Filtration Products by 3M
Product Portfolio for Purification
Our **Expertise**  
**Engineering in Filtration**  

**Expertise - Experience - Flexibility - Innovation**

3M Purification’s Engineering department comprising of experienced engineers and technical specialists, is available to analyse every specification detail for designing customised solutions for each specific application.

**Scientific Application Support Services**

The cornerstone of 3M Purification’s philosophy is service to customers, not only in product quality and prompt delivery, but also in validation, application support and in the sharing of scientific information.

3M Purification’s Scientific Applications Support Services works closely with customers to solve difficult filtration challenges and to recommend the most efficient, economical filter system. SASS specialists can perform on-site testing and utilise filtration applications expertise to partner with customers.

3M Purification resolves filtration problems promptly and efficiently in a cost-effective, confidential manner.

**Efficient & Economic filtration Solution from a World Leader in Purification**

**3M Purification Core technologies:**
Membranes, Depth filters, Cleanable Filters, Housings, Engineered Filtration System

**3M Purification Service Worldwide:**
Branch offices and approved distributors, SASS : Application support group for each market

**3M Purification Worldwide operations:** ISO certified plants
# Industrial & Life Science Product Overview

<table>
<thead>
<tr>
<th>LifeASSURE™</th>
<th>PFS &amp; MFE Series</th>
<th>BA, BNA &amp; BDA Series</th>
<th>ER &amp; EF Series</th>
<th>020SA, 020SP, 045SP &amp; 020ST Series</th>
<th>BLA &amp; PLA Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Formerly known as Microfluor.</td>
<td>• PTFE pleated media</td>
<td>• Absolute ratings at 0.2 μm.</td>
<td>• Formerly known as Electropor.</td>
<td>• Formerly known as LifeASSURE.</td>
<td></td>
</tr>
<tr>
<td>• PTFE pleated media</td>
<td>• Absolute ratings at 0.2 μm.</td>
<td>• Charge modified (or non) Nylon 6.6 technology.</td>
<td>• Multi-zone microporous membrane and Advanced Pleat Technology (APT) design.</td>
<td>• Multi-zone microporous membrane combined with Advanced Pleat Technology (APT).</td>
<td></td>
</tr>
<tr>
<td>• Sterile filtration of air, gases and solvents.</td>
<td>• Multi-zone microporous membrane and Advanced Pleat Technology (APT) design.</td>
<td>• Ratings from 0.04 μm to 0.8 μm.</td>
<td>• Exceptional performance of final Nylon 6.6 membranes.</td>
<td>• Exceptional performance of final Nylon 6.6 membranes.</td>
<td></td>
</tr>
<tr>
<td>• Filtration area from 0.17 to 4.08 m².</td>
<td>• Filtration area from 0.17 to 4.08 m².</td>
<td>• Sterile filtration.</td>
<td>• Extended life time.</td>
<td>• Extended life time.</td>
<td></td>
</tr>
<tr>
<td>• Validation guide – DMF.</td>
<td>• Validation guide – DMF.</td>
<td>• Filtration area from 0.17 to 4.08 m².</td>
<td>• Filtration area from 0.17 to 4.08 m².</td>
<td>• Filtration area from 0.17 to 4.08 m².</td>
<td></td>
</tr>
<tr>
<td>• Available as capsules or cartridges.</td>
<td>• Available as discs, capsules or cartridges.</td>
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<td>• Available as discs, capsules or cartridges.</td>
<td></td>
</tr>
</tbody>
</table>

## Electronics
- LifeASSURE MFE Grades 0.2, 0.1 & 0.05 μm
  - Acids, solvents, strippers,
  - Ultra Pure Chemicals,
  - Photoresists,
  - Tank venting, Gas filtration
- LifeASSURE EF
  - From 0.45 μm to 0.04 μm
  - Ultra Pure Water,
  - Photoresists,
  - Solvents
- LifeASSURE ER
  - Solvents and reagents
- Sterile fluids
- Sterile fluids

## Power Generation
- Polymers,
  - Inorganic solutions,
  - Corrosives products,
  - Aggressive solvents,
  - Tank venting
- LifeASSURE PLA
  - Antibiotics, Diagnostics,
  - Growth Media,
  - Process Water, Vaccines,
  - Blood fractionation
- LifeASSURE PLA
  - Solvents,
  - Process Water

## Chemicals
- LifeASSURE 020SP, 045 SP
  - Solvents,
  - Process Water
- LifeASSURE PLA
  - Ophthalmics,
  - Parenterals (LVP, SVP),
  - Process Water

## Oil & Gas
- Tank venting,
  - Sterile compressed air & gases
- LifeASSURE BLA
  - Pre & Final Filtration,
  - Wine, Beer, Bottled Water,
  - Fruit Juice, Soft drinks,
  - Other beverages

## Paint & Coatings
- General Industrial
  - Tank venting,
  - Sterile gas filtration
  - LifeASSURE 020SP, 045 SP
  - Final Filtration,
  - Beer, Wine,
  - Bottled Water,
  - Water in Food processing

## Biotechnology
- Tank venting,
  - Sterile compressed air & gases
- LifeASSURE 020SP, 045 SP
  - Pre & Final Filtration,
  - Tank venting,
  - Sterile gas filtration
- LifeASSURE BLA
  - Pre & Final Filtration,
  - Wine, Beer, Bottled Water,
  - Fruit Juice, Soft drinks,
  - Other beverages

## Fine Chemicals & Cosmetics
- Tank venting,
  - Sterile compressed air & gases,
  - Acids & bases
- LifeASSURE BLA
  - Pre & Final Filtration,
  - Wine, Beer, Bottled Water,
  - Fruit Juice, Soft drinks,
  - Other beverages

## Pharmaceuticals
- Tank venting,
  - Sterile compressed air & gases
- LifeASSURE BLA
  - Pre & Final Filtration,
  - Wine, Beer, Bottled Water,
  - Fruit Juice, Soft drinks,
  - Other beverages

## Food & Beverage
- Tank venting,
  - Sterile compressed air,
  - Nitrogen filtration
- LifeASSURE PLA
  - Antibiotics, Diagnostics,
  - Growth Media,
  - Process Water, Vaccines,
  - Blood fractionation
- LifeASSURE BLA
  - Final Filtration,
  - Beer, Wine,
  - Bottled Water,
  - Water in Food processing
## LifeASSURE™ Product Overview

<table>
<thead>
<tr>
<th>PDA Series</th>
<th>PSA Series</th>
<th>PSN Series</th>
<th>PNA Series</th>
<th>EMC &amp; IMC Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formerly known as BioASSURE.</td>
<td>Formerly known as SterASSURE.</td>
<td>Formerly known as PhotoSHIELD.</td>
<td>Assymetric polyethersulfone membrane combined with Advanced Pleat Technology (APT) design.</td>
<td>Multi-zone microporous membrane combined with Advanced Pleat Technology (APT) design.</td>
</tr>
<tr>
<td>High throughput and fast flow applications.</td>
<td>Available in 0.1 and 0.2 µm absolute rating in Cartridge, Mini Cartridge and Capsule format.</td>
<td>High efficiency contaminant removal at 0.04 µm, 0.1 µm or 0.2 µm micron ratings.</td>
<td>Filtration flexibility.</td>
<td></td>
</tr>
<tr>
<td>Validated 0.2 µm absolute rate.</td>
<td>Nylon 6.6 membrane in an all-polypropylene construction validated and DMF.</td>
<td>Filtration area from 0.16 m² to 1.04 m².</td>
<td>Available in 0.2 µm, 0.45 µm, 0.65 µm and 0.8 µm.</td>
<td></td>
</tr>
<tr>
<td>Available in gamma-compatible and sterile formats.</td>
<td></td>
<td>Available as 50 mm capsules, capsules or cartridges.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Electronics
- Photoresists, Ancillary Chemicals
- Developers, Etchants & Stripper, Solvents
- LifeASSURE EMC Fine Chemicals

### Power Generation
- LifeASSURE IMC Fine Chemicals

### Chemicals
- LifeASSURE IMC Fine Chemicals

### Oil & Gas
- LifeASSURE IMC Jet Ink

### Paint & Coatings
- LifeASSURE IMC Utilities

### General Industrial
- Biologicals, Cell Culture, Chromatography column protection, Vaccines, Media & Fermenter feed streams, High protein feed streams, Serum & Blood fractionation
- Biologicals, Cell Culture, Chromatography column protection, Vaccines, Media & Fermenter feed streams, High protein feed streams, Serum & Blood fractionation
- Fermenter feed streams, Serum & Blood fractionation, Biologicals, Diagnostics, Chromatography column protection, Cell Culture

### Biotechnology
- Ophthalmics, Parenterals (LVP, SVP), Bulk pharmaceutical chemicals, High purity DI water & WFI systems, Orals & Topicals
- Ophthalmics, Parenterals (LVP, SVP), Reagents & Buffers, Bulk pharmaceutical chemicals, High purity DI water & WFI systems, Orals & Topicals
- Ophthalmics, Large Volume Parenterals (LVP), Reagents & Buffers, Bulk pharmaceutical chemicals, High purity DI water & WFI systems, Orals & Topicals

### Fine Chemicals & Cosmetics
- Solvent filtration
- Solvent filtration

### Pharmaceuticals

### Food & Beverage

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*Lenntech*
### NanoSHIELD™

<table>
<thead>
<tr>
<th>NanoSHIELD Series</th>
<th>MKCA Series</th>
<th>RB Series</th>
<th>D Series</th>
<th>RT, RC &amp; RW Series</th>
<th>RP Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Hollow Fibre Technology (HFT). Polypropylene and Polyethylene construction.</td>
<td>• Formerly known as Micro-Klean. Acrylic/cellulose fibres &amp; Phenolic/melamine resin.</td>
<td>• Formerly known as Micro-Wynd Polypropylene (or cotton) media.</td>
<td>• Formerly known as PolyKlean. All propylene depth filter.</td>
<td>• Rigid all propylene depth filter. Advanced graded porosity design.</td>
<td>• Rigid all propylene depth filter. Advanced graded porosity design.</td>
</tr>
<tr>
<td>• Superior flow with minimal pressure drop and highest level of filter efficiency in compact design. Available in capsules and cartridges.</td>
<td>• Pre and post filtration, including a Micro-Klean RB Series cartridge.</td>
<td>• Exclusive process which combines blanket media and wound matrix (yarn). Available in cartridges from 10&quot; to 40&quot;.</td>
<td>• Formerly known as Micro-Kwynd Polypropylene (or cotton) media.</td>
<td>• Grooved cartridge with extended surface area. Coreless filter structure. Nominal ratings are 5 μm, 25 μm and 50 μm.</td>
<td>• Grooved cartridge with extended surface area. Coreless filter structure.</td>
</tr>
<tr>
<td>• Available in capsules and cartridges.</td>
<td></td>
<td>• Nominal rating from 1 to 75 μm. Available in cartridges from 9 ¼&quot; to 40&quot;.</td>
<td></td>
<td>• Continuous integral length filter element up to 40&quot; length.</td>
<td></td>
</tr>
</tbody>
</table>

### Micro-Klean™

- Photoresist, Etchants & strippers, Alcohols, Bases, Developers, Solvents
- Potable water, Dechlorination
- Galvanic baths, pre-filtration (PCB)
- Electrolytic baths, First water prefilteration
- PCBs, CMP Slurry Manufacturing, FPD, TFT-LCD, Pre-RO, CD/DVD
- Cooling water, Lubricant fluids
- Waste water
- Condensate water treatment
- Chemicals pre-filtration, Fatty acids, Organic solvents, Raw Materials
- Acids prefiltration, Process water, Alcohols, solvents
- PE-PP, Intermediate grade, Chemicals, PVC-VCM, Herbicides, Pesticides
- Hydrocarbons, Fuels, Waxes, Process water, Waste water
- Refined products prefiltration, Aggressive solvents
- Amines & Glycols, Pretreatment in wastewater, Process cooling water, Completion fluids
- Paint or varnish pre-filtration, Solvent recovery, Resin pre-filtration
- Resin manufacturers (water & solvents), Trade & architectural paints, Ink
- Cutting oils, Hydraulic fluids, Waste water, Detergents, Grease
- Metalisation bath, Waste water
- Plating, De-salination Plants, Pulp & Paper, Additives, Process cooling water, Parts washing, Peroxide, Mechanical Seals
- Dechlorination, Effluent treatment
- Dechlorination
- Dechlorination
- Dechlorination
- Dechlorination
- Beverage prefiltration, Process water
- Soft drinks, Bottled water, Ready-to-drink beverages, Juice
- Bottled Water, Ready-to-Drink Beverages, Dairy Products, Juices, Soft Drinks, Process & Blending Water
**Industrial & Life Science Product Overview**

<table>
<thead>
<tr>
<th>AU Series</th>
<th>NT-P &amp; NT-TE Series</th>
<th>BK-Z8 &amp; BK-Z2 Series</th>
<th>PK Series</th>
<th>CMP Series</th>
</tr>
</thead>
</table>
| • Formerly known as Betapure.  
• Polypropylene (or polyester) media.  
• Bi-component fibre technology.  
• Depth filtration.  
• Micron rating from 2 μm absolute to 200 μm nominal.  
• Classification effect.  
• Available in cartridges from 10” to 40” integral length and capsules. | • Formerly known as Beta-Klean.  
• Acrylic-cellulose fibres & Phenolic/melamine resin.  
• True grade porosity filters.  
• Depth media.  
• Absolute rating from 0.3 to 50 μm.  
• Available from 4” to 30” as cartridge or capsule. | • Formerly known as Petro-Klean.  
• Polypropylene depth media.  
• High flow rates & dirt holding capacity.  
• 0.5 to 70 μm absolute rating.  
• Classification effect.  
• Available in cartridges from 10” to 40”. | • Formerly known as Beta-Klean.  
• Polypropylene depth media.  
• High-capacity depth filter.  
• Multi-zone graded-porosity design.  
• Absolute rating from ‘10 to 60 μm.  
• Available in cartridges from 10” to 40”. | • Formerly known as Optima.  
• All polypropylene filter.  
• True grade porosity filters.  
• Cellulose fibres & melamine resin.  
• Depth media.  
• Absolute rating from ‘10 to 60 μm.  
• Available in cartridges from 10” to 40”. |

**Electronics**

- Polyolefin range  
  - Demineralised water, Solvents, Effluents
- NT-TE Grade  
  - UPW per RO, CMP slurries, emulsions, Etching baths, Metalisation baths, Acids, cooling water
- Pre Reverse osmosis, Etching bath

**Power Generation**

- Polyolefin range  
  - Process water, Equipment protection
- NT-TE Grade  
  - Stator cooling water, Waste water, Effluents, Condensate water
- Cooling water, Condensate water

**Chemicals**

- Polyester range  
  - Aggressive solvents
- NT-TE Grade  
  - High Purity Chemicals, Acids, bleach, Polymers (PP, PE, ...), Process water
- Acids, Caustic solutions, Solvents, Final Product
- Monomers, Polymers, Solvents

**Oil & Gas**

- Polyolefin & Polyester range  
  - Waterborne or solvent paints, Car paints - Varnish, top coat, metalics, mica - Can & coil coatings, inks, special papers
- NT-TE Grade  
  - Amines, glycols, Refined products
- Refined products, Jet fuel, Waxes
- Amine sweetening, Glycol dehydration, Refined products, Solvents, Process water, Gas Filtration

**Paint & Coatings**

- Polyolefin & Polyester range  
  - Waterborne or solvent paints, Car paints - Varnish, top coat, metalics, mica - Can & coil coatings, inks, special papers
- NT-TE Grade  
  - Special coatings (paper, film), Magnetic media, Can & coil coating, High quality inks, Lens coating,
- Paint or varnish pre-filtration, Solvent recovery, Resin pre-filtration

**General Industrial**

- Polyolefin & Polyester range  
  - Cooling water, Solvent recovery
- NT-TE Grade  
  - Cutting oils, lubricants, Detergents, pulp & paper, Textiles, metallisation baths, Process Water
- Inks pre-filtration, Paints, Solvents, Metal rolling mills

**Biotechnology**

- NT-P Grade  
  - Clarification & membrane protection for growth media, vaccines, cell culture & Blood fractionation

**Fine Chemicals & Cosmetics**

- NT-P Grade  
  - Carbon fines removal, precipitate removal, clarification of perfumes, solvent filtration, water system

**Pharmaceuticals**

- NT-P Grade  
  - Oral liquids and syrups, Clarification and membrane protection, water systems

**Food & Beverage**

- NT-TE Grade  
  - Wine, Beer, Bottled water, Spirits (vodka, cognac, ...), Edible oils, Process water
### Betafine™

<table>
<thead>
<tr>
<th>PBG, PEG &amp; PPG Series</th>
<th>T Series</th>
<th>XL Series</th>
<th>C(P) &amp; S(P), HT, U(2) &amp; U(2)/W, ZA &amp; EC Series</th>
<th>MH &amp; EXT Series</th>
<th>Encapsulated Filter System Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formerly known as Polypro XL</td>
<td>Formerly known as TSM</td>
<td>Polypropylene pleated media, APT pleat technology</td>
<td>Composite media, Charged modified technology, Multi-zones technology</td>
<td>Formerly known as Maximizer</td>
<td>Single-use depth filtration system consisting of a holder, manifold caps, and capsules</td>
</tr>
<tr>
<td>PPG range</td>
<td>High Purity Chemicals pre-filtration, Nickel sulphamate baths, Multi layer PCB</td>
<td>CD &amp; hand disks, Printed Circuit Boards, Flat screens, Ultra Pure Water</td>
<td>Zeta Plus HT, C, CP, S &amp; SP</td>
<td>Charged modified technology, Graded density media, Lipid selective absorption</td>
<td>Ergonomically designed holder (large model can pivot) with vertical flow path</td>
</tr>
<tr>
<td>PPG &amp; PG Versions</td>
<td>Clarification &amp; membrane protection for growth media, vaccines, cell culture &amp; Blood fractionation</td>
<td>Clarification &amp; membrane protection for growth media, vaccines, cell culture &amp; Blood fractionation</td>
<td>Zeta Plus ZA</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
</tr>
<tr>
<td>PPG, PEG or PPG Versions</td>
<td>Carbon fines removal, precipitate removal, clarification of perfumes, solvent filtration, water system</td>
<td>Carbon fines removal, precipitate removal, clarification of perfumes, solvent filtration, water system</td>
<td>Zeta Plus S &amp; SP</td>
<td>Clarification of perfumes, carbon fines removal, precipitate removal, removal of residual catalysts, water systems</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates, HCPs, virus and DNA reduction, Protein aggregates, emulsion &amp; anti-foaming agents reduction, Protection downstream processes</td>
</tr>
<tr>
<td>PPG &amp; PPG Versions</td>
<td>Oral liquids and syrups, Clarification and membrane protection, water systems</td>
<td>Oral liquids and syrups, Clarification and membrane protection, water systems</td>
<td>Zeta Plus S &amp; SP</td>
<td>Clarification or oral liquids and syrups, precipitation of parental products, water systems</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates, HCPs, virus and DNA reduction, Protein aggregates, emulsion &amp; anti-foaming agents reduction, Protection downstream processes</td>
</tr>
<tr>
<td>PPG Version</td>
<td>Yeast removal, Clarification of wine, Final polishing of distilled spirits</td>
<td>Yeast removal, Clarification of wine, Final polishing of distilled spirits</td>
<td>Zeta Plus C, CP, S, SP</td>
<td>Wine, Beer, Bottled water, Brandy (Vodka, Cognac), Vinegar, Fruit juice, Syrups</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
</tr>
</tbody>
</table>

### Zeta Plus™

<table>
<thead>
<tr>
<th>PBG, PEG &amp; PPG Series</th>
<th>T Series</th>
<th>XL Series</th>
<th>C(P) &amp; S(P), HT, U(2) &amp; U(2)/W, ZA &amp; EC Series</th>
<th>MH &amp; EXT Series</th>
<th>Encapsulated Filter System Series</th>
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<tr>
<td>Formerly known as Polypro XL</td>
<td>Formerly known as TSM</td>
<td>Polypropylene pleated media, APT pleat technology</td>
<td>Composite media, Charged modified technology, Multi-zones technology</td>
<td>Formerly known as Maximizer</td>
<td>Single-use depth filtration system consisting of a holder, manifold caps, and capsules</td>
</tr>
<tr>
<td>PPG range</td>
<td>High Purity Chemicals pre-filtration, Nickel sulphamate baths, Multi layer PCB</td>
<td>CD &amp; hand disks, Printed Circuit Boards, Flat screens, Ultra Pure Water</td>
<td>Zeta Plus HT, C, CP, S &amp; SP</td>
<td>Charged modified technology, Graded density media, Lipid selective absorption</td>
<td>Ergonomically designed holder (large model can pivot) with vertical flow path</td>
</tr>
<tr>
<td>PPG &amp; PG Versions</td>
<td>Clarification &amp; membrane protection for growth media, vaccines, cell culture &amp; Blood fractionation</td>
<td>Clarification &amp; membrane protection for growth media, vaccines, cell culture &amp; Blood fractionation</td>
<td>Zeta Plus ZA</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
</tr>
<tr>
<td>PPG, PEG or PPG Versions</td>
<td>Carbon fines removal, precipitate removal, clarification of perfumes, solvent filtration, water system</td>
<td>Carbon fines removal, precipitate removal, clarification of perfumes, solvent filtration, water system</td>
<td>Zeta Plus S &amp; SP</td>
<td>Clarification of perfumes, carbon fines removal, precipitate removal, removal of residual catalysts, water systems</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates, HCPs, virus and DNA reduction, Protein aggregates, emulsion &amp; anti-foaming agents reduction, Protection downstream processes</td>
</tr>
<tr>
<td>PPG &amp; PPG Versions</td>
<td>Oral liquids and syrups, Clarification and membrane protection, water systems</td>
<td>Oral liquids and syrups, Clarification and membrane protection, water systems</td>
<td>Zeta Plus S &amp; SP</td>
<td>Clarification or oral liquids and syrups, precipitation of parental products, water systems</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates, HCPs, virus and DNA reduction, Protein aggregates, emulsion &amp; anti-foaming agents reduction, Protection downstream processes</td>
</tr>
<tr>
<td>PPG Version</td>
<td>Yeast removal, Clarification of wine, Final polishing of distilled spirits</td>
<td>Yeast removal, Clarification of wine, Final polishing of distilled spirits</td>
<td>Zeta Plus C, CP, S, SP</td>
<td>Wine, Beer, Bottled water, Brandy (Vodka, Cognac), Vinegar, Fruit juice, Syrups</td>
<td>Clarification of mammalian cell culture harvest &amp; bacteria, yeast and insect cell lysates</td>
</tr>
</tbody>
</table>

### Lenntech

- Zeta Plus HT, C, CP, S & SP
- Zeta Plus EC
- Zeta Plus U, UZ, UW & U2W
- Zeta Plus HT
- Zeta Plus HT, C, CP, S & SP
- Photographic films, Special inks, Special papers
## Industrial & Life Science Product Overview

<table>
<thead>
<tr>
<th>ZetaCarbon</th>
<th>CUNO™</th>
<th>Self Cleaning Metal Filters</th>
<th>3M™</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ZetaCarbon Series</strong></td>
<td><strong>CTG System Series</strong></td>
<td><strong>Metal Screen Filters Series</strong></td>
<td><strong>J3000 Series</strong></td>
</tr>
<tr>
<td>• Activated carbon &amp; charged modified technology.</td>
<td>• Formerly known as CTG-Klean.</td>
<td>• Formerly known as Micro-Screen.</td>
<td>• Complete system of cartridges and housings that is modular and can be automated.</td>
</tr>
<tr>
<td>• Different standard carbons or &quot;à la carte&quot; formulations.</td>
<td>• This unique system consists in a pack including CTG cartridges. Fluid is isolated from the housing.</td>
<td>• Metal Screen &amp; Super Metal Screen cleanable metallic filters.</td>
<td>• An all-propylene construction.</td>
</tr>
<tr>
<td>• Filtration area from 25 cm² to 3.5 m² per cartridge.</td>
<td>• Ease of use.</td>
<td>• Depth or surface media.</td>
<td>• An enclosed system.</td>
</tr>
<tr>
<td>• Available in discs, capsules or cartridges.</td>
<td>• Labour cost reduction.</td>
<td>• Usable under severe process conditions (up to 480°C)</td>
<td>• Available from a single housing to a manual or automated skid.</td>
</tr>
<tr>
<td>• Can replace bulk activated carbon.</td>
<td>• No cross contamination.</td>
<td>• AP max = 14 bar.</td>
<td>• Pleated filter media and sanitary housings and skids.</td>
</tr>
<tr>
<td><strong>Metal Screen Series</strong></td>
<td><strong>Self Cleaning Metal Filters</strong></td>
<td><strong>J3000 Series</strong></td>
<td><strong>Electronics</strong></td>
</tr>
<tr>
<td>• Formerly known as Micro-Screen.</td>
<td>• Self-cleaning metallic filters.</td>
<td>• Formerly known as Turno-Klean.</td>
<td><strong>RS1S range</strong></td>
</tr>
<tr>
<td>• Formerly known as CTG-Klean.</td>
<td>• Manual or motorised purges.</td>
<td>• DDS, EG, EGS, G, GH and GP Series</td>
<td>Dechlorination, Process water, Waste water</td>
</tr>
<tr>
<td>• This unique system consists in a pack including CTG cartridges. Fluid is isolated from the housing.</td>
<td>• Usable up to 260°C.</td>
<td>• Self-cleaning metallic filters.</td>
<td>Gas filtration (High pressure cryogenic)</td>
</tr>
<tr>
<td>• Ease of use.</td>
<td>• Micron ratings from 3 to 750 μm.</td>
<td>• Manual or motorised purges.</td>
<td><strong>RS3S range</strong></td>
</tr>
<tr>
<td>• Labour cost reduction.</td>
<td></td>
<td>• No cross contamination.</td>
<td>Silicone oils, Lubricating oils, Resins</td>
</tr>
<tr>
<td>• No cross contamination.</td>
<td></td>
<td>• Environment/worker protection.</td>
<td>Toxic-hazardous products, Solvents, Oils, Acids, caustic solutions</td>
</tr>
<tr>
<td>• Environment/worker protection.</td>
<td></td>
<td></td>
<td>Fatty acids, Aggressive products (acids, etc...), Polymers, Vapour</td>
</tr>
<tr>
<td><strong>Self Cleaning Metal Filters</strong></td>
<td><strong>J3000 Series</strong></td>
<td><strong>Electronics</strong></td>
<td><strong>RS1S range</strong></td>
</tr>
<tr>
<td>• Formerly known as Micro-Screen.</td>
<td><strong>Power Generation</strong></td>
<td>Dechlorination, Process water, Waste water</td>
<td>SMP slurries</td>
</tr>
<tr>
<td>• Self-cleaning metallic filters.</td>
<td>Contaminated water, Radioactive effluents</td>
<td>Dechlorination, Process water, Waste water</td>
<td><strong>RS3S range</strong></td>
</tr>
<tr>
<td>• Manual or motorised purges.</td>
<td>Seal protection, Pressurized gases</td>
<td>Dechlorination, Process water, Waste water</td>
<td>Silicone oils, Lubricating oils, Resins</td>
</tr>
<tr>
<td>• No cross contamination.</td>
<td></td>
<td>Contaminated water, Radioactive effluents</td>
<td>Toxic-hazardous products, Solvents, Oils, Acids, caustic solutions</td>
</tr>
<tr>
<td><strong>J3000 Series</strong></td>
<td><strong>Chemicals</strong></td>
<td></td>
<td><strong>Viscous oils, Grease, Asphalt, Fuel, Instrument Protection</strong></td>
</tr>
<tr>
<td>• Formerly known as Turno-Klean.</td>
<td><strong>RS1S range</strong></td>
<td><strong>Power Generation</strong></td>
<td><strong>Power Generation</strong></td>
</tr>
<tr>
<td>• Self-cleaning metallic filters.</td>
<td>Dechlorination, Process water, Waste water</td>
<td><strong>RS1S range</strong></td>
<td><strong>RS1S range</strong></td>
</tr>
<tr>
<td>• Usable up to 260°C.</td>
<td>Dechlorination, Process water, Waste water</td>
<td>Contaminated water, Radioactive effluents</td>
<td>Contaminated water, Radioactive effluents</td>
</tr>
<tr>
<td>• Micron ratings from 3 to 750 μm.</td>
<td>Dechlorination, Process water, Waste water</td>
<td>Seal protection, Pressurized gases</td>
<td>Seal protection, Pressurized gases</td>
</tr>
<tr>
<td></td>
<td>Dechlorination, Process water, Waste water</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 3M™

<table>
<thead>
<tr>
<th>HN Series</th>
<th>DF System Series</th>
<th>High Flow Series</th>
<th>NB Series</th>
<th>100 &amp; 500 Series</th>
<th>740 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depth filter sheets constructed of high quality cellulose and inorganic filtration additives bound by a resin.</td>
<td>Formally known as Duol, True grade porosity &amp; depth filter media, Available in polypropylene and polyester, Nominal rating from 1 to 200 μm, Available in length 1 &amp; 2.</td>
<td>Radial Pleat Design, Blown microfibre, all polypropylene construction, High flow capacity, Absolute rating from 1 μm to 70 μm, Available in 40” and 60”.</td>
<td>Polypropylene and polyester felt and nylon monofilament materials, Nominal bags, Specially designed plastic sealing collar, Nominal ratings in polyprop &amp; polyester from 1 μm to 200 μm and in nylon from 25 to 1200 μm, Available in size 1 and 2.</td>
<td>All meltblown polypropylene microfibre filter media, High efficiency bags, Ratings are nominal: the 100 Series from 1.5 to 34 μm and the 500 Series from 2.5 to 48 μm.</td>
<td>All meltblown polypropylene microfibre filter media except PERP-740, 740 B30 and 740 KF Series. Ratings are: 740B, 48 µm, 740 B KF Series. From 1 to 70 μm. ERP-740 NF Series. Available in 20 &amp; 60 μm.</td>
</tr>
</tbody>
</table>

| Etch Bath, Process Water/RO pre-filtration, CD & DVDs, Photochemicals, Solvents, Printed Circuit Manufacturing | RO Pre-filtration, Process Water | Magnetic media, Organic solvents, Photo chemicals, Plating solutions, RO membranes | Magnetic media, Organic solvents, Photo chemicals, Plating solutions, RO membranes | Magnetic media, Organic solvents, Photo chemicals, Plating solutions, RO membranes | Magnetic media, Organic solvents, Photo chemicals, Plating solutions, RO membranes |
| Water Treatment, Electrodeposition, Trade Paint, Can Coatings, Dispersions, Adhesives, Paper Coatings, Automotive Plants, Architectural Paint, Resins, Coil Coatings, Printing Ink | Water Treatment | Prefiltration, Batch processing, Tanker loading | Prefiltration, Batch processing, Oil removal | Prefiltration, Batch processing, Oil removal | Water Treatment |
| Bulk solids, Precipitate removal | Process water | Bulk solids, Precipitate removal | Bulk solids, Precipitate removal | Bulk solids, Precipitate removal | Bulk solids, Precipitate removal |
| Vegetable and edible oil, Syrup, honey, Wine, Beer, Other high viscous drinks | Bottled Water, Beer Trap Filtration, Process water | General Food Applications including water | General Food Applications including water | General Food Applications including water | General Food Applications |

**Image 51x50 to 122x121**

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General Portfolio EU Eurex 0912.indd 9

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## Housing Ranges

<table>
<thead>
<tr>
<th>Plastic Housing Series</th>
<th>Sanitary Housing Series</th>
<th>High Flow Housing Series</th>
<th>Stainless Steel Housing Series</th>
<th>Special Housing Series</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Core Line Example:</strong> 1N Series Range.</td>
<td><strong>Core Line Example:</strong> IP and IW Series Range.</td>
<td><strong>Core Line Example:</strong> HF Series Range.</td>
<td><strong>Core Line Examples:</strong> CF, CH, DS, HC, W, WTC and WTB Series Range.</td>
<td>In-house design and fabrication services deliver standard or customized versions of housing products in standard or exotic materials to the exacting standards required by the customer.</td>
</tr>
<tr>
<td>Manufactured from a high impact plastic for added strength and specifically designed to meet most industrial application requirements for liquid filtration.</td>
<td>Housings in 316L stainless steel with seals from a variety of elastomeric materials. Compatible with most process applications (also for CIP and SIP procedures). Interior &amp; exterior polished &amp; crevice-free internal finish. Fully CE according to PED.</td>
<td>Stainless steel, external surfaces glass bead blasted. Code stamped according to ATEX Group II, Category 3, T5 &amp; PED 97/23/EC rated Category I. Available in 40º and 60º, horizontal or vertical configurations. Compact design with high flow.</td>
<td>Manufactured standard filter housings in 316L or 304L Stainless Steel. Also electropolishing possible.</td>
<td></td>
</tr>
</tbody>
</table>

### Electronics
- Fine Chemicals: RO Pre-filtration, Process Water
- General chemicals, Utilities: Bespoke High Quality finished vessels

### Power Generation
- Process Water: Large, Heavy duty vessels for condensate treatment
- Coolant Water, Lube Oils: Lined Vessels for aggressive chemicals

### Chemicals
- Quench water, Aqueous Salt Solutions, Final Products: Lined Vessels for aggressive chemicals
- Final Products, Raw Materials, Effluent Treatment: Bespoke High Quality finished vessels

### Oil & Gas
- Waterflooding, Produced water, Enhanced Oil Recovery, Completion fluids, Amine Sweetening, Final Products: Heavy Duty Carbon Steel for onshore and offshore installations
- Final Products, Amine, Glycols: Bespoke High Quality finished housings for critical applications

### Paint & Coatings
- Plating, Galvanic processing, Parts washing, Machine coolants: Bespoke High Quality finished vessels
- Municipal water, RO pre-filtration, Reclaimed water, Coolants, Nozzle protection, Boiler condensate: Specialised cleanable vessels
- Municipal water: Capital Expenditure Projects requiring bespoke solutions

### General Industrial
- Water Treatment: Production and formulation processes, Application systems
- Water Treatment: Specialised cleanable vessels
- Municipal water, RO pre-filtration, Reclaimed water: Capital Expenditure Projects requiring bespoke solutions

### Biotechnology
- Critical Applications: Bespoke High Quality finished housings for critical applications

### Fine Chemicals & Cosmetics
- Critical Applications: Bespoke High Quality finished housings for critical applications

### Pharmaceuticals
- Critical Applications: Bespoke High Quality finished housings for critical applications

### Food & Beverage
- Critical Applications: Bespoke High Quality finished housings for critical applications
- Bottled Water, Beer Trap Filtration, Process water: Bespoke High Quality finished housings for critical applications
**3M Water Filtration Product Overview**

<table>
<thead>
<tr>
<th>Drinking Water Systems</th>
<th>Whole House Filtration</th>
<th>Softeners</th>
<th>Reverse Osmosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Systems to treat tap water for drinking including chlorine taste and odour reduction and scale inhibition.</td>
<td>Systems to treat all the water coming into the house or vehicle/vessel for chlorine taste and colour sediment and optional scale inhibition.</td>
<td>Small commercial / residential systems for softening water by ion exchange.</td>
<td>Reverse Osmosis units to fit under your sink.</td>
</tr>
</tbody>
</table>

**Under sink**
- ScaleGard® Pro
- Tastemaster Plus
- Aqua Pure Easy range
- SQC3, SQC4
- SQC Pro 40, SQC Pro 80

**Point of Entry**
- Aqua Pure drop in - 9.75”
- Aqua Pure Jumbo drop in
- CWS075ME
- CWS100ME
- CWS150ME (Middle East only)

**Caravan & Marine**
- US-E1 Chlorine taste and odour reduction
- US-E2 Microbial reduction
- WY-B3-S Microbial reduction and scale inhibition

---

**FOODSERVICE**

<table>
<thead>
<tr>
<th>HF Range</th>
<th>European POU Range</th>
<th>Reverse Osmosis</th>
<th>UV</th>
</tr>
</thead>
</table>
| • Range of systems with carbon block and carbon block with membrane using IMPACT technology.  
• Also resin-based scale reduction range ScaleGard® Pro | • 3 ranges of Point-of-Use water cooler systems to meet size, capacity, claim set and ease of change out requirements.  
• Foodservice Reverse Osmosis systems for coffee machines, vending machines and steamers and combi ovens. | • Range of 220V Ultra Violet light systems and accessories for commercial use. |

**Coffee**
- BREW HF range
- OCS Range
- ScaleGard® Pro range

**Espresso and Vending**
- ScaleGard® Pro range
- SGLP-RO
- TFS450
- SGLP2-BL

**POU Water Coolers**
- AP1 range
- AP2-G range
- AP3 range

**Post Mix machines**
- BDM HF range
- CFS8000/9000 ranges

**Ice machines**
- ICE HF range
- CFS9000 range

**Steamers and Combi Ovens**
- ScaleGard® Pro range
- SGLP2-BL
- HFO-90
- SGLP-RO
For more information, contact your local 3M Purification representative or distributor.

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