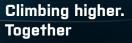
# GREYWATER REUSE

SUSTAINABLE WATER FILTER TECHNOLOGY FOR HEALTH, SAFETY AND THE ENVIRON-MENT



DIEHL

**Aviation** 

### **CHARACTERISTICS**

Future lavatories on board aircraft will be able to substantially reduce the consumption of fresh water and the emission of CO2. The Greywater Reuse System takes part of the water used by passengers to wash their hands and uses it to flush the toilette. Taking the example of a Boeing 787, this relatively simple method can save up to 250 kg of fresh water per aircraft. Thanks to this wight savings, CO2 emissions of a state-of-the-art widebody aircraft under typical operating conditions can be reduced by up to 90 tons per year. While also reducing operating costs.

Diehl Aviation's innovative Design stands for clean and future-proof solutions for the lavatory and was only possible by integrally taking all the challenges of hygiene technology into consideration. The entire system, which is just under 4 kg in weight and very robust, is safe regarding bacteria, odorless, and above all poses no risks to passengers or crew.

#### BENEFITS

- Reduces CO2 emissions, small ecological footprint
- Saves fuel through reduced weightEasier handling
- Low maintenance
- No drawbacks for passengers
- Aircraft require less fresh water

diehl.com/aviation

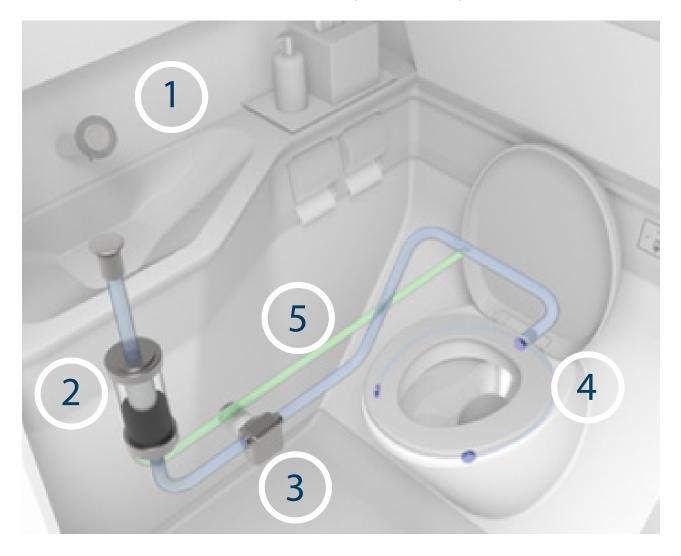




## **TECHNICAL DATA**

#### **Function:**

- 1 Hand wash water will be used for toilet flush
- 2 Grey water will be stored in a small tank
- 3 and transferred via a pump
- 4 to the spray ring or nozzles.
- 5 An overflow protection is part of the tank. If the maximum level is reached and no toilet flush was activated, the water will be drained automatically into the waste system.





This project has received funding from the Clean Sky 2 Joint Undertaking under the European Union's Horizon 2020 research and innovation program under grant agreement N $^{\circ}$  807081

diehl.com/aviation