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Headline

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Emirates has announced that it is using 3D printing — also known as Additive Manufacturing — to produce components for its aircraft cabins. The airline is working with 3D Systems of the U.S. and UUDS of France.

Emirates has partnered with **3D Systems**, a U.S.-based 3D printing equipment and material manufacturer and services provider, and with **UUDS**, a European aviation engineering and certification office and services provider based in France, to print the first batch of **3D-printed** video monitor shrouds using 3D Systems' **Selective Laser Sintering** (SLS) technology platform.

The SLS process uses lasers to bind together powdered plastic into the required shape defined by a 3D model. The material used to print Emirates' Video Monitor Shrouds is a new thermoplastic developed by 3D Systems with excellent flammability resistance properties and surface quality suitable for commercial aerospace business applications.

Video monitor shrouds produced using the SLS technique weigh 9-13% less than components manufactured traditionally or through the Fusion Deposition Modelling (FDM) technique. This offers potentially significant reductions in fuel emissions and costs when consolidated over the entire fleet of Emirates aircraft.

Additionally with the SLS technique it is possible to print more than one component at a time when compared with other 3D printing methods. This leads to quicker per-part production times and reduced wastage of raw materials.

Emirates' 3D-printed video monitor shrouds have undergone a range of structural, durability, flammability and chemical tests and are also in the process of receiving EASA certification for airworthiness for aircraft interior cabin parts.