Customer Reference

VOLOCOPTER Airtaxi - NECURON® 651

Customer:	CNC Speedform AG, Werther, Germany
Products used:	NECURON® 651
Branch:	Prototype construction
Application:	GRP lamination tools

1. Problem / task

Volocopter air taxis are emission-free, electrically powered aircrafts that take off and land vertically. They are designed to complement urban mobility and fly up to two passengers directly and quietly to their destination. They thus offer a whole new dimension to the quality of life in cities.
In 2019, Volocopter successfully completed the first test flight in Singapore. In the next few years, these air taxis will be used commercially for the first time in Singapore. All international flight permits have already been issued.
Our customer CNC-Speedform had the task of presenting a prototype design model of this flying taxi on a 1: 1 scale.

2. Solution / Result

The customer used the NECURON® 651 to manufacture the lamination tools. After the tools were milled from NECURON® 651, the components of the prototype were further processed by hand lamination with glass fiber reinforced plastics.
In this video you can see the component production at our customer:

Volocopter Design VoloCity static full-scale model - YouTube

For each rotor segment, for example, you always need two tools to then join the segments. In addition, there is each component individually and again as a mirror image on the other side.

3. Advantages

The customer decided to use NECURON® 651 because the material has a very homogeneous structure, can be milled very quickly and the tool surface can be excellently prepared for the lamination process with very little rework.

NECURON® 651
BLOCK MATERIAL - CASE STUDY

Application Images

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