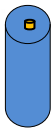
CARTRIDGE PRODUCT LIST

All dimensions are approximate due to slight variations in the cellulose paper, atmospheric conditions during manufacture, and carriage and storage, actual size may vary up to +/-4mm. This has no adverse effect to the cartridge performance or installation. All boxes and individual cartridges contain spare lid seals for filter housings. Cartridges filter fineness of 1µm nom, 3 µm absolute. Temperature operating range 0-135°C , +/- 5°C. The stated volumes of oil are only relative to installation of single filter housing. All cartridges are protected by a nylon outer cover with pressed brass ring holder. On installation the brass ring must be facing upwards. Products may vary slightly from pictures shown.

All cartridges are packed individually in polythene bags and are boxed. Each box contains replacement lid seals. Cartridges must be stored in a dry area. Moisture will affect the cartridges water holding capacity. Particulate contamination in accordance with BS 5540 part 4: 1981 and ISO/DIS 4406. ISO equivalent to NAS 1638 class 6 - hydraulic oil specification.

Code 1858 Micro Cartridge. Supplied as a carton of 12. Fits Code 9758 Micro Duty Filter Unit. Tightly wound filter media. Max temp 125°C Dirt retention capacity: approx. max 150 g solid particles and approx max 95 ml water.
Suitable for all types of engine oils and can also be used on diesel fuel and light hydraulic oil up to 32 viscosities

For installation on small cars, light commercial vehicles and vans, small generators, forklifts and 4WD's. Used mainly for Engines with Sump Capacity of 3 gal / 16 litres. Suitable for installation in confined spaces.



Code 1868 Light Duty Filter Cartridge Supplied as a carton of 12. Fits Code 9768 Light Duty Filter Unit. Tightly wound filter media. Max temp 125°C. Dirt retention capacity: approx. max 600 g solid particles and approx max 230 ml water.
Suitable for all types of engine oils and can also be used on diesel fuel and light hydraulic oil up to 32 viscosity

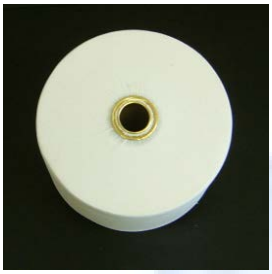
Applied to small Commercials, generators, forklifts, 4WD's. Diameter: 103mm Height: 105mm Used mainly for Engines with Sump Capacity of 3 gal / 16 litres

OIL FILTRATION SOLUTIONS FOR INDUSTRY
Website www.fa-st.co.uk www.oilfiltration.co www.howcleanisyouroil.com
FA-ST Filtration Analysis Services Technology Ltd.
Unit 4 Foxwood Road, Dunston Trading Estate, Chesterfield, Derbyshire, S41 9RF
Tel: 01246268900 Fax: 01246268904 E-Mail: sales@fa-st.co.uk
Co Reg No: 5525184 Vat Reg No: GB 843 0628 38

Code 1878 Heavy Duty Filter Cartridge. Supplied as a carton of 12. Fits Code 9778/9778H/9778UMZ Heavy Duty Filter Unit. Tightly wound filter media. Max temp 125°C. Dirt retention capacity: approx. max 1.200 g solid particles and approx max 870 ml water.

Suitable for all types of engine oils and can be used on diesel fuel and hydraulic oil up to 46 viscosity

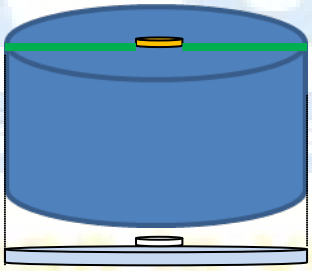
Applied to General Commercials, and Heavy Industry. Diameter: 143mm Height: 105mm For Engines with Sump Capacity of 9 gal / 40 litres or hydraulic systems with tanks up to 120 gallons/ 540 litres



Code 1888H Super Duty Filter Cartridge. Supplied as a carton of 6. Fits Code 9788/9788H/9788UMZ Super Duty Filter Unit. Applied to large mobile plant & industrial equipment. Tightly wound filter media, and 1 x 1 micron 2mm base layer and handles. Dirt retention capacity: approx max 2500grms and approx max1000mls water.

For light oils and diesel fuels from 2 to 46 viscosity at cold 0°C and ambient 23°C temperature and also for warm/hot oils up to 120 viscosity and 125°C

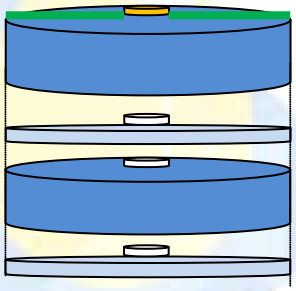
Diameter: 198mm Height: 105mm Used for Engines with Sump Capacity of 18 gal / 90 litres or hydraulic systems with tanks up to 300 gallons/ 1360 litres



Code 1888SPT Super Duty Filter Cartridge. Supplied as a carton of 6. Fits Code 9788/9788H/9788UMZ Super Duty Filter Unit. Applied to large mobile plant & industrial equipment. Tightly wound filter media in 2 layers separated by a 1 micron 2mm spacer, and 1 x 1 micron 2mm base layer and with handles. Dirt retention capacity: approx max 2500grms and approx max 1000mls water.

For use on lighter oils and diesel fuels 2-46 viscosity at cold 0C and ambient 23C temperatures or for use on engines and oils operating at higher temperatures up to 125°C

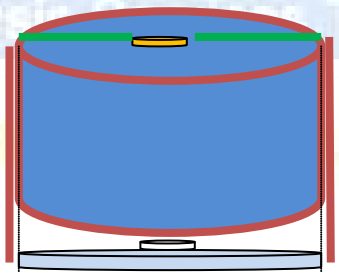
Diameter: 198mm Height: 105mm Used for Engines with Sump Capacity of 18 gal / 90 litres or hydraulic systems with tanks up to 300 gallons/ 1360 litres



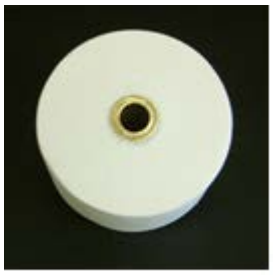
Code 1888SH Super Duty Filter Cartridge. Supplied as a carton of 6 Fits Code 9788/9788H/9788UMZ Super Duty Filter Unit. Applied to large mobile plant & industrial equipment) Tightly wound filter media, and 1 x 1 micron 2mm base layer and cardboard outer sleeve with handles. Dirt retention capacity: approx 2500grms and approx 1000mls water.

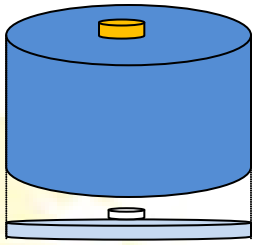
For all types of oils and fuels at all temperatures. Particularly suitable for high viscosity hydraulic and gear oils up to 460 viscosity and temperature up to 125°C

Diameter:198mm Height: 105mm Used for Engines with Sump Capacity of 18 gal / 90 litres or hydraulic systems with tanks up to 300 gallons/ 1360 litres

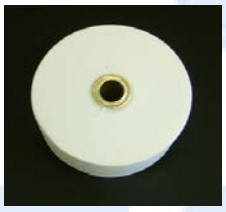


Code KF65 Super Heavy Duty Filter Cartridge. Supplied as a carton of 6. Fits Code KU65 Super Heavy Filter Unit. Mainly suitable for large commercial engines on buses, trucks and mobile plant. Can also be used as a hydraulic filter. Tightly wound cellulose filter media and 1 x 1 micron base layer. May be supplied with or without handles as KF65 or KF65H. Diameter: 175mm Height: 98mm For Engines with Sump Capacity of 9 gal / 40 litres or hydraulic systems with tanks up to 120 gallons/ 540 litres

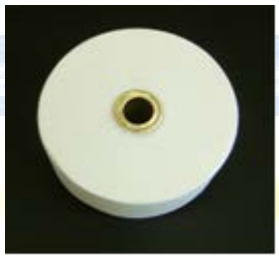


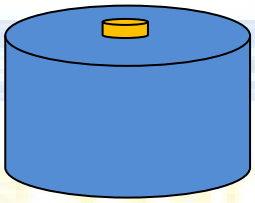


Code 2078PP Heavy Duty Polypropylene Cartridge. Supplied as a carton of 12. Fits Code 9778 Heavy Duty Filter Unit. (For emulsified fluids & water glycol in heavy industry) For filtering water and water based oils and glycols. Diameter:143mm Height: 105mm. Used for tanks up to 120 gallons/ 540 litres



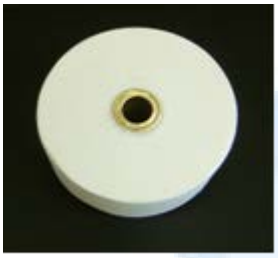
Code 2088PP Super Duty Polypropylene Cartridge. Supplied as a carton of 6 Fits Code 9788 Super Duty Filter Unit. (For emulsified fluids & water glycol in heavy industry Heavy) For filtering water and water based oils and glycols. Diameter:198mm Height: 105mm. Used for tanks up to 300 gallons/ 1360 litres

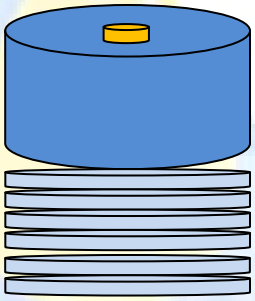




Code 2088PP6 Super Duty Polypropylene Cartridge. **Supplied as a carton of 6** Fits Code 9788 Super Duty Filter Unit. (For emulsified fluids & water glycol in heavy industry) High efficiency micro filtration for filtering water and water based oils and glycols to NAS CLASS 5. Diameter: 198mm Height: 105mm. Used for tanks up to 300 gallons/ 1360 litres

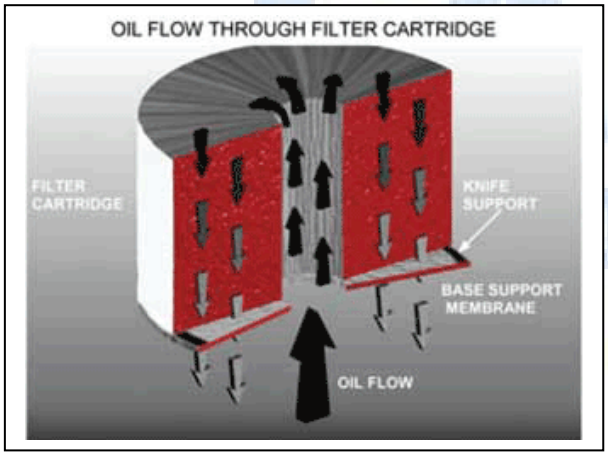
These cartridges are made to order and are particularly useful for filtering Skydrol type oils. Alternative seals for oil compatibility are required and oil type must be specified prior to ordering. Filter rigs may need the seals changing in pumps etc. before using on certain types of oils.

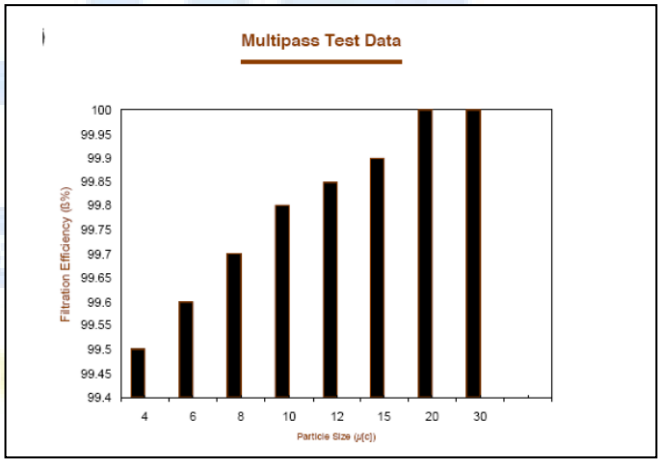




Additional Information

Based on the multi-pass method for evaluating filtration performance according to ISO 16889 (1999).
The results have been presented after 8 hours of operation. With the ability to remove water, the cartridge is designed to perform at below 4 micron absolute on a minimum of 5 passes.





FILTER CARTRIDGE INFORMATION part number 1888H, 1888S, 1888SH, 1888SPT

Filter cartridges are rated at 3 micron absolute and will filter to 1 micron based on multi-pass operation ISO 4572, using ACFTD (AC Fine Test Dust) and will remove up to 1litre of water per cartridge and up to 2 kgs of dirt. The average life span under standard operating conditions is 250-300 hours of continuous use.

Filtration Level: Particulate contamination in accordance with BS 5540 part 4: 1981 and ISO/DIS 4406. ISO equivalent to NAS 1638 class 6. (Hydraulic oil specification)

The Super Duty Filter Cartridge is a depth cartridge made of long fibre cellulose with a full diameter polyester protection disc. The filter is covered with nylon and encased in an outer tube which forms an integral part of the cartridge. The cartridge can be used on all pure oil based products such as hydraulic, engine and gearbox oils. The filtration is carried out at low pressures, off-line, cartridge pressures are controlled between 1 and 4 bar with a 8 bar maximum.

Action of Cartridge

The filter cartridge acts by absorption and adsorption in a continuous recycling process. The long cellulose fibres attract the water formed either through the combustion process or by condensation and absorb it like a sponge, whilst at the same time rejecting the larger oil molecules which are forced to pass between the tight windings of the cartridge. Thus the cartridge, by removing water inhibits the production of acids. As the oil passes through the cartridge, minute particles of carbon, wear metals and silicon are extracted from the oil by adhering to the many surfaces of the filter. Through the continuous removal of water and contaminants the catalysing effect of the oil additives will be prevented, enabling the oil life to be extended within the original specification laid down by the manufacturer. The additional extension of oil life will be dependent upon the operating conditions and maintenance programme applicable to the machine.

Additives

While the filter is extracting the water and contaminants it is continuously safeguarding the desirable elements (additives) compounded within the oil itself. These typically include, dependent on use, dispersants, VI improvers, lubricity agents, fungicidal, anti foaming and gelling additives. These additives are held in suspension and their levels can be critical if the oil is to maintain its beneficial effect. The filter will not remove these additives but enhances their life by the removal of contaminants which cause them to be activated.

Disposal

Used cartridges should be disposed of in accordance with local regulations and are made from fully combustible materials.

Cartridge Change Intervals

Taking into consideration the high dirt and water retention capacity, the filter change intervals can be individually determined according to the contamination and volume of the oil With a normal machine installation the recommended cartridge change frequency is 500 operating hours or 6 months whichever comes first. Where the machine operates in adverse conditions this change frequency should be reduced to 250 operating hours. The maximum life of the cartridge is 6 months.

Oil Throughput

Throughput levels are dependent on viscosity, temperature, degree of contamination and oil pressure. However, as a guide: ISO 46 grade hydraulic oil at 40 degrees centigrade with a 3 bar inlet pressure the flow rate is approximately 6 litres per minute (single filter housing) mounted on by pass to a machine.
Higher flow rates from 12 to 40 litres per minute on filter rigs.

Operating Temperature

The cartridge will operate within the operating specification of engine, hydraulic and gearbox oils –10 to +95 centigrade.

Storage

Cartridges must be stored in a dry area and kept sealed within their poly bags. Once opened the cartridge will begin to absorb moisture from the surrounding atmosphere. To increase water holding capacity remove from the poly bag and place the cartridges in a warm room, next to a heat source e.g. radiator for approx 1 hour

All cartridges are manufactured 'in house' and are hand finished and inspected to ensure complete compatibility with the filter units. Each cartridge is individually bagged and each box is supplied with replacement O ring seals for the filter lids.