

Battery Industry

- Woven Wire Mesh
- Expanded Metal
- Perforated Metal







Woven Wire Mesh

A lightweight and inexpensive stainless steel mesh has been investigated as an battery current collector, fuel cells, and electrolyzers. Using stainless steel mesh as a current collector offers battery companies properties in battery that are not found in other products. As the mesh is made from two separate wires, it can withstand more flexure . It is ideal for electrode substrates, current collectors, flow field screens, and gas diffusion electrodes.

It can be provided as discs or cut into mesh tapes. The mesh tapes are supplied at extremely small width up to 20mm. we designed special machines to produce the finish edge mesh. The finish edge will increase the mesh stability and provide a safety edge for handling. And It will also protect the battery separator.

Size & Configurations

- Mesh typically range from 20mesh to 100mesh
- Wire diameter from 0.10mm to 0.38mm
- Roll width from 20mm to 1000mm
- Roll length from 30m to 300m

Material

- Stainless steel
- Nickel
- Copper
- Aluminum
- Silver

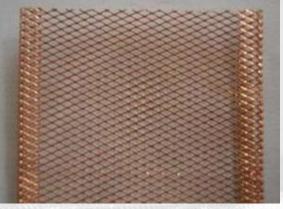
Feature

- Oxidation and corrosion resistance
- A safety edge for handling













Expanded Metal Mesh

Current collectors of thin film batteries must be flexible, have high surface area, be cost-effective, and allow fluids to flow through them. Our expanded metal fits all these requirements and it is micro-permeable by design, therefore it allows the transport of the protons from the anode to the cathode through the membrane. It also forces the electrons to travel around a conductive path to the cathode, functioning as a key component in battery manufacturing. The expanded metal is manufactured in slit coils or sheets and is processed as discs or most any shape as required.

Size & Configurations

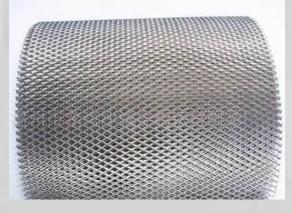
- Plate thickness from 0.3mm to 0.5mm
- Shape is diamond hole

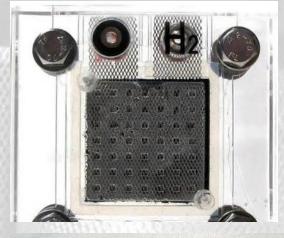
Material

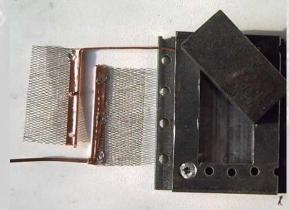
- Stainless steel
- Nickel
- Copper
- Aluminum

Feature

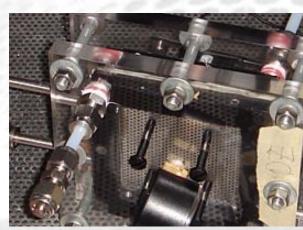
- High utilization
- Light weight
- High load-carrying capacity
- Firm in structure















Perforated Metal Mesh

Perforated metal mesh are formed into troughs into which is placed the active material, a similar perforated strip is then placed over the original strip and the sides crimped together, forming an endless perforated pocket with the active material retained inside. These finished pockets are cut to suitable lengths and attached together by interlocking the crimps, the number of pockets and attached being determined by the height of the plate desired. A "U" frame of steel is then placed around the plate and the sides firmly crimped on. The result is a mechanically rugged plat with extremely low electrical resistance.

Size & Configurations

- Plate thickness up to 0.5mm
- Round hole diameter up to 2.0mm

Material

- Stainless steel
- Nickel
- Copper
- Aluminum

Feature

- Strong corrosion resistance
- Wear resistance, anti-oxidation
- High tensile strength and tolerance capacity.
- Holes and rows are evenly placed in accurate position







Expanded, Perforated & Wire Products





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