



High-Density Solution for Airbus A320 family

In response to calls by the airline industry for high-density solutions, Lufthansa Technik has the answer with its A320 product platform. High-Density Solution by Lufthansa Technik and DIEHL Aerosystems involves installing double lavatories alongside the aft galley to gain extra cabin space, thus allowing a capacity of up to 186 passengers to be achieved. To further reduce maintenance costs and weight, the cabin configuration features a Digital Direct View Solution instead of the classic monument integrated cabin attendant seat (CAS).

Lufthansa Technik's High-Density Solution helps A320 operators to maximize operating profit and fleet flexibility by enlarging their seat capacity.

The situation

The introduction of the Airbus A320neo with 180 passengers has set a new standard for on-board capacity. European regulators have determined that the capacity of the A320 can be increased to a theoretical maximum of 195 seats. Current market trends, such as smart monuments, slim-line and ultra-slim seats, lead more and more often to the modification of A320 aircraft equipped for 174 passengers or less.

A modular solution

Lufthansa Technik offers a modular A320 family modification platform. The joint solution by Lufthansa Technik and DIEHL Aerosystems incorporates double lavatories alongside the aft galley, offering flexible trolley and container capacity and a Digital Direct View Solution.

Thanks to the very small footprint, operators can maximize their cabin revenue space while ensuring that passenger needs are fully met. Depending on the selected configuration, the aft galley provides space for up to eight half-size trolleys or 19 standard containers and can also accommodate beverage makers, ovens and USB charging options.

In addition, weight is reduced by removing the rear CAS and substituting it with a Digital Direct View Solution. By ensuring secure and rapid egress from the aircraft with new single-lane slides (EAM Worldwide), further weight savings are realized.

Expertise and strong partnerships

As the world's leading MRO provider, Lufthansa Technik has developed a strong expertise in operational and maintenance requirements. In the case of the High-Density Solution, the company joined with DIEHL Aerosystems to realize a design that offers maximized cabin revenue space as well as lower total cost of ownership. Increased flexibility, reduced weight, shorter installation times and lower maintenance costs are some of the other features. Lufthansa Technik gives customers the choice to configure the product according to their individual needs. Lufthansa Technik's offer ranges from consulting to turnkey solutions as well as Engineering Bulletins (EB) and material kits. Supplemented by excellent material and logistics services, Lufthansa Technik minimizes the time to market and additional downtimes by efficiently integrating a modification event into a scheduled maintenance layover.



Aft complex features

- Aft galley with double lavatory
- Digital Direct View Solution
- Up to 8 half-size trolleys
- Up to 19 standard containers
- Oven capacity for max. 96 meals
- USB charging options
- Flat front surface
- PRM function
- ... and more

Options

- A319: up to 151 PAX (with one overwing exit)
- A320: up to 186 PAX
- A321: up to 226 PAX
- Aft galley with double lavatory
- Emergency slides
- Bin space solution
- Stowalley
- ... and more

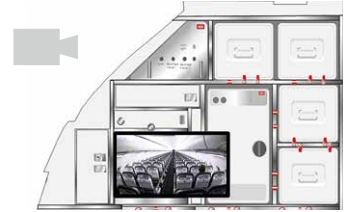
Customer advantages

- Digital Direct View
- Lower weight (up to 100 kg)
- Less maintenance
- Shorter lead time and downtime means fast return on investment
- Turnkey solution
- EB & material kit
- Return on investment in less than 12 months possible



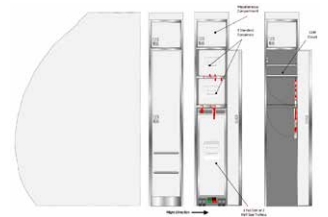
New aft bulkhead solution

Our new, compact and flexible aft bulkhead provides a maximum of stowage options in the aft galley in combination with a double lavatory. Depending on the configuration a customer chooses, the aft galley provides space for up to eight half-size trolleys or 19 standard containers, and can also accommodate beverage makers, ovens and USB charging options. Maintenance costs and weight can be further reduced through an innovative Digital Direct View Solution which replaces the rear CAS.



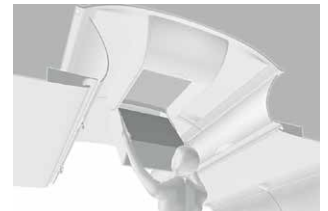
Stowalley

When it comes to on-board catering, a reduction to eight half-size trolleys can be challenging. Lufthansa Technik therefore offers a combination of classic trolley stowage and DIEHL's Stowalley. One Stowalley holds two additional half-size trolleys, four standard containers as well as a flexible stowage area that functions as coat hanger or stowage space. Integrating the High-Density Solution and Stowalley gives customers a true high-capacity configuration with extraordinary galley and stowage options.



Center Ceiling Stowage – a bin space solution

More passengers means more luggage volume inside the cabin. A Center Ceiling Stowage (CCS) uses the space available in the center ceiling area. Through the modular design, it fits different positions in the cabin. The Center Ceiling Stowage typically holds cabin crew equipment that is needed less frequently, such as emergency equipment for example. By removing such equipment from the overhead bins, more space is available for the personal belongings of airline customers. CCS therefore relaxes the carry-on luggage situation on board, enhancing passenger comfort.



Emergency slides

Single-lane slides from EAM Worldwide are Lufthansa Technik's solution for cabin configurations with a maximum passenger seating capacity as listed on the first page. Compared with other high-density solutions, such as wide slides or dual-lane slide rafts, a weight advantage of approximately 80 kilograms per aircraft is gained. EAM's new single-lane slide is a high-performance solution that meets the latest FAA TSO-C69c requirements and is designed for safe and rapid evacuation of the aircraft.



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