

# Pressure vessel bags

Utilising a bag filter meets the special requirements associated with high flow rates, high viscosity, high temperature and is an economical method of filtering a liquid where the solids content is less than 250 parts per million (ppm).

Two media types are used in the manufacture of most pressure vessel bags: needle felt and monofilament.

Needlefelt bags are a non woven composition of fibres designed to trap particles within the matrix and throughout the depth of the media. Felts used for pressure vessel bags are almost exclusively manufactured from either polyester or polypropylene.

Both have a broad chemical compatibility but have different temperature capabilities. Polyester will typically operate up to 135 °C while Polypropylene will operate up to 90 °C. *(Temperature capabilities will vary depending on chemical type and concentrations. see charts for bag dimensions and micron sizes available).*

Monofilament bags are manufactured from precision woven fabrics, typically Nylon or Polyester however; Polypropylene can also be used in some instances. These fabrics are woven from single strands of thread and offer a more consistent pore sizes and greater mechanical strength than that of a felt.

Monofilament fabrics have no depth filtration capability and all filtration is at the surface of the bag. In many applications, monofilament bags can be cleaned and reused.

Nylon has good Alkali resistance but limited acid resistance with a maximum temperature of approximately 110 °C. Polyester will typically operate up to 135 °C while Polypropylene will operate up to 90 °C. *(Temperature capabilities will vary depending on chemical type and concentrations. See charts on pages 24 - 26 for bag dimensions and micron sizes available).*

