

# Hall Pyke



## Stainless Steel Mesh Fabrication

**The SMART choice for filtration**

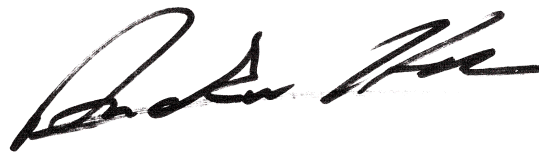
# SMART Choice

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To help you select the right filtration solution for your business Hall Pyke have developed our Smart Choice Catalogue. Use the catalogue to help you navigate through the often difficult and complex decisions about filtration products. The catalogue features just a selection of the filtration solutions Hall Pyke can provide. Your account manager will be happy to discuss your specific needs and answer any questions you may have.

“Having a World Class product range is at the heart of our strategy but it’s delivering first class service, tailored to our unique customer needs that’s the life blood of our organisation.

If both of these things are important to your company then Hall Pyke is the Smart Choice for filtration”.



Andrew Hall, Managing Director



## Mesh Fabrication

Our supplier of meshes BOPP, manufactures a comprehensive and diverse range of medium, fine and ultrafine filter meshes. These are produced using state of the art weaving machines, in clean and air conditioned halls, to the highest levels of quality and reproducibility. Dependent upon requirements, the meshes can be converted into dimensionally accurate components and semi-finished goods, with individual items carefully worked by hand and series production either partly or fully automated using special machinery designed expressly for this purpose.

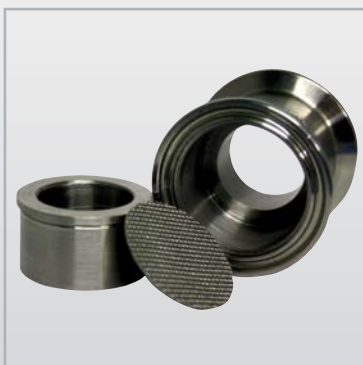
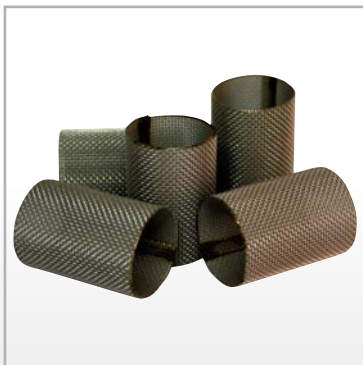
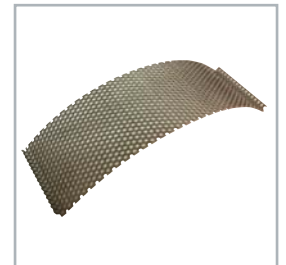
### Laser Cut Panels

By using laser cutting devices Hall Pyke can offer a cutting service for synthetic meshes that allows for a clean sealed edge reducing the chances of lose threads migrating down stream.

### Wedge Wire Elements Made to Order

Wedge wire is a welded steel structure, mainly used for filtration, separation and retention media. Hall Pyke can offer fabrication of sheets or tubes of wedge wire for applications such as run down screens, in-line strainers for pump and nozzle protection, mash filtration, dewatering and many other bespoke designs. Wedge wire has the following advantages:

- **Non-clogging:** the continuous slot formed by the V-shaped surface wires ensures a two-point contact between the particles and the slot, which minimizes clogging.
- **High-precision slot sizes:** Precise slot sizes are available to meet customer requirements.
- **Surface filtration:** the V-shaped surface wires allow easy cleaning by mechanical scraping or back flushing.
- **Low pressure-drop**
- **Strong construction:** for most applications, the wedge wire screen is self-supporting, because of the welding at each intersection.
- **High differential pressure:** because the profiles are welded at every point of contact the wedge wire can work at very high differential pressures and can withstand a lot of abuse during washing and handling.

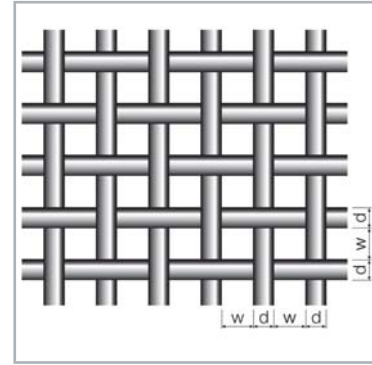


## Mesh Fabrication continued...

### Important Definitions For Sieving Meshes

#### Warp/Weft

The longitudinal direction of a mesh wire is the warp, the transverse direction is the weft. Only stainless steel wires are used, which meet the most challenging requirements in terms of diameter tolerances, yield strength and wire surface.



#### Aperture (W), Wire Diameter (D)

Square woven wire meshes are defined by aperture and wire diameter. The aperture (w) describes the distance between two warp or weft wires. The wire diameter (d) describes the thickness of the wire before weaving. This measurement may alter slightly during the weaving process.

#### Mesh Count

The mesh count describes the number of apertures per imperial inch and is calculated as follows:

$$\text{Mesh Open Area } A_o = \left( \frac{25.4 \text{ mm}}{w \text{ (mm)} + d \text{ (mm)}} \right)^2 \times 100\%$$

e.g. w = 0,050 mm, d = 0,030 mm,  $A_o = 39\%$

#### Mesh Open Area ( $A_o$ )

Mesh open area describes the total of all apertures as a percentage of the mesh surface.

$$\text{Mesh} = \frac{25.4 \text{ mm}}{w \text{ (mm)} + d \text{ (mm)}}$$

#### Materials

Our main material is stainless steel to DIN 1.4301 (AISI 304) or DIN 1.4401 (AISI 316). Other specifications are available in chrome steel to DIN 1.4016 (AISI 430).

#### Nutsche plates repair / replace

Hall Pyke offers a specialist service for:

- Supply of new filter plates to individual customer specifications
- Re-meshing of existing filter plates
- Range of designs to suit different applications/environments
- Extensive selection of filter cloths in all types and weaves available ex-stock

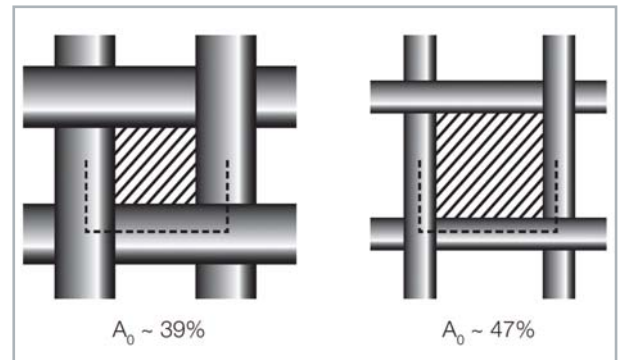
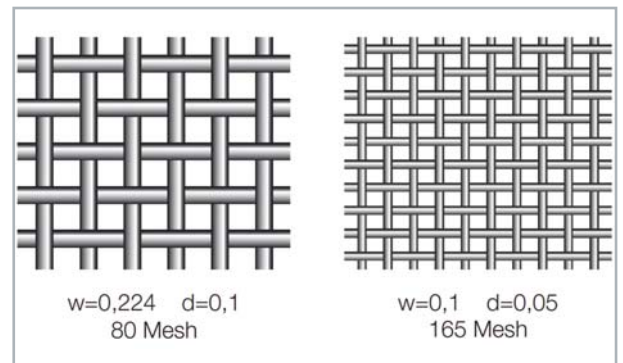
Fast turnaround remeshing service includes collection from and delivery to customer premises using our own specialist transport.

Hall Pyke offer a repair service for Nutsche filters used predominantly in the chemical and pharmaceutical industries.

Nutsche Filters perform a range of demanding tasks in these industries, and downtime for repairs can be costly in terms of both materials and lost production.

Hall Pyke provide an expert repair facility, designed to ensure the equipment is up and running to specification quickly and reliably.

All repairs are carried out using precision, high quality sintered materials produced in Switzerland by our supplier G Bopp & Co AG.



#### Screen Re-Meshing

Hall Pyke tension bonding service is one of the best in the market today offering full traceability on all parts used. Using G.Bopp a Swiss wire weavers st/steel woven mesh we can offer three mesh options ISO9044, ISO3310 or Bopp SI quality mesh. Bopp SI standard is one of the highest in the world and in conjunction with our adhesives to ISO10933 our service and traceability is second to none.

Hall Pyke also offers a bespoke frame and mesh fabrication service.



# Hall Pyke



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