

Lufthansa Business Class

Pneumatic Comfort System PCS: Convincing and proven arguments



Lantal supplies Lufthansa with the weight-saving, maintenance-free Pneumatic Comfort System. It was jointly refined and customized for a new level of passenger comfort and delivers tangible operating benefits. The new business class seat structures are supplied by B/E Aerospace. The Lufthansa long-haul fleet consists of over 100 aircraft, and several thousand PAX in volume will be installed over the next years. The first jets outfitted with the PCS in B/C seats have been flying since spring 2012.

Meeting the challenge

The challenge for Lantal's PCS put forward in Lufthansa's specification was two-fold: Deliver the highest passenger comfort in seating, relaxing and sleeping on the full flat bed, and provide a technical systems solution which will yield substantial operational benefits through lower weight, less maintenance, and a much longer life than foam cushions – with no compromise in terms of performance. The second requirement was met with Lantal's low weight PCS components designed for ultra-long maintenance-free service, with a fast

positive return on investment. The ergonomic and comfort approaches were evaluated in a series of workshops on early mock-up seats, prototypes and in-flight trials with enthusiastic passenger feedback.

Result of market research

Ahead of the decision-making process, Lufthansa conducted extensive market research with intensive passenger involvement. Several seat and cushion configurations were tested and evaluated on the ground and in the air. Finally, Lufthansa selected the system consisting of the Diamond B/E Aerospace seat with the Lantal PCS for its new B/C seat.

Customer experience

Lantal was granted an interview with Björn Bosler, Manager Passenger Experience Design Business & Premium at Lufthansa: it was published in Lantal's customer magazine UPDATE in February 2013. Lantal's Dr. Roland von Ballmoos, Vice President Pneumatic Comfort System, asked the questions.

Mr. Bosler, Lufthansa tested various seat configurations for its new Business Class on the Frankfurt/New York route. Can you tell us more about the evaluation process?

The in-flight tests were actually preceded by extensive tests on the ground in a mockup. Then, we installed 12 pre-series seats in a B744 that was flown in single rotations between FRA and JFK for two months. The test persons – more than 1300 individuals – were picked from the community of full-paying passengers booked on that route, and they agreed to treat the tests confidentially. As regards the cushions, we analyzed passenger preferences with several systems, including conventional foam cushions, the Lufthansa Shape system in the

backrest, and two Lantal PCS seats. Here, customer satisfaction ratings were surveyed for seating comfort in various seat positions and firmness preferences.

Different upholstery versions were tested as well. Which parameters of Lantal's PCS elicited positive feedback from the test persons?

Overall, in terms of general customer satisfaction, the new Business Class seat received good reviews regardless of the upholstery system. Passengers gave it excellent marks, not least because of considerable improvements in comfort – also in the fully flat sleeping position. Then, of course, spaciousness, extra stowage capacity, and the enhanced entertainment system played a role as well. Picking a favorite upholstery system was a welcome bonus, so to speak.

Lantal's PCS was tested alongside other cushion technologies, and passengers found that both configurations delivered a comparable comfort level with an advantage for PCS in the bed mode. During the in-flight tests, the higher degree of comfort was appreciated. Obviously, the firmness adjustability feature was unique to the Lantal system, and it does offer customers agreeable benefits en route. But ultimately, the total cost of ownership, longevity, and constant comfort were the key factors in the decision.

Which comfort-relevant characteristics of Lantal's PCS did the test persons appreciate most?

We are pleased to note that positive feedback concerning our Business Class has been consistent over time and across our aircraft types. We have seen record customer satisfaction ratings for our new B748s with conventional Lufthansa upholstery and the new A330 equipped with the PCS. Initial A330 flights have confirmed the high reliability of the

seat, including all of its functional and comfort-related aspects.

What are Lufthansa's objectives with the introduction of the PCS for the new A330 Business Class and the modernization of the rest of the fleet?

The launch of the new Business Class in almost 100 aircraft involves the largest investment ever made in the Lufthansa cabin product. The purpose of the investment is to safeguard Lufthansa's position as a top-rated global carrier with the ultimate in comfort. The commitment goes far beyond the installation of a Business Class environment with Lantal's PCS. It also involves a new in-flight entertainment concept, the continued integration of our new First Class, and the availability of FlyNet, our on-board broadband Internet access system.

How do you assess the contribution of the PCS to the total cost of ownership?

We performed a holistic cost analysis over the projected lifetime of the Business Class seat under consideration of fuel, maintenance, anticipated repairs and other factors. Switching to PCS required additional investments, but given the projected longevity of the system and the weight savings, this will have a positive impact on the ROI.

Thank you very much for this interview, Mr. Bosler. It has been a privilege to work with Lufthansa in this project. It was and still is a highly constructive and enlightening experience.

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