

OVERVIEW

The rapid expansion of AI, cloud computing, and hyperscale data centers is driving demand for reliable, energy-efficient thermal management solutions. With Celstran® LFRT, Celanese is well positioned to meet these growing market demands by enabling large, injection-molded fan and airflow management components that deliver the strength, dimensional stability, and durability required for continuous operation while reducing weight compared to metal alternatives.

WHY CELANESE OUTPERFORMS



Material innovation

Long-fibre reinforced thermoplastics engineered for demanding environments.



Application expertise

Support from material selection through part design and processing.



High value solution

Material platform for fan and ventilation components used in data center cooling systems.

Key challenges

- 24/7 operational demands
- Weight and energy efficiency targets
- Manufacturing large, complex components

Competitive advantages

- Strong portfolio of reinforced thermoplastics
- Application engineering and processing support

What it delivers

- Reliable long-term performance
- Faster development through engineering expertise

PROVEN PERFORMANCE



40 % + weight reduction
vs. metal alternative



24/7 operation ready
Superior creep and fatigue resistant



Excellent dimensional stability
Maintains performance at high operating temperatures



Large complex parts
Enables integrated designs with reduced part count