



Auto Viscous / Oil Bath Filter

Description

The self-cleaning viscous air filter or oil bath filters is particularly suitable in many industrial applications to filter large air volumes having high dust concentrations

They are generally used in diesel and gas engine applications. It maintains its dust trapping characteristics over an extended period of time and dust will not break away and be carried downstream.

Oil bath self-cleaning filters have numerous advantages: constant cleaning efficiency and pressure drop, minimum maintenance, low operating cost, small footprint and easy installation on site. Moreover, this solution is cheaper than equivalent filter casing with static filter elements or compared to other self-cleaning technologies (pulse-cleaning filters).

Working Principle

Auto Viscous filter is a self cleaning viscous filter using a rotating curtain of metal panels as the filtering mat. Behind the filter mat is an endless roll of oil drop eliminator. A timer controlled, totally enclosed thermally protected geared motor rotates the filter media and oil drop eliminator which pass through a viscous oil bath located at the bottom of the filter. The viscous oil cleans the filter media and the oil eliminator minimizes the carry over oil droplets into the air stream. The sludge collected in the oil bath needs to be cleaned periodically.

Key Features / benefits

- Constant high cleaning efficiency
- Lower pressure drop.
- Minimum maintenance.
- Small footprint and easy installation.
- Low operating cost.
- Easy installation at site.

Technical Specification

- Recommended Air Velocity : less than 3 m/sec.
- Recommended working temp. : 60 Deg. C Max.
- Recommended Oil to be used : SAE Grade 30 / Equivalent
- Initial Pressure Drop : 40-50 Pa (For 2.5 m/s inlet velocity)
- Final Pressure Drop : 100 Pa
- Rotation Frequency : 30 Sec. On 20 min. off (Adjustable)
- Motor : 3 Phase. 415 V AC, 50 / 60 Hz
- Filtration efficiency : G2 / G3 as per EN 779



Auto Viscous Filter

Area of application

- Diesel / Gas Engines
- Coal and Lignite mines
- Steel plants
- Chemical plants,
- Cement plants,
- Foundries and other industries.

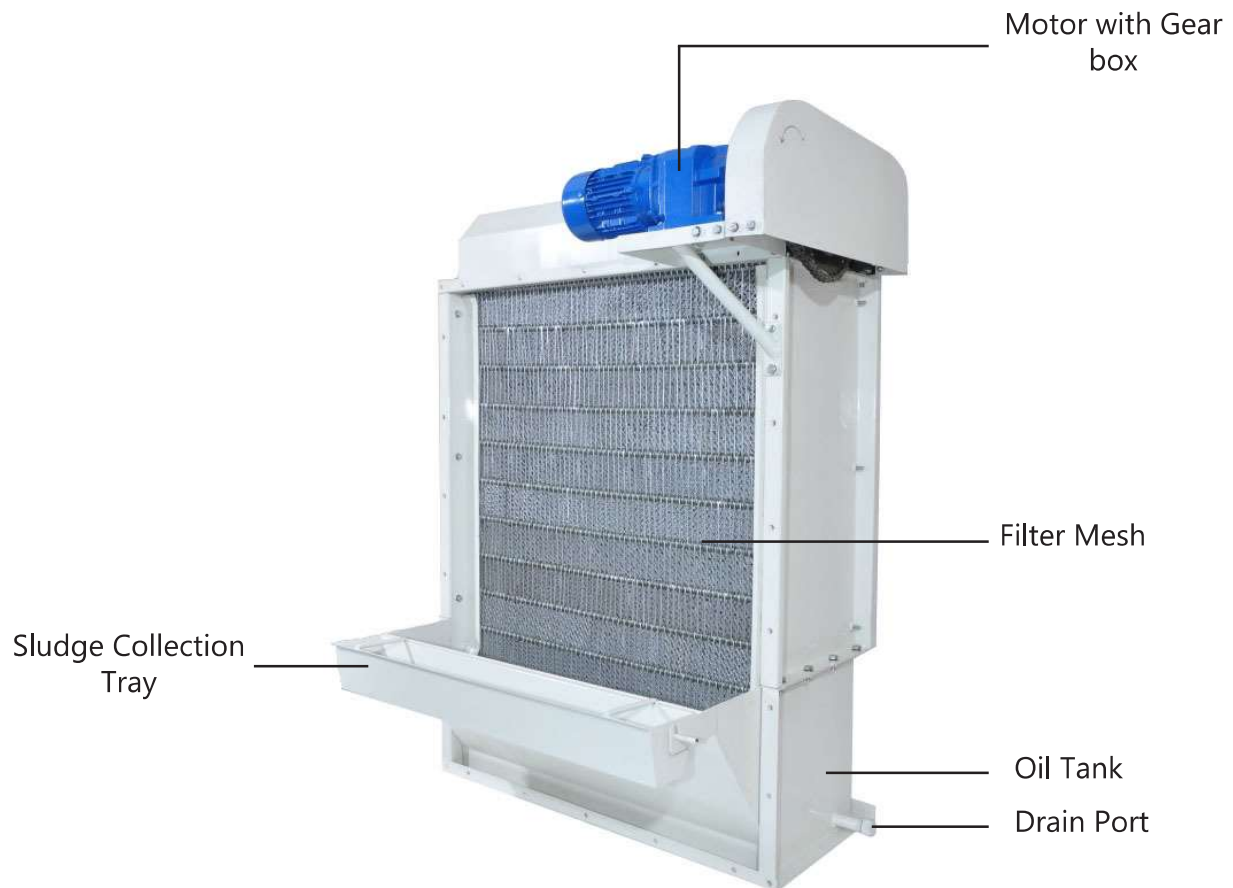
Accessories / Add-Ons

- Weather louvers and weather hoods.
- Secondary filtration stage.
- Skid platform and structure.

Oil Bath / Auto Viscous Filter

Information required to size oil bath filter

- Air Flow : CMH
- Recommended working temp. : Deg. C Max.
- Initial Pressure Drop : Pa
- Final Pressure Drop : Pa
- Rotation frequency : 30 Sec. On 20 min. off (Adjustable)
- Power supply : Phase. V AC, Hz
- Arrestance : G2 / G3 as per EN 779
- Filter mesh : Galvanized / Stainless steel
- Site conditions : Temperature , Atmospheric pressure, Humidity
- Electrical area classification : Non hazardous area
- Available space at site for installation : L x W xH



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