

WIRE MESH GLOSSARY

Apparent Percent Opening (APO)

Percent Open Area of a wire mesh that is viewed at an oblique angle.

Area Moment of Inertia

A property of a shape used to predict its resistance to bending and deflection.

Aspect Ratio (AR)

The ratio of the larger pattern repeat distance to the smaller pattern repeat distance. Useful for wire mesh with non-square openings or repeat patterns.

Asymmetric

Any wire cloth fabric woven with a flat top crimp style wire has two surfaces with different textures: a front and a back, or a top and bottom.

Austenitic

Having a particular crystalline structure frequently associated with ferrous metals.

Crimp

The manner in which wire mesh is formed into small folds.

FOB

Acronym for Free on Board, it describes when ownership changes hands when material is shipped.

Galvanize

To coat metal or steel with a layer of zinc. This provides the base material with corrosion resistance.

Gauge

A numerical designation of wire diameters. Many different gauges exist. Use decimals of an inch or mm to designate wire diameter.

Heat Treat

To subject a specific material to controlled heating and cooling in order to change its physical characteristics.

LTL

Less than Truckload. Used to distinguish smaller quantities of freight not heavy enough or large enough to require a dedicated truck.

Mesh to Diameter Ratio (MD)

The wire mesh spacing (center to center) divided by the wire diameter. The MD is used to determine appropriate crimp styles and percent open area.

Mesh Spacing, Mesh Count

The repeat pattern of the woven wire mesh. Defined either as a measured distance expressed in inches, or as the number of openings per lineal inch expressed as a count.

Metallurgy

General science of metals

Mill Certs

Material certification documents

Modulus of Elasticity

An elastic modulus, or modulus of elasticity, is the mathematical description of an object or substance's tendency to be deformed when a force is applied to it. For example, when a light force is applied to a piece of wire, it will deflect differing amounts depending on its material. Aluminum and copper based alloys will deflect approximately three times the amount of steel based alloys. Modulus is different from strength.

Opacity

The degree to which a particular wire mesh is opaque

Patina

A chemical compound formed on the surface of metal

Percent Open Area (POA)

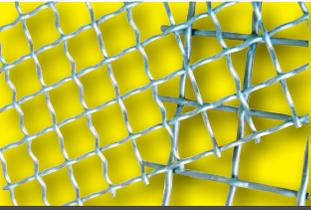
The ratio of the hole area to the total screen area at a 90° angle of incidence to the plane of the material, expressed as a percentage. Percent open area helps in comparing various materials as to how readily a substance, whether it is liquid, air or light, passing through the screen.

Pickling

Immersing metals in a solution to remove surface scale and oxidation.

Scale

The ability to create larger or smaller wire mesh weaves without changing any proportions or crimp styles.



WIRE MESH



Shute (Or Fill Wires)

The wires perpendicular to the direction in which the fabric is being woven.

Stiffness

Resistance to deflection by an applied force. How firm or springy an object feels.

Strength

Measured by how much load a piece of wire mesh can withstand before:

- a) Permanent bending (yield strength)
- b) Breaking (tensile strength)

Striation

A thin line or band, especially one or several close together.

Warp Wires

The wires parallel to the direction in which the fabric is being woven.