

Iveco/CNH Industrial Group Case Study



About Iveco/CNH Industrial Group

Founded in 1975, Iveco/CNH Industrial Group is an industrial vehicle manufacturing company based in Turin, Italy. The company designs and builds light, medium, and heavy commercial vehicles, quarry/construction site vehicles, and city and intercity buses. The company also builds special vehicles for applications such as firefighting, off-road missions, the military, and civil defense.

Iveco/CNH Industrial Group has production plants in Europe, Brazil, Russia, Australia, Africa, Argentina, and China. The company has approximately 5,000 sales and assistance areas in over 160 countries and its worldwide output amounts to about 150,000 commercial vehicles.

Iveco/CNH Industrial Group has 49 advanced research and development centers located around the world where teams of engineers and technicians research, design, and test new solutions to improve the reliability and productivity of vehicles and machines.

The company is the only vehicle manufacturer to offer ecological diesel and natural gas engines on its entire range of vehicles. It was the first full-line commercial vehicle manufacturer to make a substantial investment in natural gas technology, developing engines with specific components and configurations optimized for use with compressed natural gas (CNG).

**Company**

Iveco/CNH Industrial Group

Country

Italy

Industry

Transportation

Business Challenges

To install a fastening solution in the Eurocargo truck that can withstand high temperatures while meeting the Euro 6 standard requirements for performance, resistance, reliability, and durability.

Panduit Solution

Panduit fastening solution including cable ties, metal clip-on cable tie mounts & accessories, and cable tie installation tools.

Business Benefits

A sturdy solution that allows Iveco/CNH Industrial Group to accommodate Euro 6 requirements while maintaining continued excellence in the road transportation market.

Providing a Durable Fastening Solution that Withstands the Elements

Panduit™ enables Iveco/CNH Industrial Group to enhance performance of its new Eurocargo truck while complying with the Euro 6 standard

Business and Strategic Objectives

As a major player in global transportation, Iveco/CNH Industrial Group strives to improve the competitive position of its global brands, while behaving as a socially responsible organization.

The company needed to reduce the level of pollution produced by its vehicles to comply with the Euro 6 standard, which defines the acceptable limits for exhaust emissions of newly registered road vehicles sold in Europe since September 1, 2014.

“Meeting or exceeding applicable vehicle emissions standards is important for Iveco/CNH Industrial Group. This is especially true in markets such as Europe and North America where these standards are subject to frequent legislative or regulatory scrutiny,” said Mr. Gianpaolo Magri, Product Development Engineering Truck & Bus Medium Range System Layout Line Responsible, CNH Industrial Group.

To meet the Euro 6 standard, Iveco/CNH Industrial Group designed the Eurocargo truck, which would adhere to the requirements for exhaust emissions of NOx and other pollutants, low energy consumption, and low pollution.

Meeting the new standards requires operating at higher temperatures that demand specially designed products and materials. In particular, the company needed to properly anchor two cables alongside the engine muffler of the truck. The solution to anchor those cables needed to withstand high temperatures up to 200°C.

The solution also needed to be weather resistant and pass select chemical resistance tests. The salt spray test was key because it checks corrosion resistance of materials and surface coatings.

Iveco/CNH Industrial Group wanted to install the solution on approximately 13,000 trucks (four cable tie mounts per truck), with the possibility of adding more vehicles in the future.

“We wanted to streamline processes to improve overall productivity and lower installed cost.”

– Gianpaolo Magri

Product Development Engineering Truck & Bus Medium Range
System Layout Line Responsible, CNH Industrial Group

Panduit Solution

Iveco/CNH Industrial Group chose Panduit™ for its technical expertise and ability to propose a complete fastening solution: cable tie mounts, plastic and stainless steel cable ties, accessories, and installation tools. Each product was specifically selected to address a wide variety of application circumstances involving temperature, weathering, and other environmental impacts.

- Panduit clip-on cable tie mounts made of weather-resistant zinc-plated steel completely suited the company's harsh environment resistance needs. It is also European Conformity (CE) compliant for quality assurance, complies with Restriction of Hazardous Substances (RoHS) regulations, and is suitable for supporting bundled electrical cables in outdoor environments.
- Pan-Ty® cable ties – PEEK are constructed of a non-conductive material that is excellent for high temperature applications up to 260°C
- Pan-Steel® stainless steel self-locking cable ties with smooth, rounded edges prevent damage to cables

"Panduit offered what we needed: a solution that delivers strength, longevity, and resistance in extreme environmental conditions while complying with the Euro 6 emissions standard," said Mr. Magri.

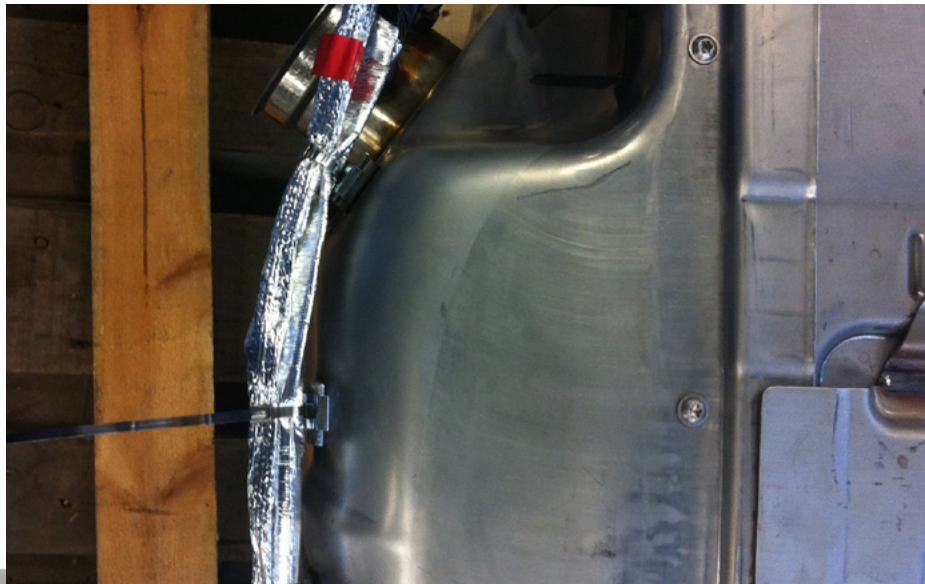
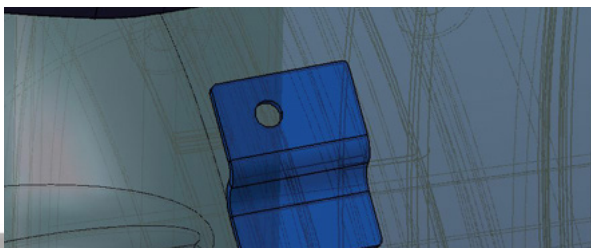
To speed and simplify the mounting of its wires, cables, and tubing as well as increase harness build productivity, Iveco/CNH Industrial Group also deployed the following Panduit products:

- PAT Automated Cable Tie Installation System: Iveco/CNH Industrial Group deployed 10 PAT systems to improve bundling productivity at the harness manufacturing facility (e.g., harnesses for heated seats, air conditioning, etc.). The PAT system reduces the potential for repetitive motion injuries and has a built-in safety interlock to prevent false triggering if anything obstructs the jaw path.
- Panduit's GTS, GS4MT, and PTS cable tie installation tools allowed the company to speed installation with consistent performance, and improved productivity by reducing operator fatigue and repetitive motion injuries. These tools provide a flush cable tie cut-off that prevents damage to adjacent wire bundles and protects workers' hands and arms from injury.

Other Panduit cable accessories selected were:

- Fir tree push mounts
- Threaded stud cable tie mounts
- Connector rings
- Tubing holders with push mounts
- Adhesive-backed cord clips and clamps
- Wire saddle harness clips

PANDUIT®



Business Benefits

Iveco/CNH Industrial Group and Panduit™ aim to provide superior quality service and products while increasing customer satisfaction. Panduit's solution allowed Iveco/CNH Industrial Group to achieve this goal and offer a demonstrable return on investment due to the speed and ease of installation.

"Panduit helped identify opportunities for us to improve productivity and lower installed cost while enhancing performance. This has allowed us to showcase our new Eurocargo truck with confidence. We look forward to more opportunities with Panduit."

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