



woven wire mesh

metals

we hold stocks of mesh in the following metals:

stainless steel

Withstands temperatures up to 800° C. By far the most popular where strength and durability are of prime importance. All standard meshes are stocked in Type 304 quality, and many are also available in Type 316 which is more resistant to corrosion. Certain other qualities obtainable to special order.

Range: 2-500 mesh and Hollanders.

plain steel

A low price material for use where corrosion resistance is not important. Mostly supplied plain, but certain meshes also available galvanised.

Range: 6-80 mesh.

monel

An alloy of nickel and copper (70/30 approx.) which combines strength with excellent resistance to acids, alkalis, sea water, etc.

Range: 20-250 mesh and Hollanders.

phosphor bronze

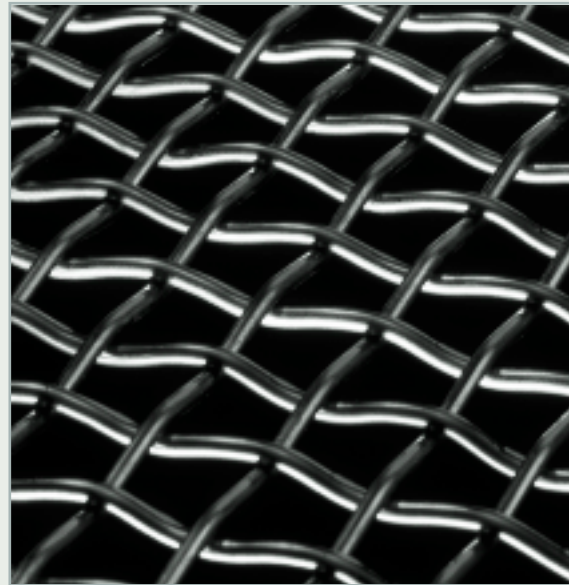
An alloy of copper and tin which is strong and durable and will resist diluted acids and alkalis. Easily soldered.

Range: 30-200 mesh.

brass and copper

Brass, an alloy of copper and zinc, is harder but more subject to corrosion. Copper is less corrodible but, because of its softness, should not be used with abrasive substances. Both are easily soldered.

Range: 8-100 mesh.



definitions

mesh count

The number of apertures or wires in a linear inch. Most meshes are square woven and will have the same count in both warp and weft.

warp

The wires running lengthwise in a roll of mesh.

weft (or shute)

The wires running transversely across the mesh width.

open (or free) area

The proportion of aperture expressed as a percentage of the whole area.

selvedge

The finished edge formed by looped weft wires at either side of the cloth. Some modern shuttleless looms do not produce a looped selvedge.



specifications

choosing a mesh

Any required mesh count can be achieved using a number of different wire diameters, but certain combinations of mesh count and wire diameter have been accepted as standards throughout industry. These are underlined in our mesh table and are generally held in stock.

The combination of mesh count and wire diameter determines the aperture, the open area and the strength of the material. For any mesh, a thicker wire will provide a more robust weave but the aperture and open area will be reduced, giving a slower flow rate to the material passing through. Using a thinner wire the converse will apply.

If a non-standard mesh is required, it can generally be specially woven provided the quantity is sufficient. Our table indicates the range of meshes which are technically feasible. Mesh counts are generally quoted per inch, and lengths and widths are given in metric or imperial.

This contrasts with the continent of Europe where the size of mesh is normally defined by the aperture in mm. or microns rather than the mesh count, and all other measurements are metric.

sizes and shapes

Wire mesh is woven in rolls approximately 30.5m long and generally in widths of 1m or 1.22m, although wider or narrower widths are sometimes available. We can supply any length in the loom width, and other widths can be cut to special order.

Cut pieces of mesh can be supplied to your measurements or templates in any shape and quantity.

prices

Woven wire mesh is priced by the square metre and price varies according to the quantity ordered.

cadisch mesh counter

A precision magnifying instrument enabling mesh count to be checked with ease up to 100 mesh. Full details on request.

screen printing mesh

We can supply fine stainless steel mesh for screen process printing. The mesh is specially selected for its quality of weaving and freedom from blemish, and is ideal where stability and fine definition are paramount, e.g. in printed circuit work. The mesh range normally used is 165-325 plain weave.

(see screen printing section.)

useful formulae

$$\text{aperture (in mm)} = \frac{1}{M} - d$$

where 'M' = mesh count per mm
and 'd' = wire diameter in mm.

$$\text{open area \%} = \frac{a^2}{(a+d)^2} \times 100$$

where 'a' = aperture in mm
and 'd' = wire diameter in mm.

