

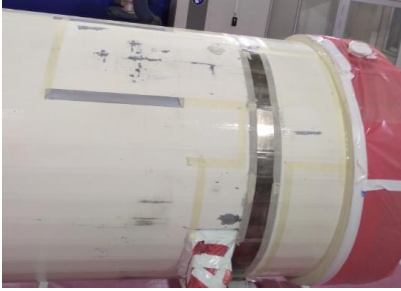
Challenge

Open Innovation # 69

Local repair of nuclear packaging paint



Industrie
Nucléaire



Nuclear packaging



Paint booth



Dates du challenge

Opening date : 06/30/2023

Closing date : 10/15/2023

Purpose of the challenge

Orano NPS is looking for solutions to repair the paintwork on metallic nuclear packaging (which may be contaminated) in small, localized areas.

Description and expectations

Description

Nuclear packaging is painted to **guarantee certain thermal properties (emissivity and absorptivity)**. This paint can be **locally degraded** after handling phases. Today, repair operations require **paint booths in controlled areas**, resulting in significant downtime.

Expectations

We are therefore looking for solutions that will enable us to carry out localized repairs on metallic nuclear packages, in the field, without having to go into the paint booth.

Requirements

- Applicability: between 0°C and +130°C
- Temperature resistance: -40°C to +130°C for at least 1 year
- Emissivity > 0.85 and absorptivity < 0.3 with maintenance after aging for at least 1 year
- Resistance to water spray (precipitation of 5 cm per hour for at least one hour) and immersion in borated water (no leaching)
- Packaging repair surface between 1 cm² and 0.1 m²