



PUBLIC PREMIERE - FRAUNDORFER AERONAUTICS TENSOR 600X AT EUROPEAN ROTORS

News / Events / Festivals, Manufacturer



Fraundorfer Aeronautics is presenting its newly developed "TENSOR 600X" aircraft to the public for the first time at European Rotors in Cologne. The aircraft has a range of 600 kilometers and a maximum cruising speed of 200 km/h.

The TENSOR 600X is intended for personal mobility: Medium-distance business trips, for example, can be completed much faster than with any other mode of transport. The aircraft is about twice as efficient as a comparable helicopter. The basis for this is the "Fraundorfer R01 High Performance" rotor system – a new generation of autorotation rotors developed with state-of-the-art computer simulations. This has enabled Fraundorfer Aeronautics to achieve outstanding performance, stability and safety values. The TENSOR is a completely newly developed compound gyroplane and can fly in areas where previous aircraft reached their limits.

Fraundorfer Aeronautics' technology makes it possible to take off practically vertically; quiet, easy to handle and inexpensive to fly. In addition, the aircraft is very safe, as it does not experience stalls or spins, making it fundamentally different from other aircraft. Even in critical weather conditions, the TENSOR flies safely. A single-engine aircraft normally requires 5,000 meters of visibility and a minimum safe altitude of 600 meters; the TENSOR

manages with 800 meters of visibility and 150 meters of minimum safe altitude. In other words, while a single-engine aircraft can only fly about 30 percent of the days of the year due to weather conditions, the TENSOR can realistically be used 85 percent of the days of the year. It is efficient and designed for alternative propulsion.

Compact pilot training as an additional service

Fraundorfer Aeronautics also offers compact pilot training. Using modern training methods, simulator training and courses in blocks, the pilot's license can be obtained after a total of four weeks of training. In addition, the company's "Pilot-to-Pilot Guidance" offers its customers comprehensive support in all flying-related matters.

Until now, flying has been a time-consuming hobby. Long flight preparation, pre-flight checks and ground handling characterized private aviation. TENSOR takes a completely new approach, looking not only at the aircraft, but also at the entire chain of training, service, maintenance and operations. As a result, the TENSOR enables busy people to make flying part of their personal mobility, saving them time and money. The TENSOR is airborne in 10 minutes, ready for takeoff. In Germany, today already 400 airfields can be used for takeoff and landing. The wings of the aircraft are foldable for hangarage and also for transport.

Locomotion in the air that is independent of infrastructure on the ground

The technology of the TENSOR 600X is the basis for a new, significantly more powerful generation of aircraft. With it, the company aims to establish efficient, safe and environmentally friendly locomotion in the air that is independent of infrastructure on the ground.

"When we founded Fraundorfer Aeronautics, we wanted not only to bring the beauty and efficiency of flight into everyone's daily lives, but also, and more importantly, to enable environmental and disaster relief missions that were previously infeasible," says Christoph Fraundorfer, founder and CEO of Fraundorfer Aeronautics. "We have been performing unsolved, highly complex aerodynamic calculations for decades. After seven years of risks and challenges, we've made a breakthrough."

The TENSOR's characteristics make this aircraft very well suited for use in areas where it is difficult to build runways - for example, in urban environments. But the TENSOR's capabilities also offer great advantages between cities and in hard-to-reach regions with weak infrastructure, for example for rescue services, transport flights or disaster control.

Fraundorfer TENSOR will shape transport logistics and passenger traffic

The TENSOR is a scalable concept that can fundamentally change air traffic. By mid-decade, Fraundorfer Aeronautics will launch the TENSOR 800X, a further development of the TENSOR 600X certified under European aviation regulations and capable of commercial operations. This larger aircraft is aimed at commercial applications, such as passenger transport, use in logistics or for supply flights to regions that are difficult to reach. This is because it can perform these applications much more cheaply and efficiently than a helicopter, for example.

Successful maiden flight in January 2020

Fraundorfer Aeronautics' "TENSOR 600X" successfully completed its maiden flight in January 2020 after receiving preliminary airworthiness certification. The aircraft is currently undergoing certification. The first production aircraft are being built.



16 NOVEMBER 2021

ARTICLE LINK:

<https://50skyshades.com/index.php/news/manufacturer/public-premiere-fraundorfer-aeronautics-tensor-600x-at-european-rotors>