



Filtrec: Bringing Advanced Filtration Technology Closer to the Indian Market

As hydraulic systems become more compact, efficient and demanding, filtration is becoming an increasingly important part of equipment design. For construction, mining, agriculture and other mobile equipment, maintaining hydraulic-fluid cleanliness is directly linked to the reliability and service life of pumps, valves and other critical components.

For **Filtrec**, this is where its combination of global filtration expertise, application engineering and local manufacturing capability becomes particularly relevant. With more than three decades of experience in filter-element construction, Filtrec has developed **Absolute Beta** as an advanced filtration technology focused not only on particle removal, but also on pressure drop, dirt-holding capacity, energy efficiency and overall filter performance.

Absolute Beta: More than filtration efficiency

Absolute Beta represents Filtrec's approach to improving the overall performance of a hydraulic filter rather than focusing on filtration efficiency alone. The technology uses a tailored combination of different filter-media layers and pleat configurations, with the media selected according to the requirements of each filter family and application.

According to Filtrec's published testing, the new media configuration achieves a **30% reduction in pressure drop** compared with the previous configuration, while the 3, 5 and 10 micron media packs provide **more than 40% higher Dirt Holding Capacity**. The high-efficiency configuration achieves a **Beta ratio greater than 1,000**.

For equipment manufacturers, these improvements provide greater flexibility during hydraulic-system design. Lower pressure drop can make it possible to select

a smaller filter for a particular application, while higher dirt-holding capacity can contribute to longer element life and reduced maintenance requirements.

For end users, the objective is cleaner hydraulic fluid and better protection of the hydraulic system throughout the filter's operating life. Effective filtration helps protect pumps, valves, cylinders and other critical components from contamination-related wear, supporting equipment reliability and lifecycle performance.

Technology developed for different hydraulic challenges

An important strength of Filtrec's approach is that Absolute Beta is not limited to one type of application. The technology has been developed into different configurations to address specific operating challenges.

Absolute Beta | Spark Buster provides anti-static protection designed to reduce electrostatic discharge while maintaining high filtration performance. This is particularly relevant as hydraulic systems become more sophisticated and sensitive to operating conditions.

Absolute Beta | H2O and H2O Plus address water contamination in hydraulic fluids. Water can contribute to corrosion, oxidation, premature wear and degradation of lubrication properties. H2O Plus combines water absorption with solid-particle filtration, providing protection against two important forms of hydraulic-fluid contamination.

Filtrec has also developed **Absolute Beta | SYN Media**, a synthetic-fibre configuration designed particularly for return filters. Its lower pressure drop makes it suitable for applications involving high-viscosity oil and significant temperature variations, including mobile machinery.

Global technology, local



capability

Filtrec's global experience is supported by manufacturing and technical capabilities in key markets, including India. This combination allows Filtrec to bring international filtration technology closer to customers while developing a stronger understanding of local operating conditions and application requirements.

For OEMs and equipment manufacturers, this means access to filtration solutions backed by global engineering expertise, combined with the responsiveness and application support required in a fast-growing market such as India.

This is particularly important as Indian equipment manufacturers increasingly focus on localisation while simultaneously adopting more advanced hydraulic technologies. **Filtration as part of equipment efficiency**

The development of Absolute Beta also reflects

Filtrec's broader view of filtration. A filter is not simply a consumable that needs to be replaced at regular intervals. Its pressure drop, dirt-holding capacity, filtration efficiency and behaviour throughout its service life can all influence hydraulic-system performance.

Filtrec reports that the Absolute Beta configuration can provide **up to 20% savings in energy or fuel consumption**, depending on the application. Lower pressure losses can contribute to improved hydraulic-system efficiency, while effective contamination control helps protect components and maintain system performance.

For construction and off-highway equipment, where fuel consumption, machine availability and maintenance costs are critical considerations, these improvements can have a meaningful impact on the overall operating cost of the machine.

Looking ahead

The future of hydraulic



filtration will increasingly be shaped by the need for **higher efficiency, compact system design, component protection and lower lifecycle costs**. As hydraulic systems become more sophisticated, filtration will need to perform consistently under increasingly demanding conditions.

Absolute Beta reflects Filtrec's approach to this evolution by combining **high filtration efficiency, lower pressure drop, increased dirt-holding capacity and application-specific technologies** within a single filtration platform.

With more than 30 years of filtration experience, Filtrec continues to develop solutions that go beyond simply removing contaminants. The objective is to make filtration an integral part of hydraulic-system design - contributing to **reliability, efficiency, component protection and longer equipment lifecycle**.