

▲ ABSOLUTE BETA[®] | SYN MEDIA

The vehicle and mobile equipment industries have long been developing solutions to face the challenge of dealing with extreme temperatures including those in very cold environments. The cold start can be determinable to a machine's operability.

This has led Filtrec to the creation of **ABSOLUTE BETA | SYN MEDIA** a synthetic fibre media, designed especially for our return filter range, that ensure a lower pressure drop, which makes it suitable for high-viscosity oil and/or in presence of high temperature variations, it guarantee reliable operability of your mobile machine.

Used also in standard conditions, the key features of very low pressure drop and high efficiency stability, allow also the users to use a small filter compared to standard filter elements made with glass fibre media or gives the possibility to cover higher flow rate and better withstanding to return flow peaks.

Due to the particular structure of the media made with very thin synthetic fibres, **ABSOLUTE BETA | SYN MEDIA** has a low pressure drop. Replacing an equivalent size paper filter element will, in many cases, result in improved filtration efficiency, higher flow rates, longer service life, and significant cost savings. This gives to the customers the possibility to use our filters in standard and also in very compact systems with high return flow.

Especially for compact systems, with a small tank and low fluid volume – but with a high return flow rate, the reliability of the overall system is assured by our synthetic media for removing solid contaminants.

VISCOSITY AND TEMPERATURE

Viscosity is a measure of the resistance offered by a fluid to flow and could be considered as the integral of all the interaction forces between oil's molecules. When temperature of the fluid increase, molecules have greater thermal energy and are able to overcome the attractive forces binding them together and they can slide over each other more easily making the liquid to become less viscous. When temperature of the fluid decrease, molecules have less thermal energy and overcome the attractive

forces with difficulty and they can slide over each other less easily making the liquid to become more viscous. Generally the viscosity of lubricants means the kinematic viscosity with units of centistokes (cSt) or, less frequently, in other units as mm²/s or SSU. If high viscosity fluid are employed, low temperatures increase further fluid viscosity producing cold start behaviours. In these conditions we recommended the use of

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WHICH PROBLEMS CAN OCCUR?

The problems caused by cold start can be for example:

- Exceeding the differential pressure of the filter element due to the higher viscosity of the oil.
- Damages of the components of systems and equipment.
- Unfiltered oil passage due to the bypass valve opening.
- Increases in service costs because of unnecessary and frequent filter element replacements.
- Higher pressure drop due to the thicker oil that has a tougher time passing through the layer of media fibres.
- Increase of solid contamination.
- Long waiting times until the system is warmed up.

WHAT ARE THE BENEFITS OF ABSOLUTE BETA | SYN MEDIA ?

Our new technology ABSOLUTE BETA | SYN MEDIA can guarantee:

- ▲ Suitable for high viscosity fluids
- ▲ Excellent for cold start
- ▲ Low pressure drop
- ▲ High efficiency
- ▲ Competitive price
- ▲ Low energy required
- ▲ Longer service life

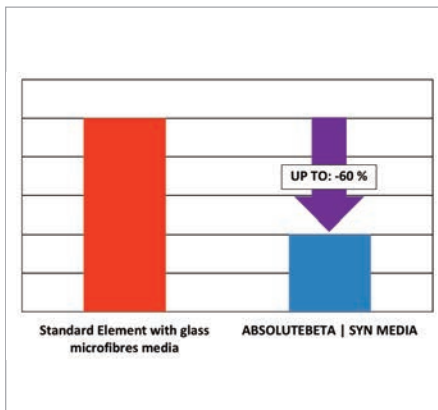


Fig.1 ABSOLUTE BETA | SYN MEDIA pressure drop performance

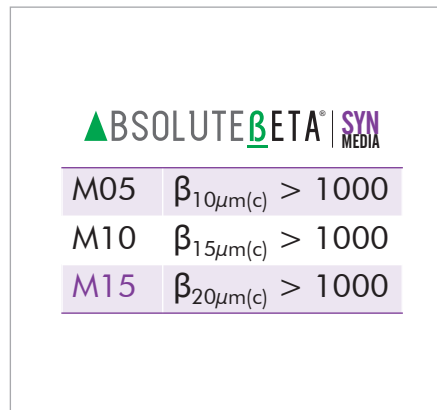


Fig.2 Beta ratio efficiency values (β) for ABSOLUTE BETA | SYN MEDIA

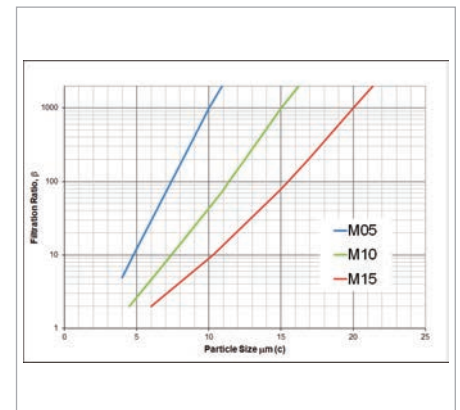


Fig.3 Beta ratio efficiency values (β) for ABSOLUTE BETA | SYN MEDIA

HOW TO RECOGNIZE IT?

You will find



hallmark on the endcap of the new **ABSOLUTE BETA | SYN MEDIA** and a new label on the box.



KINDNESS AS A VALUE

To ensure a top quality solution: for any enquiries there is a Filtrec specialist that will assist you, from choosing the right size to configuring your system.

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