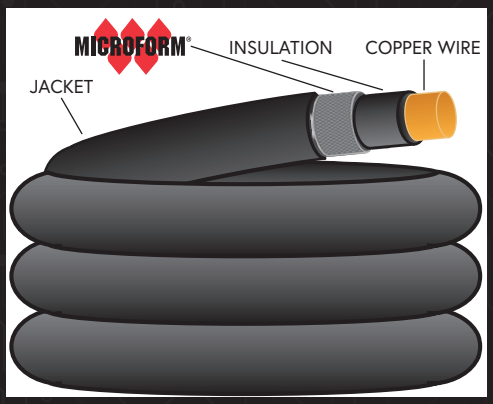
MICROFORM®
FOR EMI SHIELDING

For precision-engineered applications that require a light mesh, Wallner Expac designs and manufactures its Light Gauge MicroForm®. Versatile, economical, and environmentally friendly, this expanded metal micromesh is fully customizable to meet tight specifications for use in specialized applications such as medical, lightning strike protection, EMI shielding, and more.



EMI SHIELDING APPLICATIONS FOR MICROFORM®

- ◊ Aerospace, Avionics, Satellites
- ◊ Enclosures, Gaskets
- ◊ Consumer Electronics
- ◊ Medical & Healthcare
- ◊ Cable, Piping
- ◊ Telecommunications
- ◊ NFC
- ◊ GPS

From consumer electronics to system-critical applications such as aerospace, medical, and military, effective shielding is required to prevent electromagnetic interference. It can be as simple as an annoying hiss, buzz, or static, or as severe as a solar flare that disrupts global communications satellite transmissions.

Shielding must be lightweight, low in volume, and have excellent shielding properties. Wire mesh screens are the best alternative electromagnetic shields for such microelectronic circuits, and meeting these requirements is MicroForm® micromeshes.

THE MICROFORM® ADVANTAGES

◊ Primarily made from copper, steel, or aluminum for its strength and lightweight shielding properties, it can also be made from other metals and alloys.

◊ Formed from a continuous coil, MicroForm's® uniform pattern won't fray, ensuring a strong, lightweight, and conductive solution that is easily formed for use as gaskets or around structures, wound around cables or pipes, or embedded within composite layers.

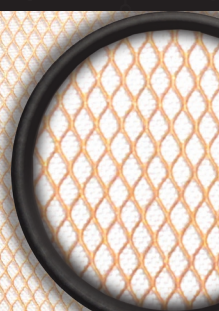
◊ All patterns are precision-engineered to your specifications including thickness, geometry, conductivity, open area, and specific weight.

◊ Instead of punching the metal, it is simultaneously slit and stretched which produces a uniform pattern and a greater amount of finished expanded metal from the raw.

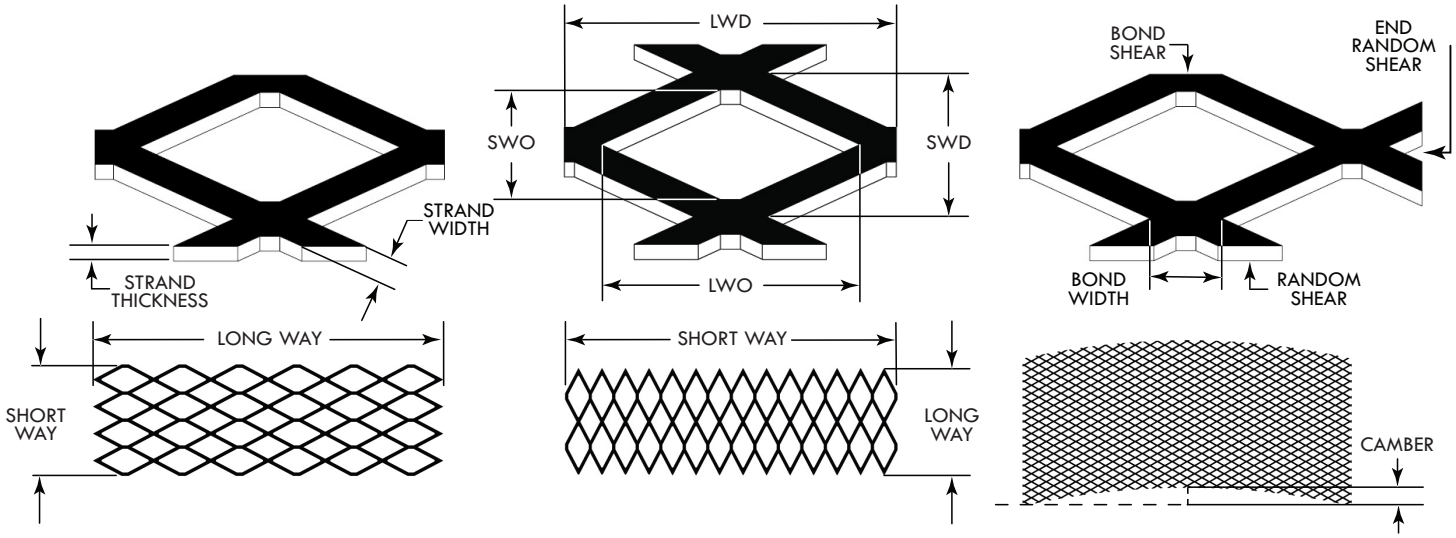
◊ We are employee-owned and manufacture MicroForm® using our own designed and built expanders in our US-based, ISO-9001 certified plants.

WALLNER EXPAC®
ENGINEERS • INNOVATORS • MANUFACTURERS
AN EMPLOYEE-OWNED COMPANY

(909) 481-8800
California • Georgia • Texas
WWW.EXPAC.COM



CAPABILITIES AND PARAMETERS



MICROFORM® EXPANDED METAL PARAMETERS

◊ Widths up to 25"
◊ LWD from 0.050"-0.125" (1,270µm-3,175µm)
◊ Base metal thickness: 0.002"-0.032" (50.8µm-812.8µm)
◊ Metals: Aluminum, Copper, and more
◊ Options include slitting, flattening, and more

SERVICES AND CAPABILITIES

Our state-of-the art, on-site tooling facilities support our manufacturing with post-production services including:

◊ Wire EDM
◊ Surface and OD grinding
◊ Precision inspection equipment
◊ CNC machining, lathes, radial drills
◊ Stamping, Forming, Flattening, Slitting, Welding
◊ Engineering & Design, creation of customized patterns

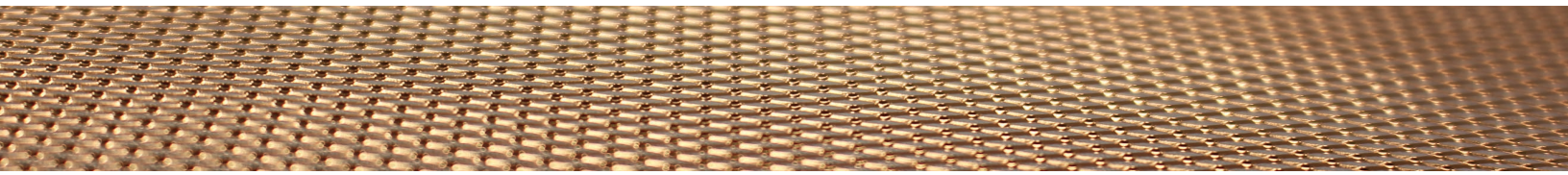
APPLICATIONS FOR MICROFORM®

◊ Battery Technologies
◊ Airbag Filters
◊ EMI Shielding
◊ Mist Elimination, Dust Collection
◊ Lightning Strike Protection
◊ Speaker Grilles, Acoustics
◊ Baskets, Containers, Sifters
◊ Medical
◊ Plumbing
◊ Shading
◊ Modeling & Craft Wire
◊ Screens- Doors, Windows
◊ Food Processing
◊ Military & Aerospace

EXPANDED METAL TERMINOLOGY

◊ LWD: Long Way of Diamond/Design dimension.
◊ LWO: Long Way of Opening dimension.
Used to indicate clear opening in the long direction.
◊ SWD: Short Way of Diamond/Design dimension.
◊ SWO: Short Way of Opening dimension.
Used to indicate clear opening in the short direction.
◊ STRAND THICKNESS: Equal to the thickness of the sheet metal being used.
◊ STRAND WIDTH: The amount of metal fed under the dies to produce one strand.
◊ BOND SHEARED: Where two strands intersect, eliminating prongs or jagged edges.
◊ RANDOM SHEAR: This type of shearing leaves prongs or jagged edges.
◊ END RANDOM SHEAR: This type of shearing leaves prongs or jagged edges on the ends.
◊ CAMBER: The maximum distance between the edge of the expanded metal and the straight edge

MICROFORM®



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