



# INTRODUCTION TO CLEAR EDGE



Expertly designed products with Material Science By Clear Edge™



### MAKING PROCESSES SAFER, HEALTHIER AND MORE PRODUCTIVE.



Clear Edge and its company lineage have almost two centuries of experience of achieving the most from our customers' processes. Our filtration products are designed to deliver process excellence. As part of Filtration Group Corporation, our ability to collaborate and partner with customers' process around the world and in many industries is unparalleled. Listening to our customers and then meeting, often exceeding, their needs is at the heart of our philosophy.

- · Clear Edge is a fully integrated, global filtration solutions company.
- For our woven product lines, our filtration media is manufactured in our ISO accredited fully owned weaving plants.
- We offer an extensive, quality assured filtration fabric portfolio, not limited to the media types we weave.
- Our final product fabrication plants are strategically located close to our customers.
- Our products are supported in our customers' processes by technically trained sales teams covering six global regions, by local culturally aware Customer Service teams, vertical market experts and application specialists (the Clear Edge TechApps team) able to provide global on-site assistance.

Successful customers are the cornerstone of Clear Edge's business culture. We are focused on helping our customers achieve the very best value from their process.





### **OUR MARKETS**



### MINING AND MINERALS

Clear Edge has experienced each resources cycle alongside our mining and mineral processing partners and understands the challenges faced by the modern mining sector. We have worked with our customers as environmental and safety standards resources prices hit change, as mineral and water become scarcer and as commodity new highs and lows. Whether your process is focused on aluminium or steel, coal or precious metals, base metals or rare earth elements, we have experience in tuning filtration step performance to maximise value.

### **CHEMICALS**

The chemical sector includes a diverse range of industries; from the production of fertilizer, vital feedina the world's arowina population, to pigments used for manufacturer of everything from paints and coatings to clothing. Filtration is often critical to achieving accredited product standards and the economic success of the process. Whether your product is the filter cake or filtrate, a bulk, fine or speciality chemical; Clear Edge specialises in realising the value of all chemical processes by ensuring each filtration step is as efficient as it can be.



### **GREEN ENERGY**

Clear Edge's mission to make the world safer and healthier connects very well with the global transition to greener energy. Whether it is through battery raw materials refining with Lithium and cobalt, or hydrogen production through alkaline water electrolysers, we are at the forefront of material science technology. Leading the way with innovative products that help our customers optimise their process and make them as efficient and cost effective as possible. Clear Edge truly are leading the charge to a cleaner environment.

### **FOOD AND BEVERAGE**

From sugar refining to brewing, edible oils to dried milk products, Clear Edge's products have been relied upon by the Food and Beverage sector for many years. Food industry and related government regulations rightly demand every food contact item to be manufactured to high, and often accredited, standards. Our products deliver consummate levels of performance with the highest food safety standards always front of mind.





### WATER TREATMENT

Standards of water treatment, both waste and potable, continue to improve as technology innovates and environmental and consumer expectations grow. Clear Edge is at the forefront of the filtration technology employed to continually improve the quality of water being distributed by our municipalities for consumption in households, hospitals and businesses or being treated for discharge to the environment.

### **MORE KEY SECTORS**

Clear Edge's market leading products deliver process excellence in many more key sectors including:

- · Building products
- · Pulp and paper
- Power generation
- Healthcare
- Transportation
- Other industrial applications.



### **FILTER PRESS CLOTH**

Filter Presses have been a mainstay of industrial solid/liquid separation for many decades. Clear Edge's filter press cloth range has developed alongside this evolving process technology in conjunction with end-user and original equipment manufacturer partners for today's best performance.

### Specialist filter press fabric for:

- Mining and minerals
- Chemicals
- Water treatment
- Food and beverage
- Many other applications



Many fabrication options available







Coreflo™ welded barrel neck



Azurtex<sup>™</sup> for fine partical size distributions

### Key features:

- Broad range of media choices to help optimise your process
- Capability to manufacture press cloth of over 3m in width
- Variety of fabrication options, for example Coreflo™ welded thermoplastic barrel necks
- High filtration efficiency and throughput
- Excellent cake release



### **FILTER BELTS**

Vacuum belt filters • Multi-roll belt presses • Horizontal plate tower filters Linear screens • Continuous and open daylight board lines • Gravity belts

Clear Edge's extensive woven filter belt range has its origins in our European ancestor companies, Scandiafelt™ and Verseidag-Techfab GmbH. Both iconic businesses produced best in class products, which together make the most comprehensive and technically accomplished range of woven process filtration belts available anywhere in the world. Coupled with Clear Edge's highly regarded Filterlink™ spiral belt range, we offer belts to add value to any process.

### These include:

- Phosphoric Acid
- Waste water treatment
- Flue gas desulfurization
- Mineral concentrates and tailings
- Wood and mineral fibre board
- Food and biomass drying
- Bakery
- Sand and gravel
- Pulp and Paper



Food drying belts



Waste Water Sludge De-Watering



Tower filter belts



Gypsum washing (Phosphoric acid)



Vacuum belt filter

### Key Features:

- Robust, industry leading seam design, edging and construction for long operational life
- Wide range of process enhancing fabrics
- High filtration efficiency and throughput
- Outstanding cake release
- Woven belt widths up to 8m



Spiral belt media with robust edging



Non-marking belt join



Innovative belt seam

### **VACUUM FILTER BAGS**

Rotary disc • Rotary drum • Vacuum pan • Vacuum leaf





Tilting Pan Filter



Vacuum Disc Filter



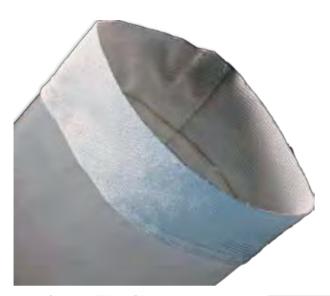
Drum filter with Frame-Trak™

#### **Key Features:**

- Extensive range of process designed filter fabrics
- Chemical and temperature compatibility
- State of the art fabrication
- High filtration efficiency and throughput
- Excellent cake release
- · Robust for long operational life

Frame-Trak™: Ask us about our unique cloth fixing system for pan and drum filters, offering fast cloth change, reduced operator risk, extended cloth life and improved solids capture.

## PRESSURE LEAF & CANDLE FILTERS



Candle Filter Sleeve

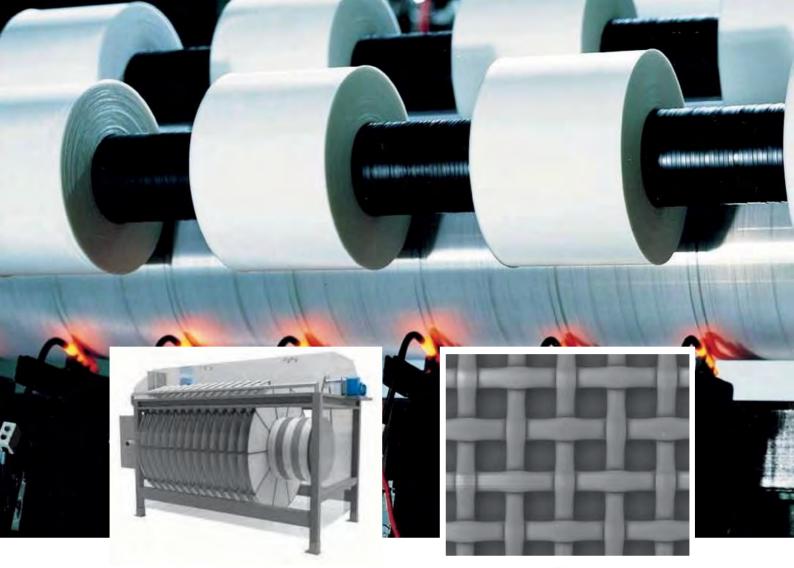


Pressure Leaf Bag

Pressure leaf and candle style filters are used for polishing applications in many mining and minerals, chemical, food and beverage, pharmaceutical and pulp and paper processes. The cloths or bags come in many shapes and sizes, requiring high media and quality robust product fabrication to provide the capture, throughput and operation life, demanded to achieve process excellence. Clear Edge delivers on every front.

#### **Key Features:**

- Broad range of media options to add value to your process
- Chemical and temperature compatibility
- State-of-the-art product fabrication
- Superior filtration efficiency and throughput
- · High flow rates with long cycle times



### Tertiary Water Filtration

A Monodur™ Mesh (x150)

### MONODUR<sup>™</sup> WOVEN MESH

Clear Edge Monodur<sup>™</sup> screen fabrics are available in a comprehensive selection of mesh openings and are woven from Polyamide (Nylon), Polyester, Polypropylene, PFA, PEEK and FEP monofilament fibres.

Our in-house capabilities include value-added processing such as slitting, stamping, tubing, dyeing and finishing of products used in medical and highly demanding electronic applications.

### Applications for Monodur™ include:

- Screening
- Separating / filtering / straining
- Classifying
- Sifting
- Automotive
- Chemical
- · Food processing
- Appliance
- Water treatment
- · Biomedical / Pharmaceutical



Filter element made

with Monodur™

### **DRY BAGS**



Clear Edge offers a broad range of dust filtration products for efficient dry process capture and pollution control. From elevated temperature and aggressive chemical environments to food and pharmaceutical contact grade bag media and a range of accessories.

### **Dry Filtration Machine Types:**

- Pulse Jet Dust Collectors
- Reverse Air Dust Collectors
- Shaker Dust Collectors
- Blower Units
- Fluidized Bed Dryers

#### Accessories include:

Cages, Clamps, Venturis, Caps, Thimbles, Hangers, Seals, Valves, Leak Detection Kits.



Support Cage



### **MORE FABRICATED PRODUCTS**



Centrifuge Bag

### Other expertly fabricated products available to suit your needs such as:

- Plating Bags (anode and cathode)
- Centrifuge Bags
- Tube Press Cloths
- Deep Pile Disc Filter Bags for tertiary water filtration



**Tube Press Filters** 

### **ROLL GOODS**

### Many of Clear Edge's filter media fabrics are available as roll goods:

- · Precision woven, quality assured
- Various weave patterns, yarn types, polymer types and finishes
- Technical support available for selection
- · Samples for application testing available



Filter Media Roll Goods

### **HARDWARE SPARES**



#### FILTER PRESS PLATES

Clear Edge's range of filter press plates are custom designed and manufactured to help you achieve the highest performance. Replacing the filter media with a new set of Clear Edge's filter press cloths increases a filter's performance, replacing some or all the plates in a filter press can provide immediate and long-lasting performance benefits.

### PRESSURE FILTER LEAVES

The quality and condition of the filter leaves has a direct impact on the productivity and filtration efficiency of any pressure leaf filter. Clear Edge, in conjunction with our Filtration Group partners, offers new high-performance pressure filter leaves and the refurbishment of your used leaves, to an "as new" standard.



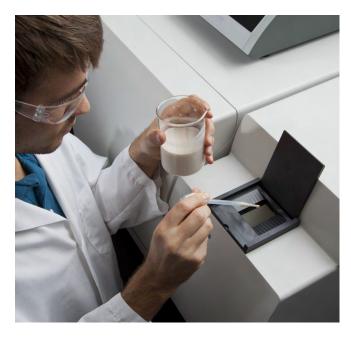


### ULTRAFLO™ DISC FILTER SECTORS

Ultraflo™ disc filter sectors are delivering significant process and safety benefits to customers' operations around the world. Built for the tough environment of rotary vacuum disc filters, the unique design of Ultraflo™ offers improved hourly throughput, reduced maintenance, greater filter availability and lower risk manual handling.

### Material Science By Clear Edge™

At Clear Edge Filtration, we believe that material science is the key to unlocking innovative filtration solutions. Our team of dedicated scientists and engineers harness the power of advanced materials to push the boundaries of filter cloth and belt performance. We understand that our customers face increasingly complex filtration challenges, and we are committed to providing solutions that meet their unique needs.



#### Here's how we leverage material science in our products:



#### Advanced fiber selection:

We carefully select and blend highperformance synthetic fibers, each with unique properties tailored to specific applications.



#### Innovative weaving techniques:

We employ cutting-edge weaving technologies to create highly retentive materials that ensure optimal particle capture and filtrate clarity.



#### **Customizable material combinations:**

We understand that no two filtration challenges are the same. That's why we offer a wide range of material combinations and configurations to create custom-made solutions for your specific needs.



#### Polymer additives:

We modify polymer extrusion recipes to include additives that enhance the base performance of our materials.



#### Surface treatments and modifications:

We utilize advanced surface treatments and modifications to enhance filtration efficiency, cake release, and chemical resistance.







By mastering the science behind materials, we don't just manufacture filters, we engineer process efficiency. Our passion for material science translates into filter cloths and belts that deliver:

Unmatched filtration performance

Reduced operating costs

Superior durability and longevity

Improved sustainability

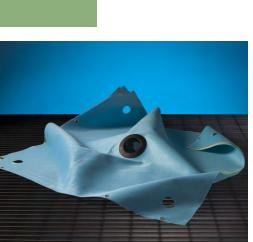
Let us put the power of material science to work for you!

### Why Choose Clear Edge?

- Core expertise in the filter cloth business within the mining, chemical, and green energy industries since 1800s.
- We are the care takers of your filtration challenges, on time deliveries, and material planning with long-lasting customer relationships.



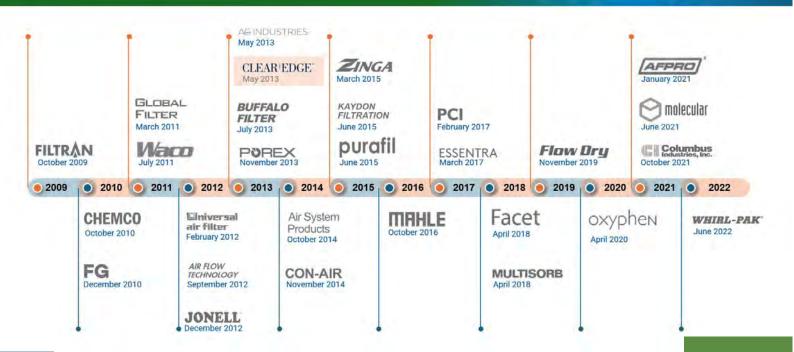




### **HERITAGE - FILTRATION GROUP**



### **OUR EVOLUTION**



### **WORLDWIDE PRODUCTION AND SUPPORT**



### **Americas**

Clear Edge Filtration Canada 893 Old Tecumseh Road Bell River, Ontario, Canada T: +1 519 837 1790. F: +1 519 837 1799

Clear Edge Filtration de Mexico S., de R.L. de C.V. Ave. Las Torres # 860 Parque Industrial Guadalupe Avante Guadalupe N.L., 67190 RFC: CEF060124SI1 Mexico T: +52 81 1520 2450. F: +52 81 1520 2452

### **EMEA**

Clear Edge Filtration Germany GmbH Kevelaerer Strasse 78 D-47608 Geldern-Walbeck Germany T: +49 2831 122 0 F: +49 2831 122 11

### **APAC**

Clear Edge Filtration (Australia) Pty Ltd Suite 201, 210-218 Boundary Road Braeside, VIC 3195 Australia T: +61 3 8551 6414

Clear Edge Filtration Polska Sp. z o.o. Poland

Ul. Koscielna 15 95-050 Konstantynow Lodzki T: +48 42 211 12 65 F: +48 42 211 64 95

Kirin Separation DBA Clear Edge Filtration Malaysia Sdn Bhd Manufacturing Lot 2353-4&5 Jalan Kempas Lama Off Jalan Skudai, 81300 Johor Bahru, Johor, Malaysia T: +607 558 8086 F: +607 557 8191

Clear Edge Filtration Americas 7160 Northland Circle Brooklyn Park, Minnesota 55428 USA

T: +1 763-535-3220 F: +1 763-535-6040 Clear Edge Filtration South Africa Pty Ltd 44 Jasper Road Robertsham, Johannesburg South Africa Tel: +27 11 680 5300 F: +27 11 680 1801

Clear Edge Filtration India Pvt Ltd A118, B119 & 120, Road No 9, VKI Area, Jaipur-302013, Rajasthan, India T: +91 141 402 5300

Clear Edge Filtration Dubai Dubai Airport Free Zone Building 6E, Block A, G09-SD14 PO Box 293868 Dubai **United Arab Emirates** T: +971 566 8292 33

> Scan the QR code to connect and discover more

