Biopharmaceutical Industry
A guide to bioprocessing products and services
Parker domnick hunter Process Filtration is a global supplier of single-use solutions for biopharmaceutical manufacturing. Our solutions combine our unique and innovative SciLog sensing and control technologies with decades of filtration expertise to produce integrated automated single-use systems that will speed up development times, increase efficiency and safety, and guarantee reproducible product quality.

A commitment to quality
Parker domnick hunter bioprocess technology is designed and manufactured to be used within applications that are most critical to patient safety. All products are manufactured in a controlled environment and fully validated with extractable data for use in biopharmaceutical applications. A strong focus on raw materials, full traceability of components and controlled release of products ensures your process delivers reproducible quality.

Global support
Wherever in the world you choose to manufacture, Parker is there to help you get the most out of your bioprocess. With multiple laboratory and manufacturing facilities and a network of customer support centres operating in 48 countries worldwide, we can offer you local, specialized support throughout your entire development process from R&D through to commercial manufacturing.

Maximizing the performance of your bioprocess

Through integrated single-use solutions

Your process. Your choice.
We understand that your process needs are unique. Our Open Architecture™ approach allows:

• Limitless potential for customization.
• Modular design for seamless addition or removal of components or functionality.
• Adaptable process flow designs for plug and go operation within or in addition to existing processes.
Cell culture and harvest
upstream bioprocessing

Growth Media Preparation

1. Single-use fluid transfer and storage: DuraPure®, klave-IT® BPCs, Platinum cured silicone & TPE tubing
2. Automated filtration systems: SciFlex® NFF, FilterTec™
4. Prefiltration: PROCLEAR range
5. Mycoplasma retentive filters: PROPOR MR

Cell Culture Maintenance System

1. Bench-scale: MabTec™
2. Scale-up applications: Contact Parker domnick hunter
3. Quantitative fluid management: WeighStation™ Dual

Cell Culture Harvesting

1. Prefiltration: PROCLEAR range
2. High capacity sterilizing filtration: PROPOR HC
3. Single-use fluid transfer and storage: DuraPure®, klave-IT® BPCs, Platinum cured silicone & TPE tubing
4. Automated filtration systems: HarvestClear™

Intelligent Laboratory-Scale Systems

1. Laboratory-scale tangential flow filtration systems: PureTec™
2. Laboratory-scale normal flow filtration systems: FilterTec™
3. Multi-filter capacity testing system: FilterTec™ Plus
4. Media preparation station: LabTec™
5. Precision metering: ChemTec™

Integrity Testing

1. Diffusional flow: Porecheck 4
2. Bubble point: Porecheck 4
3. Water intrusion: Porecheck 4
4. Aerosol challenge: Valairdata 3
Purification and dispense
downstream bioprocessing

1. Buffer Preparation and Storage
   - Prefiltration: PROCLEAR range
   - Sterilizing grade filtration: PROFOR SG
   - Fluid transfer and storage: DuraPure® & klave-IT™ BPCs, Platinum cured silicone & TPE tubing
   - Automated filtration systems: SciFlex® NFF, FilterTec™
   - Single-use sensors: SciPres®, SciTemp®, SciCon®
   - 2D and 3D bioprocess containers: DuraPure® & klave-IT™ BPCs
   - Overmolded tubing, manifolds and accessories: Platinum cured silicone & TPE tubing

2. Chromatography
   - Column guard filtration: PROCLEAR BR
   - Fluid transfer and storage: DuraPure® & klave-IT™ BPCs, Platinum cured silicone & TPE tubing
   - Quantitative fluid management: WeighStation™ Triple

3. Virus Inactivation
   - Precision metering: ChemSci™
   - Quantitative fluid management: WeighPro™

4. Automated and Semi-Automated TFF Systems
   - TFF systems: SciFlex® TFF, SciPure® TFF
   - Single-use sensors: SciPres®, SciTemp®, SciCon®
   - Fluid transfer and storage: DuraPure® & klave-IT™ BPCs, Platinum cured silicone & TPE tubing
   - Quantitative fluid management: WeighCart™

5. Product and Virus Filtration with Dispense
   - Quantitative fluid management: WeighStation™
   - Automated filtration systems: SciFlex® NFF
   - Single-use sensors: SciPres®, SciTemp®, SciCon®
   - Prefiltration: PROCLEAR range
   - High capacity sterilizing grade filtration: PROFOR HC
### Selection product guide

#### Automated BioProcessing System

**SciLog SciPure**
- **BioProcessing Systems**
- **• SPM – out of the box mobile processing platforms.**
- **• Off the shelf for multiple applications with SciLog single-use sensors/mandrels.**
- **• Options available for fully automated, semi and manual operation.**
- **• Works with any manufacturers’ filters.**
- **• Available in single-use, extended-use and stainless.**
- **• TFF & NFF models available.**
- **• Optimise filter throughput with patented Rate-Pressure controlled feed.**

#### Semi-Automated BioProcessing System

**SciLog SciFlex**
- **BioProcessing Systems**
- **• TFF, NFF, media transfer, media prep and bag filling models available.**
- **• Mobile station for a multitude of bioprocessing applications.**
- **• Ideal for batch operations in development and contract manufacturing environments.**
- **• Off the shelf for multiple applications with SciLog single-use sensors/mandrels.**
- **• Works with any manufacturers’ filters.**

#### Automated BioProcessing Components

**Manifolds**
- **Single-Use Components**
- **• Risk management with SU technology.**
- **• Reduce cross-contamination.**
- **• Fully assembled, ready-to-use.**
- **• Increases operator safety when working with trains.**
- **• Your choice of sensors, bags and filters.**
- **• Designed to meet your requirements.**

#### Quantitative Fluid Management

**SciLog WeighStation™**
- **Quantitative Fluid Management**
- **• Accommodates up to three 50Kg single-use hanging bags.**
- **• Eliminates balancing of bags on mobile carts.**
- **• Allows 100% recovery.**
- **• No second operator required to hold the bag.**

**SciLog WeighPro™**
- **Quantitative Fluid Management**
- **• A mobile, compact, vertical bag holder.**
- **• Integrated configurable instrumenting workstations.**
- **• Adjustable filter, tubing, sensor and pump mounts.**
- **• Tool tray table.**
- **• Quick configuration allows maximum process flexibility.**

**SciLog WeighCart™**
- **Quantitative Fluid Management**
- **• A mobile cart with integral floor scale accommodating 150L or 200L BPCs.**
- **• Standard offering with shelving and supports to accommodate 100L or 200L BPCs.**
- **• A range of additional accessories and balances are available.**

#### Smart Dispenser System

**SciLog LabTec®**
- **Intelligent Lab Systems**
- **• Rapid, high precision dispensing/filling, ml to L.**
- **• Automated dispensing to weight or % volume.**
- **• In-line filter sterilisation – sensor filter plug-up.**
- **• Sample weighing and auto-diluting – weight ratio capability.**
- **• Performance validation sent with each LabTec®.**

#### Cell Culture Maintenance System

**SciLog MabTec®**
- **Intelligent Lab Systems**
- **• Promote high density cell culture through automated seed, feed and perfusion strategies.**
- **• Methods and alarms to protect your entire cell culture processes.**
- **• Modular compact design enhances current setups.**
- **• Seamless integration at any bioreactor to enhance performance.**

#### Tangential Flow Filtration (TFF) System

**SciLog PureTec®**
- **Intelligent Lab Systems**
- **• Ideal for lab-scale UF/MF/DF – concentration and dialfiltration.**
- **• Controls and monitors TMP (transmembrane pressure) and feed rate.**
- **• Set end points and alarm for walk-away operation.**

#### Complete Cell Culture Harvest System

**HarvestClear™ Filtration System**
- **Intelligent Lab Systems**
- **• A turnkey solution for rapid controlled clarification of bioreactors outputs up to 20L.**
- **• Reduced set-up time.**
- **• Integrated SciPres® pressure sensors enable patented R/P Stat Method which improves filter capacity and allows for safe, walk-away processing.**

**SciLog FilterTec™/ FilterTec™ Plus**
- **Intelligent Lab Systems**
- **• Filtrability studies and VMax determination.**
- **• Increase DEP filter utilisation up to 30%.**
- **• 3 pressure sensor and balance hook-ups for filter trains.**
- **• Safe, walk-away system operation.**

**SciLog ChemTec™**
- **Intelligent Lab Systems**
- **• Stored methods for linear or exponential feed by weight or volume.**
- **• Validated methods for pH control and titration, analyte (UV, turbidimeter) device tracking, preparative chromatography, and buffer weight maintenance.**
- **• Walk-away automation with remote or user defined alarms and interlocks.**
- **• Programmable control of two 6-port rotary valves.**

#### Normal Flow Filtration (NFF) System

**SciLog FilterTec™/ FilterTec™ Plus**
- **Intelligent Lab Systems**
- **• Stored methods for linear or exponential feed by weight or volume.**
- **• Validated methods for pH control and titration, analyte (UV, turbidimeter) device tracking, preparative chromatography, and buffer weight maintenance.**
- **• Walk-away automation with remote or user defined alarms and interlocks.**
- **• Programmable control of two 6-port rotary valves.**

#### Precision Metering System

**SciLog ChemTec™**
- **Intelligent Lab Systems**
- **• Optimized membrane configuration allows up to 10 times the throughput compared to single layer membrane products.**
- **• Integral prefiler layer can condense filter trains for greater processing efficiency.**

**SciLog FilterTec™/ FilterTec™ Plus**
- **Intelligent Lab Systems**
- **• Stored methods for linear or exponential feed by weight or volume.**
- **• Validated methods for pH control and titration, analyte (UV, turbidimeter) device tracking, preparative chromatography, and buffer weight maintenance.**
- **• Walk-away automation with remote or user defined alarms and interlocks.**
- **• Programmable control of two 6-port rotary valves.**

#### High Capacity Sterilizing Filters

**PROPOR MR**
- **Polyethersulphone** 0.1 micron
- **• Fully validated and integrity testable for assurance of sterility.**
- **• A typical LRV of >10 for Acholeplasma laidlawii (effective mycoplasma control).**
- **• Integral prefiler layer increases throughputs for reduction of filter trains.**
- **• Exceptional flow rates for quick processing of cell culture media.**

**PROPOR SG**
- **Polyethersulphone** 0.1 to 0.5 micron
- **• Up to 3.5 times higher flow rates than competitive sterilizing grade filters.**
- **• Fully validated and integrity testable membrane for assurance of sterility.**
- **• Low binding for minimal product loss.**

#### Sterilizing Filters

**PROPOR HC**
- **Polyethersulphone** 0.2 micron
- **• Rhoindolimonax amnigenes retention of LRV >5 efficient bioburden reduction.**
- **• Additional prefiler layer gives excellent throughput to blockage.**
- **• Low binding for minimal product loss.**

**PROPOR BR**
- **Polyethersulphone** 0.2 micron
- **• Rhoindolimonax amnigenes retention of LRV >5 efficient bioburden reduction.**
- **• Additional prefiler layer gives excellent throughput to blockage.**
- **• Low binding for minimal product loss.**

**PROCLEAR 6F**
- **Glass Microfibre** 0.6 to 10 microns
- **• Excellent dirt holding capacity.**
- **• Nano-fibre releasing glass microfibre media.**
- **• Long service life for maximum throughput.**
Selection

**Integrity Testing Equipment**

**Porecheck 4 / Valairdata 3**
- Porecheck 4 - Water intrusion, pressure decay and bubble point testing of membrane liquid filters.
- Valairdata 3 - Aerosol challenge testing of sterile gas filters.

**DuraPure™ Bag Systems**
- Dual layer media for increased capacity and assurance.
- Maximizes retention for protection of downstream membranes.
- Ideal for difficult to filter solutions.

**Fluid Storage**

**klave-it™ Bags**
- autoclavable bags made of select Kynar® PVDF film designed to maintain flexibility, strength and impact resistance after sterilization by autoclave.
- Available in pillow style.
- Low permeability.
- Can be filled and then autoclaved.

**Fluid Transfer**

**Platinum-Cured Silicone Tubing**
- A range of platinum-cured silicone tubing, etched with lot and part numbers for traceability.
- Ideal for molding with other silicones into manifold assemblies.
- Other tubing products include a number of reinforced tubings.

**Molded Silicone Manifolds**
- Single-use systems tailored to your application.
- Preparatory technology allows any configuration of Ys, Ts, crosses, reducers, and elbows, with virtually unlimited lengths between molds.
- Molded junctions are stronger; eliminate entrapment, and offer smooth, unrestricted flow.
- Contact us to discuss integrating bags, tubing, sensors and connectors to suit your needs.

**Connector Kits**

**Accessories**
- Full range of connectors from a wide array of suppliers.
- Allows flexibility and connectivity within your process.
- One stop shop convenience to meet all of your connection needs.

Contact for further information

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