

BOSSARD

Proven Productivity



Data Center Solutions

Empowering the Future with Proven Reliability



«Bossard delivers reliable fastening, cooling, and cable management solutions that keep high-density data centers efficient, stable, and running without interruption.»



SMART SOLUTIONS FOR THE DATA CENTER SECTOR

Building reliability, scalability, and efficiency for the digital backbone

Data centers power today's digital economy from cloud services to AI, 5G, and edge computing yet operators and OEMs still face major engineering challenges behind the scenes.

High rack densities and rising energy demands put unprecedented stress on thermal management systems. Continuous uptime requirements mean every fastener, cable mount, and cooling connector must perform flawlessly under load. With growing expectations for energy efficiency, operators need scalable designs that reduce maintenance time, improve airflow, and minimize downtime.

Bossard delivers an end-to-end portfolio of fastening, cooling, and cable management solutions engineered for the unique demands of data center environments. From server chassis fasteners and motherboard standoffs to rack enclosures, EMI shielding, liquid and air cooling connectors, our solutions improve structural reliability, serviceability, and thermal performance.



One-stop shop

- Fasteners for electrical purposes
- Fasteners for mechanical purposes



Engineered parts

- In-house engineering know-how
- International network of specialised partner companies



Professional consulting

- Comprehensive engineering services
- Customer trainings for fastening solutions



Own test laboratories

- Global network of 16 testing laboratories, 4 of which offer ISO/IEC 17025-accredited testing
- Comprehensive mechanical, optical, geometric and chemical test methods



Optimal delivery conditions

- We are on the spot with more than 90 subsidiaries worldwide
- Short response and delivery times
- E-Shop for all catalog products



Smart Factory Logistics

- B- and C-part management
- IoT ready
- Smart, lean and reliable

PAIN POINTS IN DATA CENTER INDUSTRY

Tackling Key Challenges in Efficiency, Reliability, and Scalability.

Bossard resolves five core pain points through smarter design and assembly, boosting reliability and performance across your entire infrastructure.



Thermal Management

Hot spots and rising cooling costs put constant pressure on rack efficiency.



Mechanical Stress

Chassis and racks endure continuous vibration and load, requiring fatigue-resistant fastening.





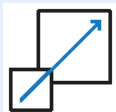
Maintenance & Downtime

Poor accessibility or complex servicing procedures reduce uptime and Improve accessibility and simplify servicing for higher uptime.



Signal & Power Reliability

Failures in PDUs, grounding, or cabling can cascade across hundreds of servers.



Scalability & Supply Chain

Global expansion demands standardized, tested solutions that are consistently available worldwide.



DATA CENTER SOLUTIONS

Product Overview

Motherboard & PCB Solutions

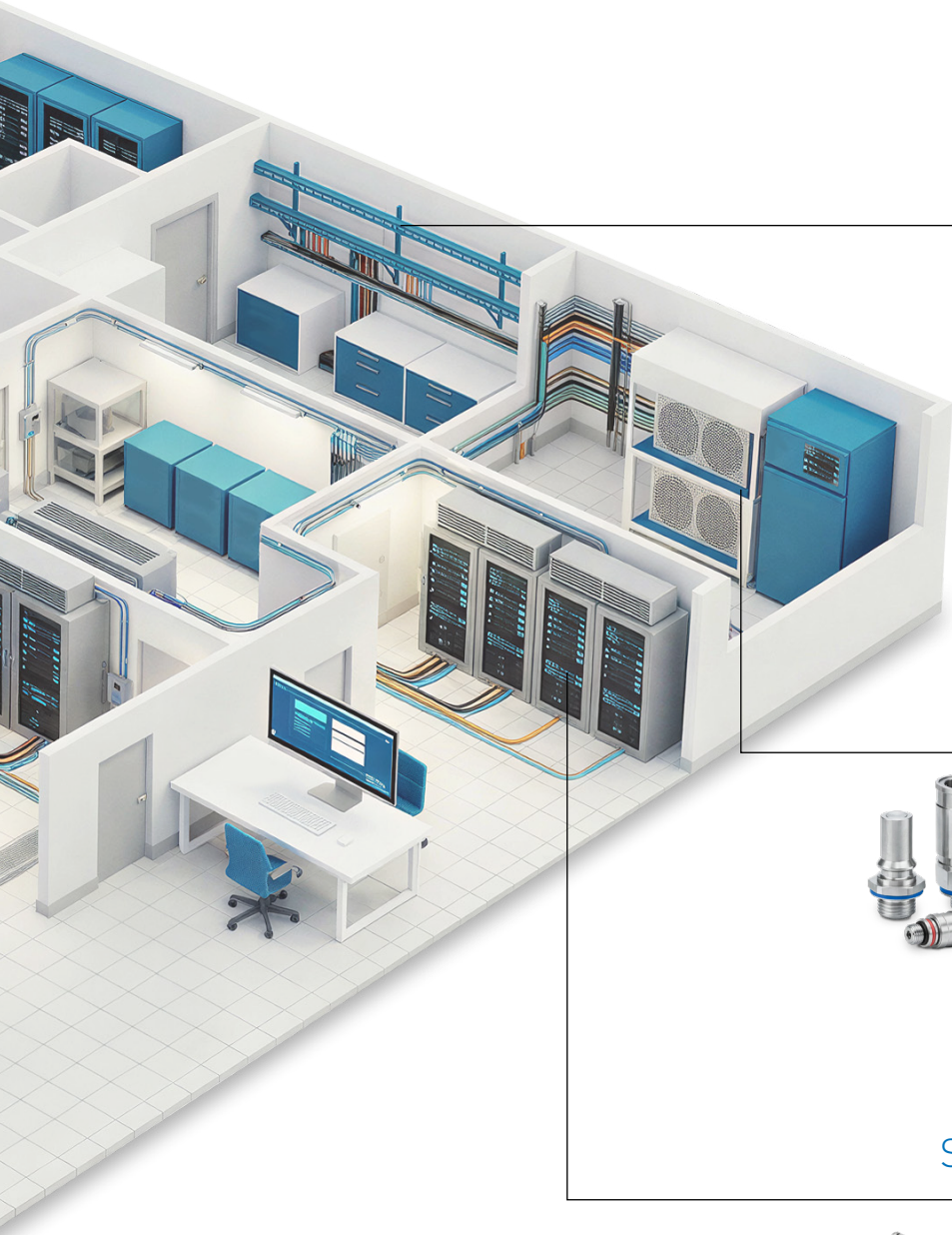


Power Distribution & Backup Power Solutions



Cable Routing Systems





Rack and Enclosure Solutions



Cooling Solutions



Server Chassis Solutions



SERVER CHASSIS SOLUTIONS

Delivering structural strength and serviceability for 24/7 operation

Server chassis form the foundation of data center hardware, housing processors, GPUs, and memory modules that generate constant heat and vibration. As rack densities increase, chassis assemblies must remain mechanically stable, easy to service, and optimized for airflow. Weak fastening or poor access can lead to downtime, higher costs, and reduced reliability.



Bossard's portfolio of server chassis fasteners and components ensures data center servers are designed for strength, thermal efficiency, and serviceability.

SELF-CLINCHING STANDOFFS & PINS

Create strong threads in thin metals for PCB and sub-panel attachment.



CAPTIVE PANEL SCREWS

Enable tool-free servicing while preventing lost fasteners during maintenance.



RIVETING SOLUTIONS

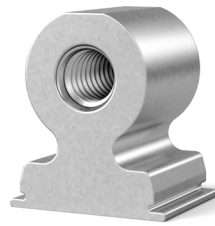
Fastening for lightweight and vibration-resistant chassis structures.



Bossard's portfolio of server chassis fasteners and components ensures data center servers are designed for strength, thermal efficiency, and serviceability.

RIGHT-ANGLE FASTENERS

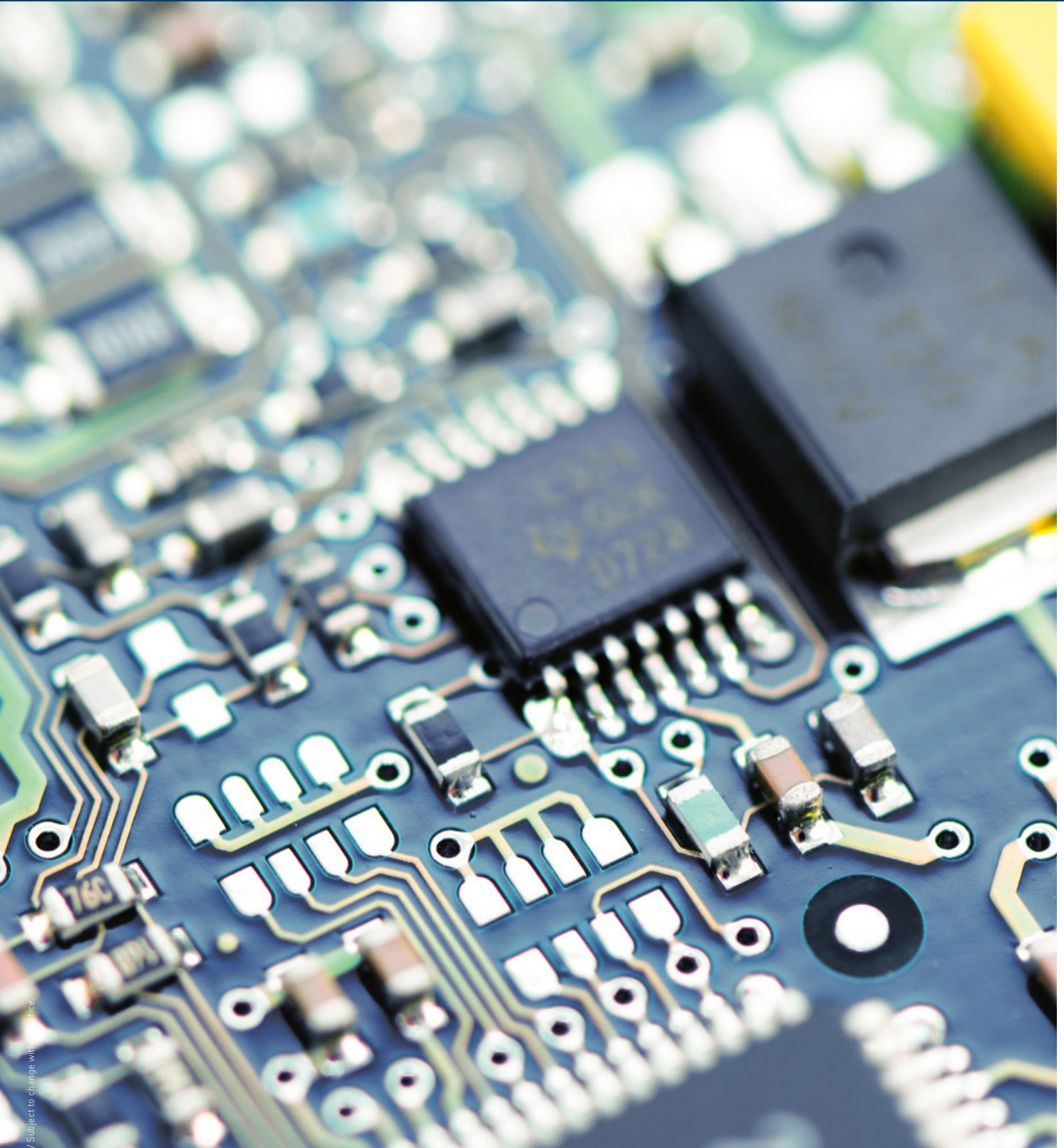
Space-efficient solutions for compact chassis designs.



ADHESIVE-BACKED CABLE MOUNTS

Allow flexible cable routing without drilling, preserving airflow in dense enclosures.





«Engineered fastening solutions for structurally reliable, serviceable, and high-density server architectures.»

RACK AND ENCLOSURE SOLUTIONS

Optimizing modularity, airflow, and security in high-density data centers

Racks and enclosures are the structural backbone of data centers, supporting servers, switches, and cabling under continuous loads. They must offer modular scalability, efficient airflow, and secure access while withstanding constant upgrades. Poor rack management can cause overheating, signal interference, and downtime.



Bossard's portfolio of rack and enclosure fasteners and components ensures data center infrastructure is designed for structural integrity, secure access, and optimized airflow performance.

LOCKS & ACCESS HARDWARE

Mechanical access control components for enclosure security.



MOUNTING HARDWARE & BRACKETS

Structural support components for racks, panels, and enclosure accessories.



Bossard's portfolio of rack and enclosure fasteners and components ensures data center infrastructure is designed for structural integrity, secure access, and optimized airflow performance.

PANELS & ACCESSORIES

Components supporting enclosure configuration and airflow management.



CABLE MANAGEMENT SYSTEMS

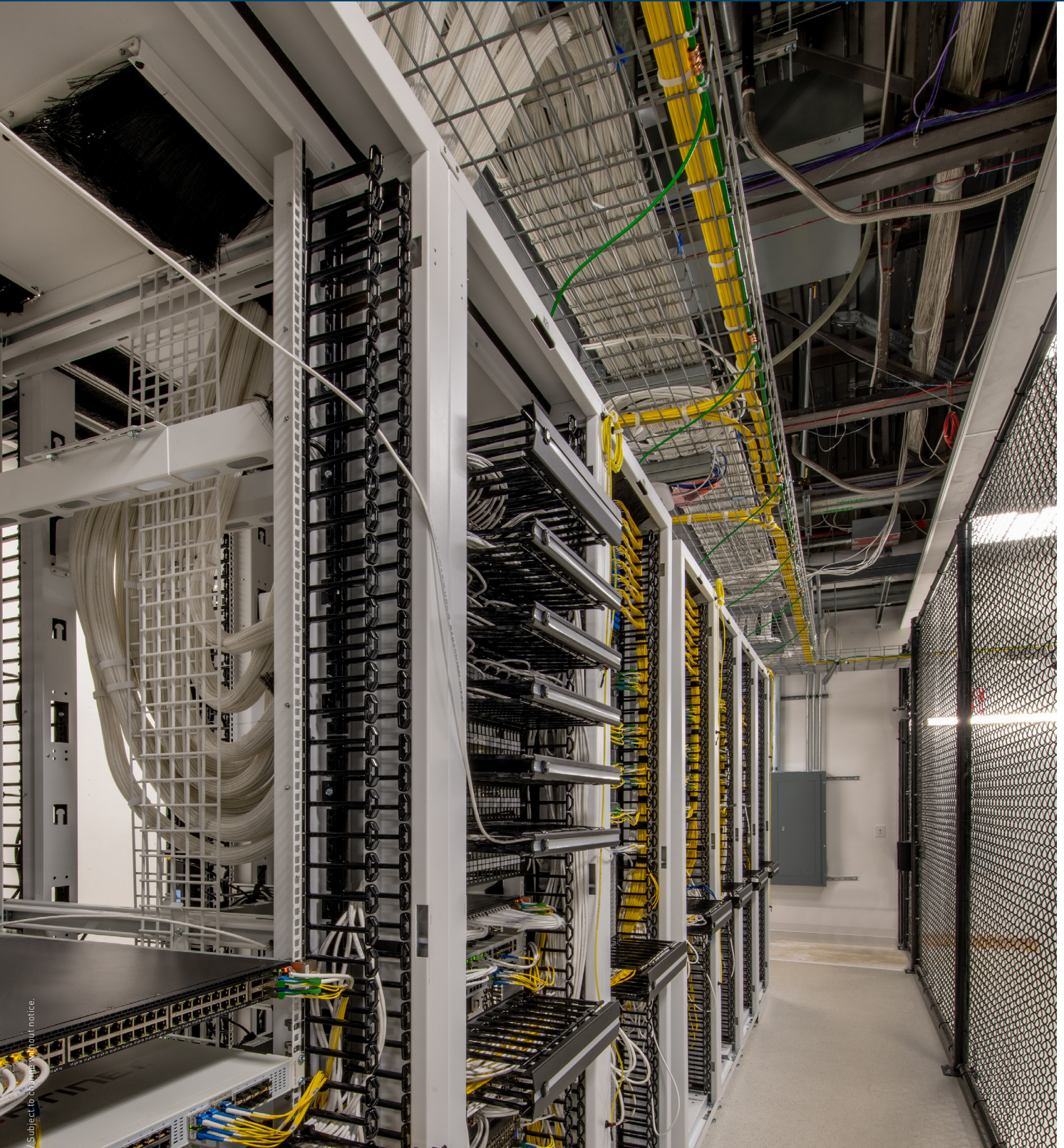
Vertical and horizontal cable management fingers, panels, and accessories.



ELECTRONIC SWING HANDLES & LOCKS

Secure, monitored access for highsecurity datacenter environments.



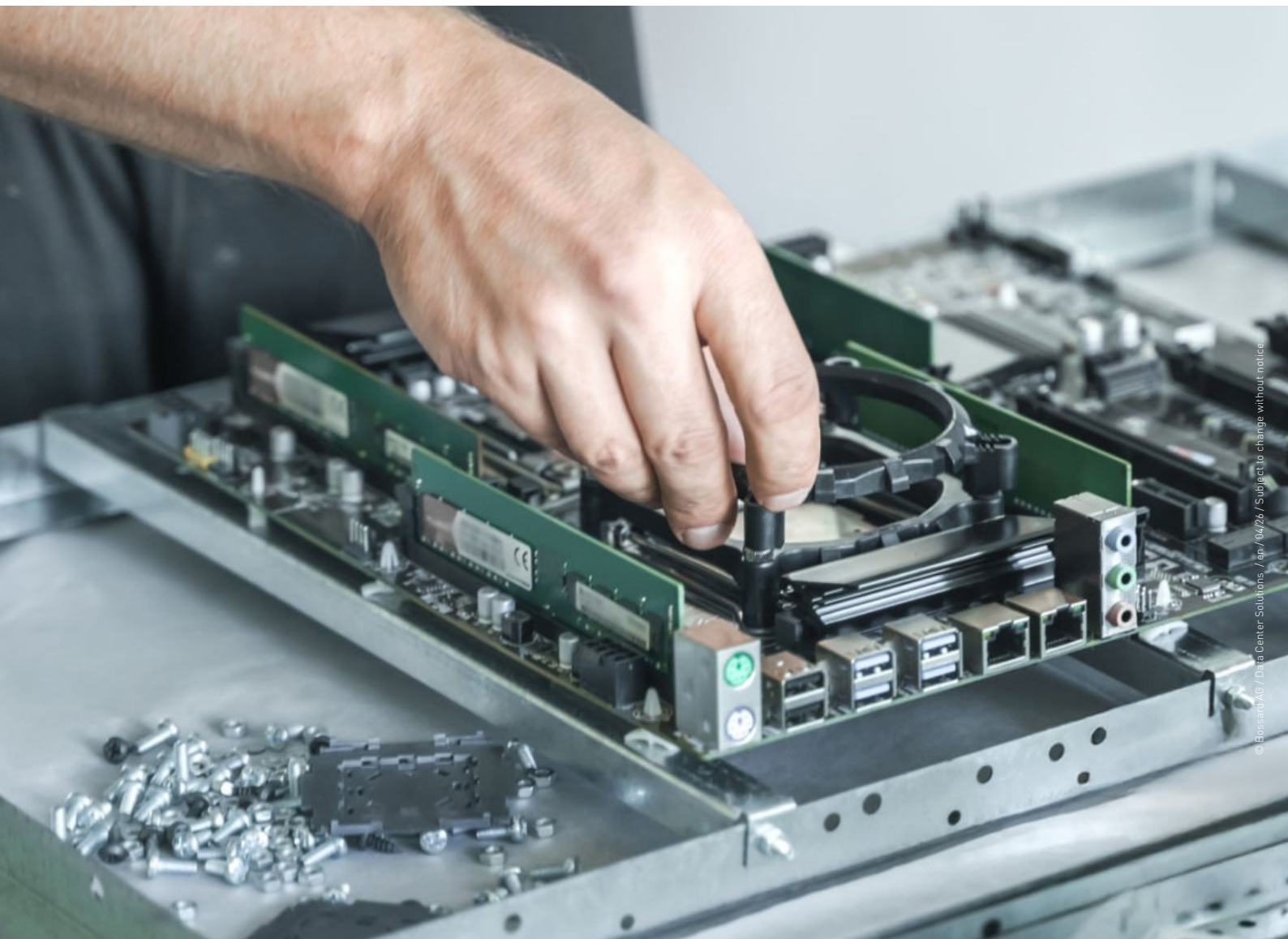


«Structural components and fastening systems designed for scalable, high-density rack infrastructure.»

MOTHERBOARD & PCB SOLUTIONS

Protecting the data center nervous system

The motherboard is the nerve center of every server, carrying CPUs, GPUs, and memory under constant load. Poor fastening can cause PCB flex, signal degradation, or thermal failure. With automated assembly increasingly common, components must also support high-speed robotic production while maintaining electrical integrity.



Bossard provides precision fasteners for data center motherboards and PCBs to ensure stability and long-term reliability.

THREADED STANDOFFS & SPACERS

Isolate PCBs from chassis to prevent flex and mechanical stress.



SURFACE-MOUNT FASTENERS

Components compatible with automated pick-and-place assembly processes.



PRECISION SCREWS

Low-profile fastening solutions for dense board layouts.



Bossard provides precision fasteners for data center motherboards and PCBs to ensure stability and long-term reliability.

HIGH-CURRENT PCB CONNECTIVITY SOLUTIONS

- Enable reliable wire-to-PCB power connections for currents up to 1000 A
- Ensure stable electrical contact under demanding operating conditions



SPECIALTY BOARD-LEVEL FASTENERS

Compact fastening solutions supporting space-constrained designs.





«Precision fastening solutions that protect signal integrity and mechanical stability in server electronics.»

COOLING SOLUTIONS

Ensuring thermal stability with air and Liquid cooling technologies

Thermal management is one of the most pressing data center challenges. Rising rack densities and power consumption create hot spots and increase cooling costs. Traditional air cooling is no longer sufficient on its own, driving demand for hybrid approaches that combine air and liquid cooling.



Cooling Solutions: Bossard supports both cooling strategies with fasteners and connectors designed for reliability, leak prevention, and serviceability.

CAPTIVE PANEL SCREWS

Enable fast servicing of thermal assemblies and maintain reliable thermal contact



HANDLES & LATCHES

Secure, tool-less access for panels and doors with vibration resistance and safe handling of server units.



FANS & FAN GUARDS

Fasteners and protective mounting components for airflow systems and fan assemblies.



Cooling Solutions: Bossard supports both cooling strategies with fasteners and connectors designed for reliability, leak prevention, and serviceability.

UNIVERSAL QUICK DISCONNECTS (UQD)

Spill-free connectors used within liquid cooling circuits.



CLAMPS & SPRING PINS

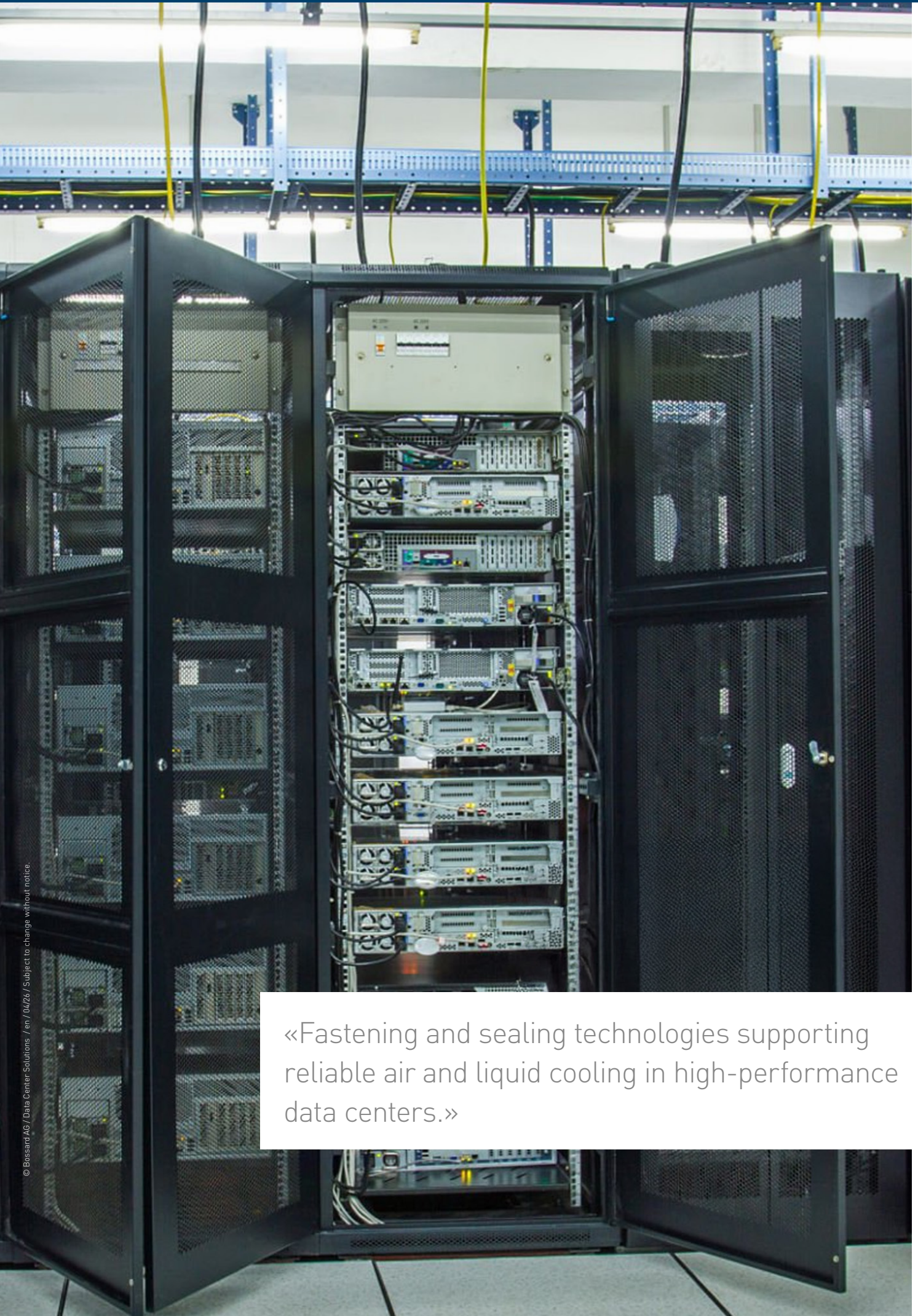
Components used to stabilize hoses, pipes, and fittings under vibration.



O-RINGS & GASKETS

Sealing components used to prevent leaks in thermal-critical joints.





«Fastening and sealing technologies supporting reliable air and liquid cooling in high-performance data centers.»

POWER DISTRIBUTION & BACKUP POWER SOLUTIONS

Securing uptime in high-current environments

Power distribution units (PDUs) and backup power systems are lifelines of datacenters. Failures in fastening or grounding can cascade across hundreds of servers, risking outages and safety hazards. Reliable fastening and grounding solutions are critical for stable operation.



Bossard provides electrical and backup power fastening solutions that ensure compliance, reliability, and serviceability.

HIGH-CURRENT POWER FASTENERS

Secure mechanical connections for power delivery at board level.



LOCKING POWER CORDS & STRAPS

Prevent accidental disconnection of critical power lines.



ANTI-LOOSENING FASTENING SOLUTIONS

Components designed to maintain clamp load under vibration and thermal cycling.



GROUNDING & BONDING HARDWARE

Fasteners and components used in grounding and earthing assemblies.



Bossard provides electrical and backup power fastening solutions that ensure compliance, reliability, and serviceability.

CABLE CLAMPS & STRAIN RELIEF COMPONENTS

Secure routing and retention of power cables.



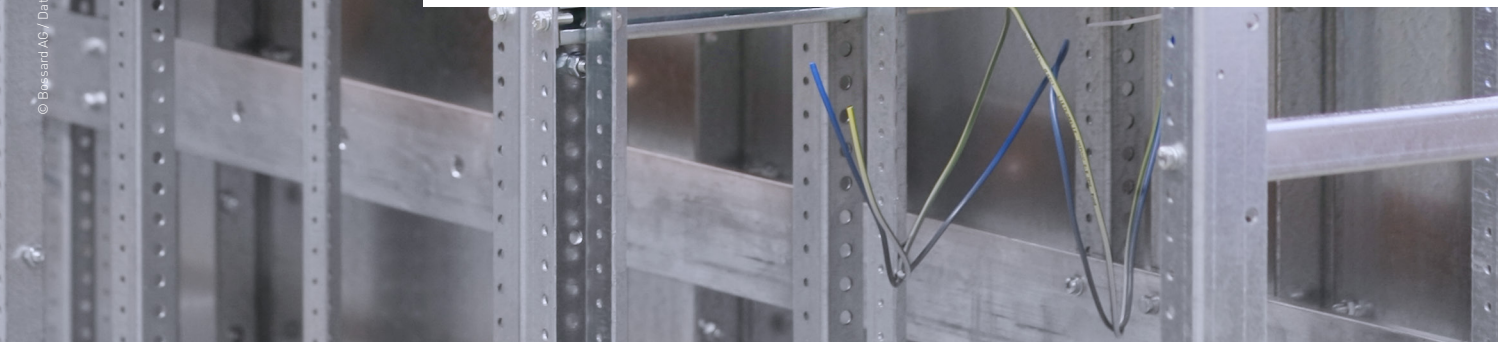
MOUNTING BRACKETS & HARDWARE

Mechanical support components for power distribution and electrical assemblies.





«Secure fastening and grounding solutions that protect critical power infrastructure and uptime.»



CABLE ROUTING SYSTEMS

Enabling clean, scalable cabling for reliable networks

Cabling is the circulatory system of Data Centers. Poor routing creates airflow blockages, signal interference, and maintenance headaches. Structured cable management ensures efficiency, serviceability, and scalability.



Bossard's fiber and cable routing portfolio provides reliable support for both current demand and future growth.

CABLE TIES & FIXING ACCESSORIES

Standard and high-performance cable ties with mounting bases and accessories.



CABLE DUCTS & WIRING CHANNELS

Components for organized and protected cable routing.



FIBER MANAGEMENT ACCESSORIES

Routing, separation, and protection components for fiber optic cables.



CABLE IDENTIFICATION & LABELING

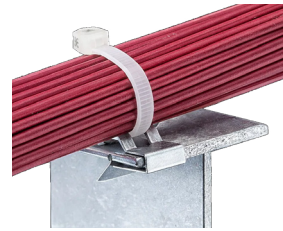
Clear and durable identification solutions for cable systems.



Bossard's fiber and cable routing portfolio provides reliable support for both current demand and future growth.

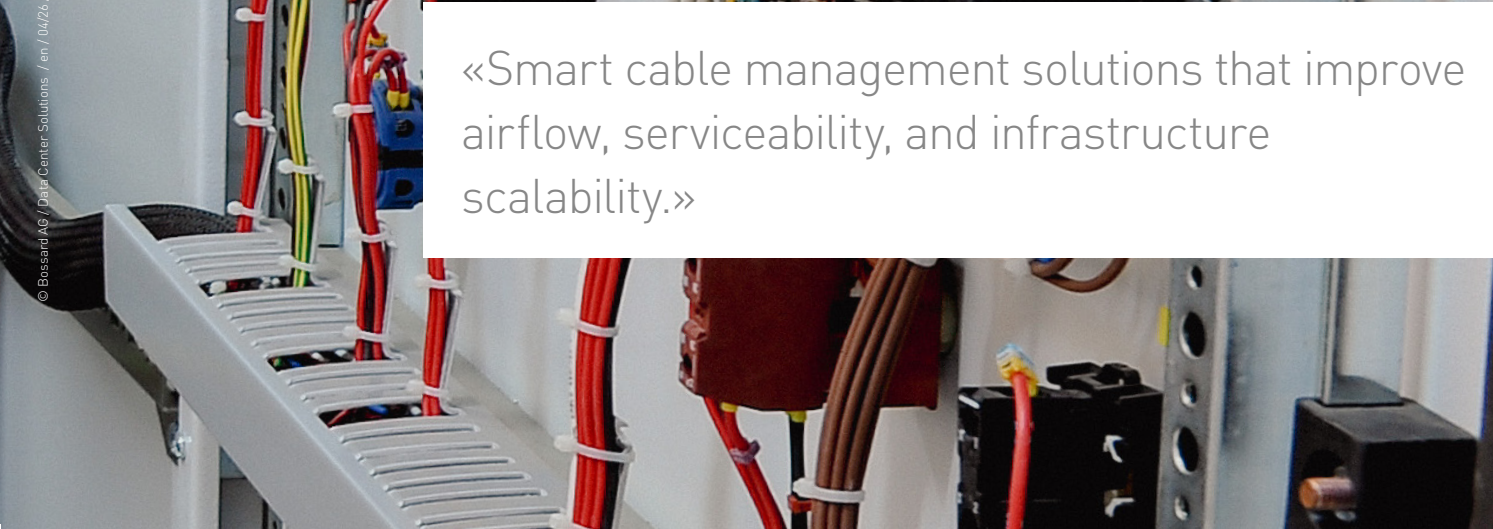
STRAIN RELIEF COMPONENTS

Protection against mechanical stress on cables and connectors.



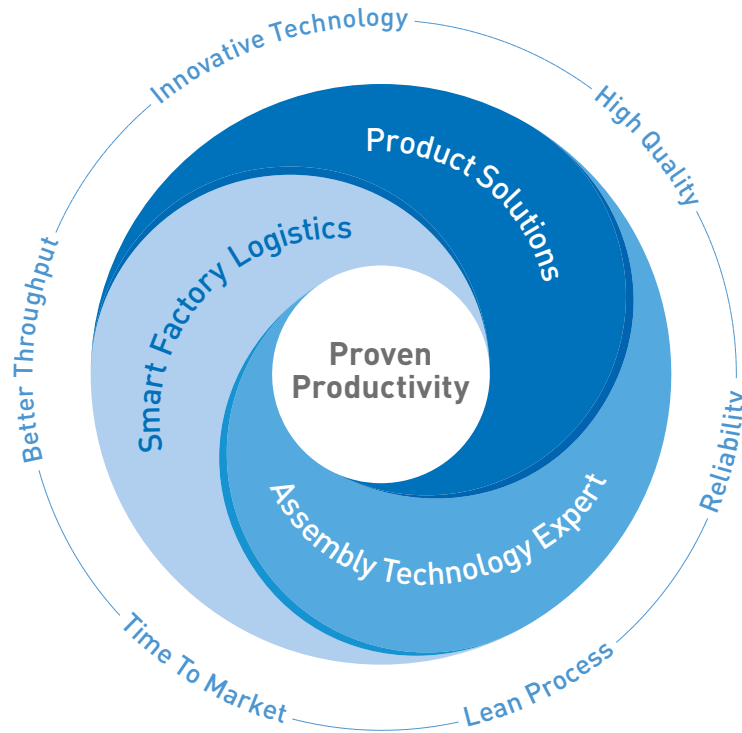


«Smart cable management solutions that improve airflow, serviceability, and infrastructure scalability.»



PROVEN PRODUCTIVITY – A PROMISE TO OUR CUSTOMERS

The strategy for success



From years of cooperation with our customers we know what achieves proven and sustainable impact. We have identified what it takes to strengthen the competitiveness of our customers. Therefore we support our customers in three strategic core areas.

Firstly, when finding optimal **Product Solutions**, that is in the evaluation and use of the best fastening part for the particular function intended in our customers' products.

Second, our **Assembly Technology Expert** services deliver the smartest solutions for all possible fastening challenges. Our services cover from the moment our customers developing a new product, to

assembly process optimization as well as fastening technology education for our customers' employees.

And thirdly, optimising our clients' productions in a smart and lean way with **Smart Factory Logistics**, our methodology, with intelligent logistics systems and tailor-made solutions.

Understood as a promise to our customers, "Proven Productivity" contains two elements: Firstly, that it demonstrably works. And secondly, that it sustainably and measurably improves the productivity and competitiveness of our customers.

And this for us is a philosophy which motivates us every day to always be one step ahead.

www.bossard.com