Rev 1.1
19.09.2014

Fireproof Shielding Fabric Aaronia Mesh

Stainless Steel EMC/EMF Shielding Mesh for usage under extreme conditions

Highlights

- ◆ Usable up to 1200° Celsius
- ◆ Half transparent
- ◆ High Attenuation
- ◆ Odorless, rot resistant



Made in Germany



Technical data

Aaronia Mesh

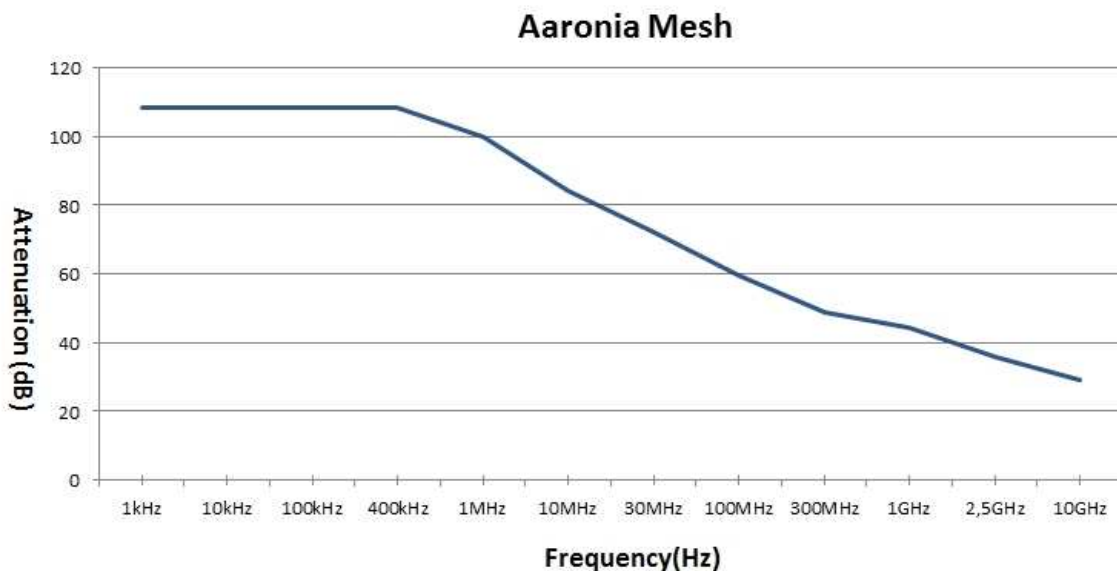
- ◆ Attenuation: 108dB at 1kHz, 100dB at 1MHz, 60dB at 100MHz, 44dB at 1GHz, 30dB at 10GHz
- ◆ Very transparent, perfect for shielding of window frames, windows etc.
- ◆ Standard delivery length per unit: 1m (1m²). Also available by the meter (up to 30m on one piece).
- ◆ Lane Width: 1m
- ◆ Thickness: 0.2 mm
- ◆ Mesh size: about 0.1 mm
- ◆ Colour: stainless steel
- ◆ Weight: Approx. 400g / m
- ◆ Usable until about 1200 degrees Celsius!
- ◆ Yield strength: 220 MPa
- ◆ Tensile strength: 550 MPa
- ◆ Hardness: 180 HB
- ◆ Extremely breathable
- ◆ Odorless
- ◆ Transparent
- ◆ Rot resistant
- ◆ Frost proof
- ◆ Washable
- ◆ Foldable
- ◆ Bendable
- ◆ Mesh material: stainless steel
- ◆ Screening performance static fields: 99.9999% to 99.99999% (only WITH grounding!)
- ◆ Screening performance low electric fields: 99.9999% to 99.99999% (only WITH grounding!)

Ideal for industrial applications as well as for military, research and development. Aaronia mesh has been specifically designed for use under extreme conditions (salt air, extreme temperatures, vacuum, etc.).

Typical applications are for example Shielding of windows and window surfaces indoors and outdoors (due to the excellent transparency), construction of EMC test chambers and shielding of individual components that are under large temperature effects. Also ideal for EMC sealing of ventilation, ventilation diffusers and holes in EMC cabins due to its resistance to rust.

Aaronia mesh is made of 100% stainless steel, is temperature stable up to 1200 degrees Celsius, has an extremely high attenuation, yet is extremely breathable. The material absorbs reliable E & H fields. In particular, in the kHz and low MHz range Aaronia mesh offers an extremely high shielding factor of up to 108dB (E-field). Aaronia mesh is easy to process and can be cut with a standard pair of scissors.

Transmission damping chart 1kHz-10GHz



References

Cross-Section of Aaronia Clients

Government, Military, Aeronautic, Astronautic

- ◆ NATO, Belgium
- ◆ Department of Defense, USA
- ◆ Department of Defense, Australia
- ◆ Airbus, Germany
- ◆ Boeing, USA
- ◆ Bundeswehr, Germany
- ◆ NASA, USA
- ◆ Lockheed Martin, USA
- ◆ Lufthansa, Germany
- ◆ DLR, Germany
- ◆ Eurocontrol, Belgium
- ◆ EADS, Germany
- ◆ DEA, USA
- ◆ FBI, USA
- ◆ BKA, Germany
- ◆ Federal Police, Germany
- ◆ Ministry of Defense, Netherlands

Research/Development, Science and Universities

- ◆ MIT - Physics Department, USA
- ◆ California State University, USA
- ◆ Indonesien Institute of Science, Indonesia
- ◆ Los Alamos National Laboratory, USA
- ◆ University of Bahrain, Bahrain
- ◆ University of Florida, USA
- ◆ University of Victoria, Canada
- ◆ University of Newcastle, United Kingdom
- ◆ University of Durham, United Kingdom
- ◆ University Strasbourg, France
- ◆ University of Sydney, Australia
- ◆ University of Athen, Greece
- ◆ University of Munich, Germany
- ◆ Technical University of Hamburg, Germany
- ◆ Max-Planck Institute for Radio Astronomy, Germany
- ◆ Max-Planck-Institute for Nuclear Physics, Germany
- ◆ Research Centre Karlsruhe, Germany

Industry

- ◆ APPLE, USA
- ◆ IBM, Switzerland
- ◆ Intel, Germany
- ◆ Shell Oil Company, USA
- ◆ ATI, USA
- ◆ Microsoft, USA
- ◆ Motorola, Brazil
- ◆ Audi, Germany
- ◆ BMW, Germany
- ◆ Daimler, Germany
- ◆ Volkswagen, Germany
- ◆ BASF, Germany
- ◆ Siemens AG, Germany
- ◆ Rohde & Schwarz, Germany
- ◆ Infineon, Austria
- ◆ Philips, Germany
- ◆ ThyssenKrupp, Germany
- ◆ EnBW, Germany
- ◆ CNN, USA
- ◆ Duracell, USA
- ◆ German Telekom, Germany
- ◆ Bank of Canada, Canada
- ◆ NBC News, USA
- ◆ Sony, Germany
- ◆ Anritsu, Germany
- ◆ Hewlett Packard, Germany
- ◆ Robert Bosch, Germany
- ◆ Mercedes Benz, Austria
- ◆ Osram, Germany
- ◆ DEKRA, Germany
- ◆ AMD, Germany
- ◆ Keysight, China
- ◆ Infineon Technologies, Germany
- ◆ Philips Semiconductors, Germany
- ◆ Hyundai Europe, Germany
- ◆ JDSU, Korea
- ◆ Wilkinson Sword, Germany
- ◆ IBM Deutschland, Germany
- ◆ Nokia-Siemens Networks, Germany



Made in Germany



Aaronia AG, Gewerbegebiet Aaronia AG, DE-54597 Strickscheid, Germany
Phone ++49(0)6556-93033, Fax ++49(0)6556-93034
Email: mail@aaronia.de URL: www.aaronia.com

Spectran® **HyperLOG®** **BicoLOG®** **OmniLOG®** **Aaronia-Shield®** **Aaronia X-Dream®** **MagnoShield®** **IsoLOG®**

are registered trademarks of Aaronia AG