ONGOING PROJECT : Freezing

FiRe, Erosion rEsistant and anti-icING coatings development

Objectives : Develop and assess multifunctional coatings for: Anti-icing, anti-erosion and anticontamination, Thermal insulation and fire resistance, Carbon fibers electrical insulation, Support the TRL reviews, Surface treatment processes, From lab scale to flight test, Develop an innovative platform dedicated to anti-icing issues

3,6 M

42 months

AIRBUS, LIEBHERR, SAFRAN TECH, SOCOMORE, OERLIKON BALZERS, ICA, IRCER, LAPLACE, LCC, IMRCP

27 Delivrables

9 Collaborateurs

7 Surface treatment technologies

Activités principales

Obtain icephobic properties from superhydrophobic coatings (sol-gel, PVD-PECVD, thermal spray) + laser texturation

Develop durable coatings: water and solid particles erosion resistant

Easy-to-clean: limit bug adhesion

Anti-icing properties characterizations & Modeling

Substrates metallic of composite

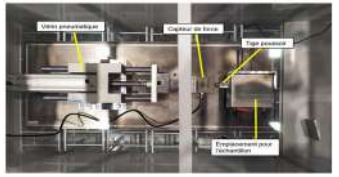
Surface treatment processes (wet or dry)

Pré or post-texturation

Anti-icing tests platform

Goniometer: wettability (IRT)

Icing Wind Tunnel (ICA)



Ice adhesion (IRT)

Bug gun(IRT)