

BÖLLHOFF

SUCCESS
STORY

Your partner for 360° joining technology



Good cooperation is the basis for success. Our customers' and ours.

Customised solutions for special requirements.



ONSERT® flies business class

RECARO

RECARO Aircraft Seating – Pathbreaking solutions for seating systems above the clouds

RECARO Aircraft Seating is a global supplier of premium aircraft seats for airlines and OEMs. The market leader in economy class seating is known for product innovation, award-winning customer service and “driving comfort in the sky.”

As RECARO expands its global footprint, the family-owned company remains committed to reliability, efficiency, sustainable practices and supporting employee growth.

Headquartered in Schwaebisch Hall, Germany, RECARO employs 2,100 people worldwide across its sites in China, Poland, South Africa and the United States, and earned €295 million in revenue in 2020.

About RECARO Group

The RECARO Group comprises the independently operating divisions RECARO Aircraft Seating in Schwaebisch Hall and RECARO Gaming in Stuttgart as well as the RECARO Holding located in Stuttgart.



The business class seat CL6720

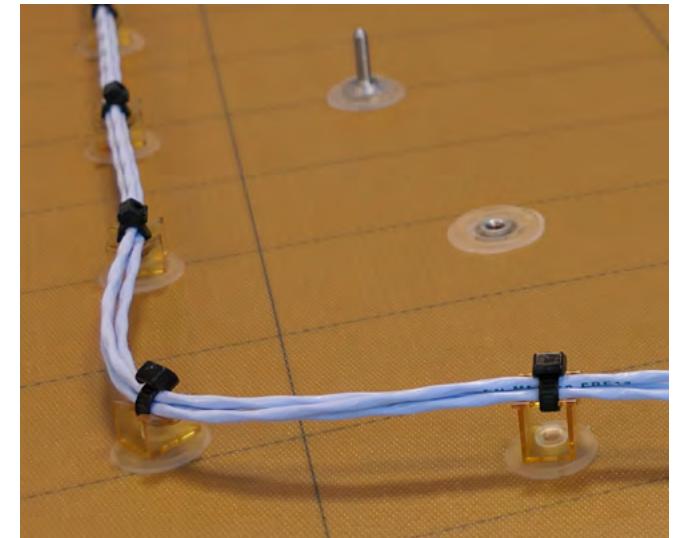
Initial situation

Lightweight construction is an important goal in every segment of the aerospace industry – including cabin equipment. In addition, higher-level quality requirements for materials and processes have to be fulfilled. This also presented RECARO Aircraft Seating with new challenges when developing the CL6720 business class seats.

A large number of electrical connection cables are hidden within a business class seat. These supply, for example, the in-flight entertainment, lighting or other control panels for the passenger. So quickly up to 100 holding points are required for cable and wire fastenings, which have to be fastened to the interior seat paneling made of composite material.

The installation is traditionally done with inserts; they are bonded into the composite components by means of the potting process.

With the aim of reducing the weight of the seat structure and making the processes more efficient, RECARO Aircraft Seating has developed together with the joining expert Böllhoff and DELO Industrial Adhesives an innovative solution based on the ONSERT® process.



Bonded ONSERT® Smart for cable management



ONSERT® Smart for cable management

The solution: ONSERT® Smart for cable management

With this version, the ONSERT® Smart basic element made of transparent plastic is bonded to the customer component with light-curing adhesive. The plastic and the adhesive meet the requirements of FAR Part 25, § 25.583 (60 seconds vertical burn)*.

Especially the short cycle times, the material-friendly process and the design freedom of the fastening elements should be emphasised. The ONSERT® elements are processed manually by using the battery-operated ONSERT® Portable Mini. Due to its modular structure, it is very well suited for use with restricted access to the adhesive area.

After the base element has been bonded, diverse ONSERT® Smart for cable management can be clipped on. These cable holders are available in different heights for different cable diameters, can be rotated flexibly and save weight. Thus, the cables do not come into contact with the seat lining during a flight. Static charges or damage to the cables are prevented and safe energy management is secured.

With a term of 7 years, 122,000 ONSERT® Smart will be installed in the business class seats every year. Further dimensions are currently in the test phase.

Would you like to know more? Talk to us.

*Standards of fire test for aircraft interior

FAR = Federal Aviation Regulation – Regulation of the US aeronautical authority



ONSERT® Portable Mini – Battery-operated setting tool for manual processing

Product features ONSERT® Smart for cable management

- After exposure immediately full mechanical strength
- Short curing times (< 4 seconds)
- Weight reduction through an all-plastic solution
- REACH and RoHS compliant
- Qualified and tested materials

Product features ONSERT® Portable Mini

- Modular approach enables a very good accessibility to the adhesive area
- Robust construction enables easier handling
- Optimal curing through adapted LED
- Integrated process monitoring





Böllhoff Group

Innovative partner for joining technology with assembly and logistics solutions.

Find your local partner at www.boellhoff.com or contact us at fat@boellhoff.com.

Passion for successful joining.

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