

# Cat fines filter

Catalytic particle fuel oil filter. Catalytic (cat) fines are small, very hard particles from the refining process. They are used as a catalyst and occur in a higher level in low-sulphur fuel. As they wear the engine fast, it is highly recommended to use a filter to clean the fuel and remove the cat fines.

The catalytic particle filter (cat fines filter, see Figure 1) is a filter for the fuel cleaning system. It reduces the cat fines level in the fuel, thus reducing the wear and damage that the cat fines would otherwise inflict on the engine cylinders and fuel equipment.

## Reduction of engine damage risk

The cat fines filter has a 10 micron auto-filter with backflushing capability. This means that the system filters the oil continuously on all filter candles except one, which is in cleaning/ standby mode.

If the pressure gets too high, an automatic warning is released to the control box. If the content of cat fines in the fuel increases, the period between backflushings will be shorter. Therefore, this is not only a filter, but also a very good indicator of bad fuel quality. With the introduction of the 0.50% sulphur cap from 2020, an increase in the level of cat fines in fuel is expected. The cat fines filter is therefore a good preventive solution that will benefit the engine.

Figure 2 shows examples of damage caused by cat fines. The examples are from a low speed two-stroke engine suffering from heavy wear caused by catalytic particles embedded on the cylinder liners.

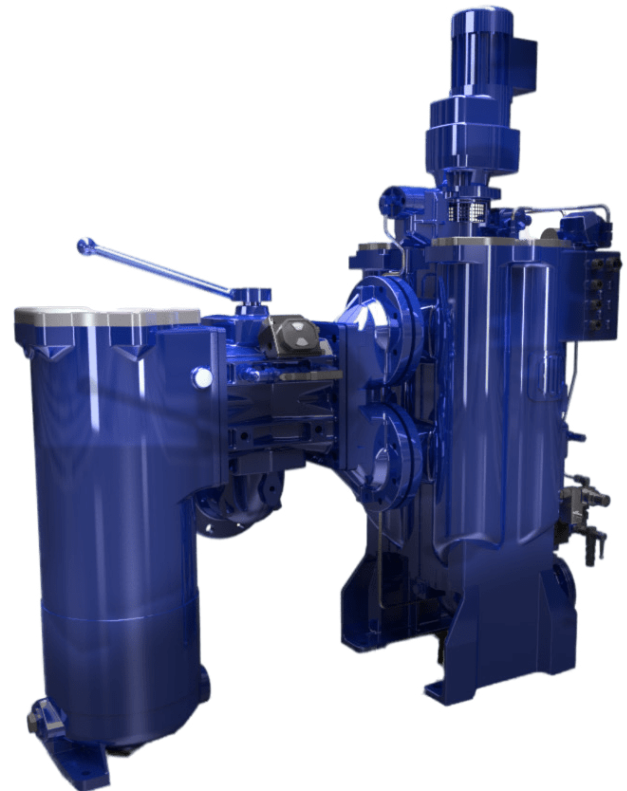


Figure 1: Cat Fines Filter

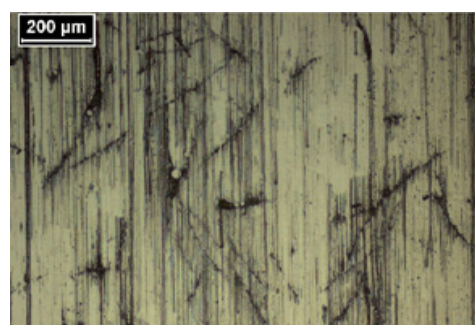


Figure 2: Examples of the effect of cat fines to the cylinder liner

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## Key benefits

- Improved fuel oil cleanliness
- Solution is recommended for all new buildings (see SL 2017-638DOJA)
- Preventive solution
- IMO 2020 ready
- Significantly lower risk of damage to:
  - cylinder liners
  - piston rings
  - piston ring grooves fuel pumps

## Scope of supply

- Cat fines filter unit with bypass filter
- Control box
- Spare filter candles optional

## Applicable to

- Available for all Everllence B&W two-stroke and four-stroke engines
- Installation point for optimal effect is in the fuel circulation line
- Installation can be carried out either during docking or during port stay

## Reference List

Cat fines filters for marine engines have been supplied for the last 30 years.

## More information

Would you like to know more about the product, and how the upgrade can improve your specific engine? Then do not hesitate to contact your local Everllence PrimeServ office to receive more information about the upgrade!

## Everllence PrimeServ

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