

May 12, 2021

## Another Joint Project with Airbus to support Rolls-Royce “UltraFan” demonstrator project

Nikkiso CO., Ltd. (“NIKKISO”) is proud to announce that another project that supports the Rolls-Royce UltraFan® demonstrator project has been launched with Airbus for their “Propulsion of Tomorrow”. In 2020, Airbus and NIKKISO partnered to develop a composite part of the Intake of the next-generation engine “UltraFan” demonstrator, which enables lower fuel consumption and noise reduction.

This second project is for a part called “Cradle”, which is the cover of pylon.

### ■ Summary of “UltraFan”

UltraFan is the next generation Rolls-Royce demonstrator capable of creating an engine family applicable for both narrow-body and wide-body aircraft (single-aisle and twin-aisle aircraft). Significantly reducing weight using composite fan blades and fan cases, a large UltraFan will be 25% more efficient compared to the Company's first Trent engine which came into service 26 years ago.

Airbus will provide the nacelle with innovative architecture and associated technology, and NIKKISO has been selected by Airbus as the joint development partner for the Cradle, a component of the nacelle.

This is the second development project between NIKKISO and Airbus, following the “Inlet Outer Ring”, which NIKKISO has recently completed delivery of the 1<sup>st</sup> test unit to Airbus.

### ■ New Technology in this Project

The new fast-curing resin material co-developed with Tejin, which was used for the previous project “Inlet Outer Ring”, will also be used for the “Cradle”.

This time, this fast-curing resin material was further customized to be used on AFP layup process, instead of hand layup.

A manufacturing prototype of the Cradle is expected to be delivered to Airbus by the end of 2021, as part of component testing trials.

### ■ Relationship between Airbus and NIKKISO

NIKKISO succeeded in developing CFRP Cascades and began delivery to their direct customer for the engine nacelles installed in the Airbus A300 in 1984. The composite Cascades were then used in a series of new aircraft that were developed and installed in other programs, and now chosen for all of Airbus's commercial aircraft.

In addition to the Cascades, NIKKISO also manufactures components for wing, nacelle, and engine for the A320, A330, and A350, and has history for more than 30 years.

### ■ NIKKISO's dedication in Aviation Industry

NIKKISO succeeded in developing the world's first CFRP Cascades in 1983, and now holds more than 90% of the global market share for large and regional aircrafts.

Even under the market severe downturn due to the novel coronavirus, NIKKISO will continue to contribute to the aviation industry as one of the key supplier, and also be prepared for the market recovery, as well as the development of new technologies and new markets.

**<Company Information>**

Company Name: NIKKISO CO., LTD.  
Head Office: Yebisu Garden Place Tower 22nd Floor, 20-3, Ebisu 4-Chome,  
Shibuya-ku, Tokyo 150-6022, Japan  
Date of Establishment: December 26, 1953  
President & CEO: Toshihiko Kai  
Business Overview: NIKKISO provides specialized pumps and systems in the Industrial  
Business, CFRP (carbon fiber reinforced plastic) aircraft parts in the  
Aerospace Business and hemodialysis, and healthcare related  
products in the Medical Business.  
HP <https://www.nikkiso.co.jp/>

For inquires, please contact:

PR and IR Section, Corporate Planning Department,  
Corporate Planning Division, NIKKISO Co., LTD.  
E-mail: [nikkiso-pr@nikkiso.co.jp](mailto:nikkiso-pr@nikkiso.co.jp)