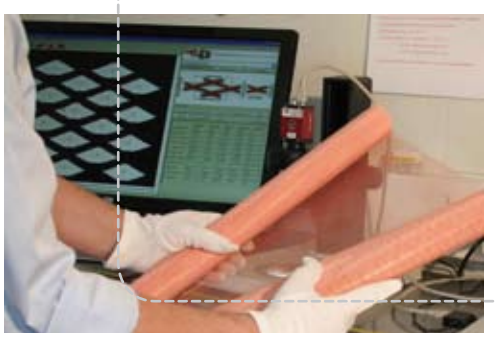
ADVANCED EXPANDED METAL TECHNOLOGY

FOR AIRCRAFT INDUSTRIES

AERO MESH

ADVANCED EXPANDED METALS



Since environmental protection and economic considerations have become more and more important in space and aircraft industries the use of new, lighter materials for aircraft construction has grown to a new level.

Prepreg carbon fibres are lighter and yet much stronger than former aluminium parts.

Although the big advantages of carbon fibres are more than visible there is one significant disadvantage: A plane needs to be a faraday cage to feature full protection from lightning bolt.

Unfortunately the electronic conducting characteristics of carbon fibres are not optimal to build up a solid faraday cage.

The solution: AeroMesh expanded metal made from copper or aluminium foil which is layered between the laminated carbon sheets.

This creates a conductive path within the composite instead of the traditional metallic structure.

AeroMesh is a nonwoven expanded material made from the continuous expansion of ferrous and non-ferrous foils.

Unlike woven meshes AeroMesh can be made from the purest of materials, because the added strength of an alloy for the weaving stresses is not required for the expanding process.

FOR LIGHTNING STRIKE PROTECTION

Additionally AeroMesh does not want to naturally fray and will not unravel when cut (no matter the shape or direction of the cut).

AeroMesh can be provided in most ductile materials. The two most common materials used as LSP (lightning strike protection) are copper and aluminium due to their physical and electrical properties. Mainly their low density, their high conductivity or a combination of the two brings the most effective protection.

AeroMesh is manufactured in Germany and the USA, utilizing the same processes and producing equipment. Thereby ensuring customers of a dual source supply and getting the same high standard product from each supplier.

Due to our own tool and producing equipment manufacturing we are not only able to offer the standard common meshes (ranging from 60 gsm up to 900 gsm and a maximum width of 36½“) but also a wide variety of on-demand materials.

- **excellent conducting characteristics for efficient LSP (lightning strike protection)**
- **lightweight**
- **highly flexible**
- **sustainable scrap-free production process**
- **available in various thicknesses and mesh dimensions**
- **infinitely variable - depending on customers‘ needs**

CONTACT US FOR FREE SAMPLES

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