

Project Report/August 2025

## New Aircraft Maintenance Hangar with Specialised Floors from StoCretec

Pilatus Aircraft Ltd is a leading manufacturer of single-engine turboprop aircraft. The company has now completed the construction of an impressive new maintenance hangar and a directly adjoining three-story annex in Buochs, in the central Swiss canton of Nidwalden. For the planning of the buildings, the client once again relied on its proven collaboration with Strüby Konzept AG of Seewen, Switzerland.

Solutions had to be developed to meet the diverse requirements of floor coatings in the modern halls and other areas. Whether electrically conductive, water protection, highly chemically resistant, wear-resistant, or UV-resistant: the appropriate floor coating system was found for every requirement.

The StoCretec OS 8 traffic area system **StoFloor Traffic DV 100** was used for the approximately 8,000 square metres of floor space in the aircraft service areas. This system solution for floor slabs has proven its suitability for applications exposed to rearising damp.

**StoFloor Traffic DV 100** is slip-resistant and resistant to strong chemical attack such as oils, fuel, or salt. The alternative use of the StoPur DV 508 sealant ensures UV-resistance of the floor coating, particularly in the entrance and frequently used gate areas.

The planning office relied on our volume-conductive coating system **StoFloor ESD KU 614** for use in the aircraft maintenance areas, to protect the aircraft's highly sensitive mechatronics systems. **StoFloor ESD KU 614** ensures that sensitive components are not damaged by electrostatic discharges. It meets all common ESD standards and is mechanically resistant. The conductivity of the StoPox KU 614 epoxy resin coating is virtually independent of relative humidity. Thus, even at a low humidity of 12 %, the conductivity requirements of common ESD standards are perfectly met. The epoxy resin, available in numerous colors, is not only functionally impressive. The absence of carbon fibers results in a homogeneous appearance and also enables light colors. Furthermore, the system offers excellent flow properties and low consumption. An additional sealing coat is not required, saving time during installation.

For the 1,100 square metres of mechanical workshops, the team of experts decided for **StoFloor Traffic Elastic EZ 500**. The OS 11a surface protection system offers increased crack bridging, is wear-resistant, and highly chemically resistant. It protects the building structure from the penetration of water and the pollutants dissolved in it.

The basement additionally houses electroplating workshops. To provide preventive protection of the groundwater from contaminants from the electroplating process, the team of experts selected the **StoFloor Industry Elastic WHG Deck 100** coating system. The StoCretec EP system is highly crack-bridging and exhibits very high chemical resistance to a wide range of media (Section 62 of the German Water Resources Act).

## Properties of **StoFloor Traffic DV 100**

- StoCretec EP multi-storey car park system
- Slip-resistant
- For floor slabs in multi-storey car parks
- Very good wear resistance
- Tested for rising damp
- Resistant to severe chemical attack (EN 13529)
- Mechanically resistant
- Thermal compatibility and resistance to temperature shock
- Limited combustibility system build-up
- Tested system build-up with voluntary external monitoring
- Large number of long-term references
- Various test certificates regarding slip resistance are available
- In accordance with EN 1504-2 and EN 13813
- System meets all performance features of an OS 8 system in accordance with German Table A.7 of TR Maintenance 2020-05

## Properties of **StoFloor ESD KU 614**

- StoCretec EP coating system

- For production areas and storage areas of electronic components
- Electrically volume-conductive
- Charging of persons in accordance with EN 61340-4-5 < +/- 100 volt also at 12 % humidity
- System resistance in accordance with EN 61340-4-5 < 1 Gigaohm also at 12 % humidity
- High mechanical resistance
- Can be driven on with polyamide, Vulkollan, or solid rubber tires
- Limited combustibility system build-up
- Chemically resistant against a large number of chemicals
- Salt-free, no ionic fluids
- Good cleanability
- In accordance with EN 1504-2 and EN 13831
- For concrete, cementitious screed, calcium sulphate screed substrates, others on request
- Colour spectrum: RAL colour fan K 5, NCS, others

## Properties of **StoFloor Traffic Elastic EZ 500**

- StoCretec PUR multi-storey car park system
- For floor slabs and ramps
- High crack bridging ability
- Resistant to severe chemical attack
- Good wear resistance
- Impact-resistant, abrasion-resistant
- Limited combustibility system build-up
- Tested for rising damp
- Thermal compatibility and resistance to temperature shock
- Tested system build-up with voluntary external monitoring
- Various test certificates regarding slip resistance are available

- In accordance with EN 1504-2 and EN 13813
- Colour spectrum: RAL colour fan K 5, NCS, others
- Large number of long-term references

## Properties of **StoFloor Industry Elastic WHG Deck 100**

- StoCretec EP coating build-up for chemical storage facilities and secondary containment tanks, for production areas dealing with water-polluting fluids (HBV areas), laboratories and cleanrooms
- High crack-bridging ability (0,4 mm)
- Very high chemical resistance to test and special media (§ 62 German Wasserhaushaltsgesetz (German Federal Water Act))
- Very high mechanical resistance
- Can be driven on with polyamide, Vulkollan, or solid rubber tires
- Tested system build-up with voluntary external monitoring and German national technical approval
- Various test certificates regarding slip resistance are available
- Good cleanability
- In accordance with EN 13813
- German national technical approval Z-59.12-309

## Who & What

Project:	New building hangar, Buochs, CH	
Investor:	Pilatus Flugzeugwerke AG, Stans, CH	
Overall performance:	Strüby Konzept AG, Seewen, CH	
Applicator:	Marti Bauunternehmungen AG, Luzern, CH	
Realisation:	2025	
StoCretec Competences:	<b>StoFloor Traffic DV 100</b>	
	Primer	StoPox GH 502
	Levelling coat	StoPox GH 502

Sealing coat	with StoQuarz 0,3 - 0,8 mm StoPox DV 100 / StoPur DV 508
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### StoFloor ESD KU 614

Primer	StoPox GH 502 filled with
Quartz sand	StoQuarz 0,2 - 0,5 mm
Conductive layer	StoPox WL 110
Coating	StoPox KU 614

### StoFloor Traffic Elastic EZ 500

Primer	StoPox GH 502
Levelling coat	StoPox GH 502
Broadcasting	StoQuarz 0,3 - 0,8 mm
Elastic floating layer	StoPur EZ 500
Coating	StoPur EZ 502
Sealing coat	StoPox DV 100

### StoFloor Industry Elastic WHG Deck 100 Galvanisation/engineering UG

Primer	StoPox WHG Grund 100
Levelling coat	StoPox WHG Grund 100
Sealing coat	StoPox WHG Deck 100

Photos: Strüby Konzept AG, Pilatus Flugzeugwerke AG, CH





