



FILTRATION SOLUTIONS SUPACLEAN SYSTEM





SupaClean Filter System

In many industries where hazardous materials are processed there is a continuous challenge to protect the operator and working environment. In other industries such as paints and coatings manufacturers there is a need to avoid cross contamination between different products. The use of filtration in these applications present particular challenges, especially when filters are replaced or different products are processed.

To help filter users meet these challenges Amazon Filters is introducing its new contained filtration system - the **SupaClean** Filter. This system consists of either 1, 3 or 7 of our standard filter cartridges enclosed inside two sealed plastic bags. This results in the filters and any process fluids being contained inside a secure assembly, providing isolation of the product and filters. The whole system is used inside a stainless steel housing which provides the pressure vessel required for the filtration process.



Amazon Filters is able to supply housings and filter assemblies for new applications or for existing applications **SupaClean** systems can be typically used as a direct retrofit.

Secure and Robust Design

In the development of **SupaClean** assemblies Amazon Filters has paid particular attention to ensure the bags providing containment are reliably sealed into the system.

We aim to ensure the users do not suffer the inconvenience, cost or hazard that may result from bags separating from the rest of the assembly. Careful design, precise manufacturing and extensive validation testing have ensured that the plastic bags enclosing the filters and product remained attached even when full of liquid.



Replace this...



With this...



Key Features and Benefits of SupaClean Systems

• **Flexibility** - The design of the **SupaClean** system enables the use of a wide range of filter type, micron ratings and sizes, including :-

VisClear	Spun bonded cartridge manufactured with nylon media specifically designed to operate in the chemical processing and liquid coatings industries. Manufactured using Amazons unique fibre processing system, they offer controlled performance and minimal fibre shed.
SupaSpun II	Precision graded density depth filters in Polypropylene or nylon media. These absolute rated high performance cartridges excel in dirt holding capacity and give extremely low clean pressure losses as a result of the strictly controlled manufacturing of the fibre matrix.
SupaGard	Nominal rated spun bonded filter cartridges. These elements exhibit a high void volume that results in low clean differential pressure losses and an excellent dirt holding capacity when compared to similarly rated elements.

• **Reduced operational costs** - Filter change-out is quick and simple. The filter assembly can be simply lifted out of the housing and replaced by a new unit. No cartridge sealing or housing cleaning are required so labour costs and time are minimised.

• **Reduced quality problems** - The filter unit is supplied already assembled thus eliminating the risk of operators not installing filters correctly and filter by-pass occurring.

• **Operator and environmental protection** - The **SupaClean** system provides containment for both the used filters and the product being filtered. Therefore filter change-out can be achieved with minimal risk of the operator or the surrounding area coming into contact with the product.

• **Elimination of cleaning** - The plastic bags encasing the system prevent the product being filtered from contacting the system housing. Therefore the housing remains uncontaminated and requires no cleaning. This is particularly valuable in multi-product operations, especially where inks, paints and coatings are being processed. In these applications using a conventional filtration system would require the use

of significant volumes of solvent to clean the housing after use.

• **Filter re-use** - The bags surrounding the filter cartridges can also serve as containers for storing filters where re-use is attractive. A typical example of this is a high value inks plant producing multiple colours in small batches on an infrequent basis. Filters contaminated with one colour can not be used for other colours, but the assembly can be labelled and stored for re-use next time a particular colour is produced.

• **Higher pressure and temperature compatibility than capsules** - Due to safety concerns standard capsule filters have limitations on process conditions they can be operated under. **SupaClean** filters are encased within a stainless steel housing providing enhanced safety and enabling the system to be operated in more demanding processes when compared to standard capsule filters.

Typical Applications

SupaClean systems are particularly suited to applications where cross batch or cross product contamination is a major issue or where hazardous

materials are being processed.

Typical applications include:-

- Paint systems in automotive production
- Equipment painting and coating systems
- Ink and paint manufacturing
- Coatings production
- Manufacturing of volatile solvents
- Chemicals production
- Multi purpose production and filling lines.



Technical Data

Maximum Operating Conditions

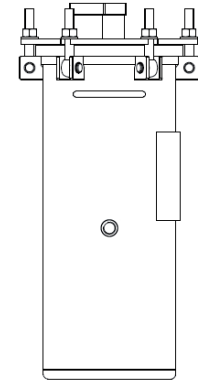
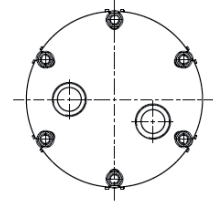
Temperature: 70°C
 Maximum Differential Pressure: 2.5 Bar

Materials of Construction

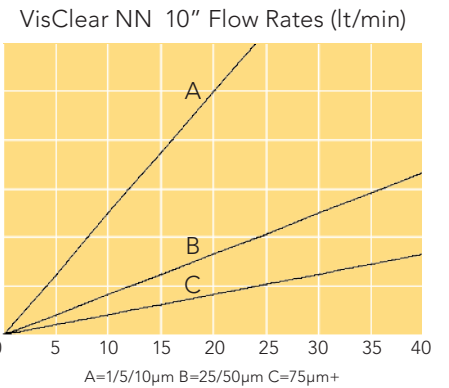
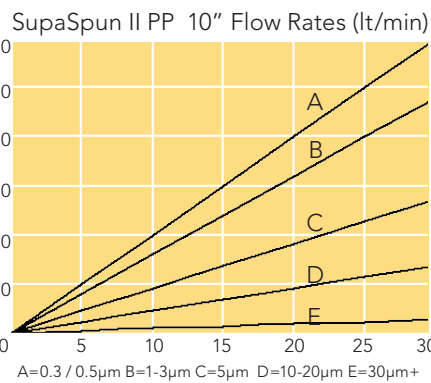
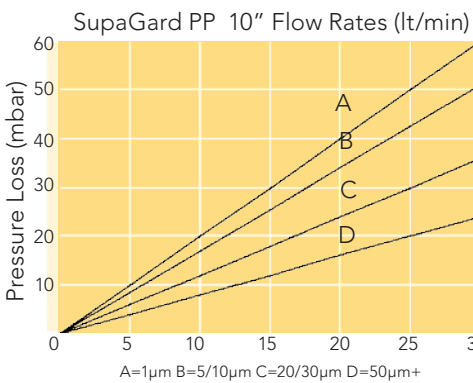
Manifold: Polypropylene
 Containment Bag: Anti Static Polyethylene (other materials available on request)

Product Validation Guides for media content are available on request.
 Technical information for the 65 Series SupaClean housings showing dimensions, volume, maximum design temperatures and design pressures are available on request.

Housing suitable for SupaClean units



Maximum Δp	2504 / 2507 PP Media PP Core	2504 / 2507 PP Media GFPP Core	2504 / 2507 P P Media St.St Core	2504 / 2508 Nylon Media Nylon Core	2508 Nylon Media Tinned / St.St Core
@ 20°C	4.0	4.0	4.0	4.0	4.0
@ 50°C	1.5	4.0	4.0	4.0	4.0
@ 70°C	0.25	2.4	4.0	1.0	4.0



AMAZON FILTERS LTD.

Albany Estate, Camberley, Surrey, GU16 7PG, ENGLAND

Tel. +44 (0) 1276 670 600 Email. sales@amazonfilters.co.uk Web: www.amazonfilters.co.uk

AMAZON FILTERS LTD reserve the right to change specification without prior notice, as part of their continuous product development programme.

CS - Issue 03