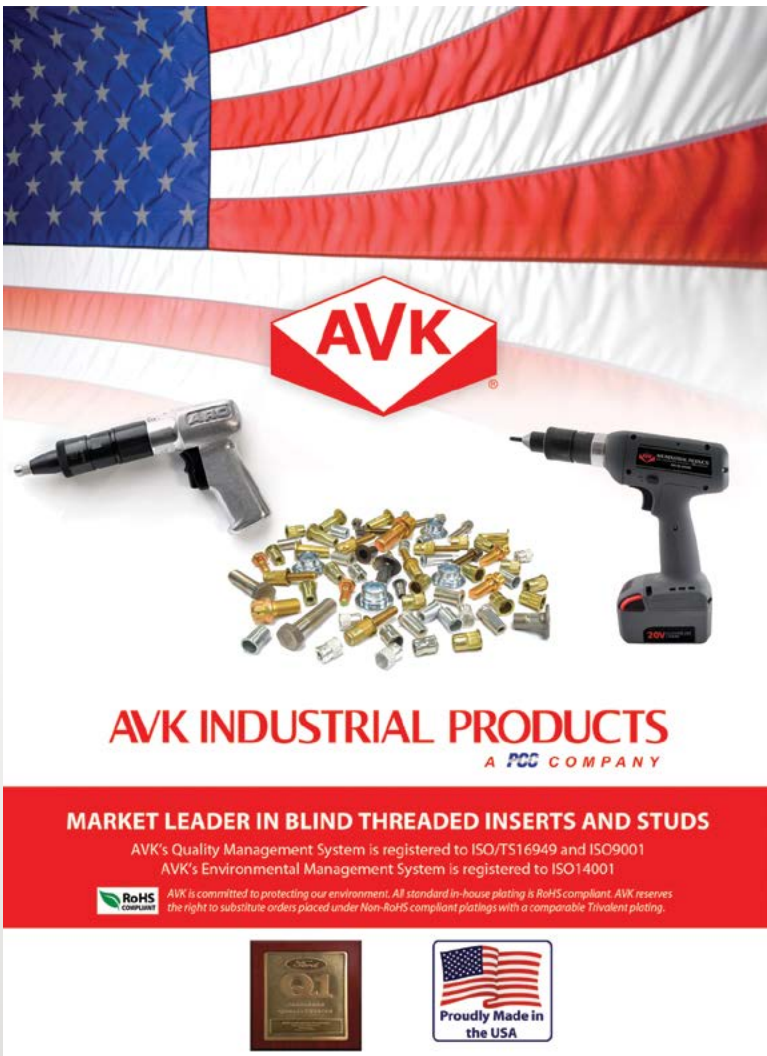


PEM®

www.pemnet.com

PEM® brand fasteners utilize self-clinching, broaching, flaring, surface mount, or weld technology to provide strong, reusable, and permanent threads and mounting points in thin sheetmetal, P.C. board materials, and other ductile or non-ductile thin material.

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AVK

AVK INDUSTRIAL PRODUCTS
A FCC COMPANY

MARKET LEADER IN BLIND THREADED INSERTS AND STUDS

AVK's Quality Management System is registered to ISO/TS16949 and ISO9001
AVK's Environmental Management System is registered to ISO14001

AVK is committed to protecting our environment. All standard in-house plating is RoHS compliant. AVK reserves the right to substitute orders placed under Non-RoHS compliant platings with a comparable Trivalent plating.

ISO 9001

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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.

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Engineered fasteners, structural and
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Premium engineered blind rivets,
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