

FLOFLER

# Coating Tomorrow's Innovations

Trelleborg coated materials in airships

### Charting a New Horizon: FloFleet's Innovative Airships Soar with Trelleborg's Coated Materials

In the ever-evolving aerospace industry, where innovation and sustainability are paramount, FloFleet emerges as a revolutionary presence with its autonomous and electric airships. These cuttingedge marvels, integral to transforming how we monitor and explore our world, are significantly enhanced by a crucial component: the coated fabric developed by Trelleborg in Monson, Massachusetts.

#### THE DAWN OF A NEW ERA

FloFleet's mission is to revolutionize aerial technology with their autonomous, electric airships equipped with solar panels and lithium batteries, achieving zero emissions and onboard energy generation, setting the stage for environmentally conscious aviation. Autonomous driving algorithms enable these airships to navigate predetermined routes with precision, opening up a world of possibilities. Rick Malo, Trelleborg Plant Manager, shares his pride in this collaboration: "At Trelleborg, we are thrilled to contribute to FloFleet's groundbreaking mission with our advanced coated fabric."



### **TRELLEBORG'S CRUTIAL CONTRIBUTION**

Trelleborg's role in this pivotal venture is significant. The external fabric chosen for FloFleet's airships was meticulously engineered by Trelleborg to meet the demanding needs of FloFleet's airships. Chosen for its lightweight, durability, and helium-impermeable qualities, Trelleborg's fabric not only meets but exceeds the stringent requirements of these airships. "Our coated fabric plays a crucial role in ensuring these airships reach new heights while prioritizing sustainability," says Malo.

#### SHIMA: A SYMBOL OF PROGRESS

FloFleet's flagship airship, "Shima," an 8-meter-long technological wonder, epitomizes their commitment to innovation. Designed to carry an 8 kg payload, Shima is in the process of securing permits for shortrange missions. This achievement highlights FloFleet's dedication to environmental sustainability and technological advancement.

#### BROAD APPLICATIONS AND ENVIROMENTAL BENEFITS

FloFleet's airships hold immense potential in a variety of sectors. Their primary focus includes monitoring oil pipelines, gas pipelines, and power lines, aiming for early leak detection and minimizing waste and pollution. These airships are also poised to revolutionize Agriculture 4.0, smart cities, search and rescue operations, fire detection, wildlife tracking, deforestation monitoring, traffic control, and aerial filming for events and documentaries.



FLOFLER

## Coating Tomorrow's Innovations

## Trelleborg coated materials in airships

What sets FloFleet's airships apart is their superior autonomy and payload capacity compared to traditional quadcopters. When compared to helicopters, they offer extended autonomy, reduced environmental impact, and lower noise pollution, making them the ideal choice for a wide range of applications.

## **A SUSTAINABLE FUTURE**

FloFleet's airships boast a wing-like design that efficiently harnesses both aerostatic and aerodynamic forces. This unique feature empowers the airships to cover distances of up to 5,000 km on a single charge, with the potential for a week of uninterrupted flight. This extended range and endurance are game changers for clients across industries, contributing to reduced emissions, enhanced service quality, and heightened safety for all involved. "FloFleet's vision aligns seamlessly with Trelleborg's core values of innovation and environmental consciousness," says Kevin Maine, Trelleborg Aerospace Segment Manager. "Our materials are often utilized in demanding applications, and this collaboration with FloFleet exemplifies another remarkable achievement. We look forward to supporting FloFleet in its future developments as they continue to redefine aerospace technology."



#### **PIONEERING THE SKIES**

As FloFleet's airships ascend, they represent more than technological feats; they are harbingers of a sustainable and innovative future in aerospace. The partnership between FloFleet and Trelleborg is a testament to the power of collaborative innovation in pushing the boundaries of what's possible in the skies. The potential of these airships, underpinned by Trelleborg's polymer expertise and capabilities, paves the way for a new horizon in sustainable and efficient aerospace technology.

For more information about FloFleet Airships, visit www.flofleet.com

