Spinaire

Engine Air Precleaner

Customer Challenge

It's a challenge keeping engines free from dust, water, salt, etc. Many applications experience short air cleaner life due to dirty intake air causing operators to replace air cleaner elements on an extremely frequent basis. On some severe applications, the dirty air might pass through the air cleaner and cause worn piston rings, scored cylinder liners, excessive blow-by, excessively worn or failed turbo chargers, fouled charge air coolers, and excessive sludge buildup. Eventually these issues will cause an engine failure.

Racor Solution

Racor precleaners are designed to remove up to 97% of air borne debris from the incoming air before it enters the air induction system of the engine. Racor precleaners are available with heavy duty aluminum and stainless steel construction for severe environments such as mining, construction, and forestry. Racor precleaners are also available in a low-cost composite material for applications where exposure to damage is minimal.

- Improved fuel economy: as filters get dirty and restriction increases, combustion efficiency is reduced.
- Extended oil filter life: reduces the amount of contaminant the oil has to trap.
- Reduced emissions: combustion efficiency decreases as air is restricted from passing through the filter.

The longer the filter stays "clean" the longer combustion efficiency is maintained.

Contact Information

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How the Solution Works

The vacuum created by the engine powers the Racor precleaner. Incoming air is drawn through the angled louvers which direct the intake air to turn the rotor. Centrifugal force caused by the spinning rotor separates the contaminants from the air, throwing them to the outer surface of the air chamber (inner surface of the cover). The separated debris is expelled through the discharge port in the cover. Clean air is drawn into the plenum chamber. Only clean dry air goes to the filter and the engine.

Features and Benefits

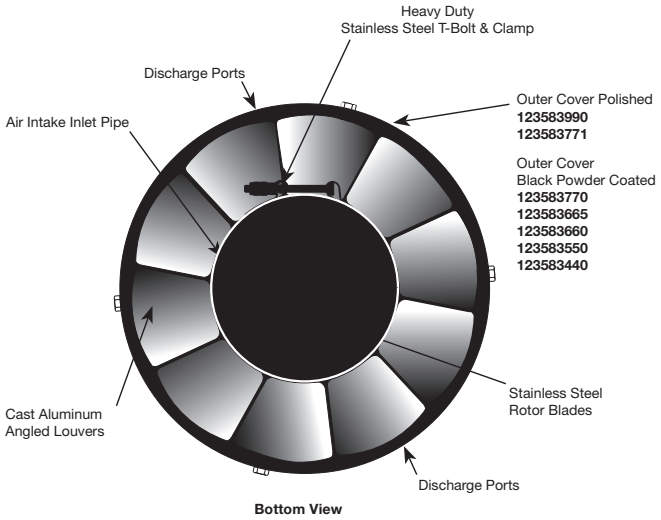
- Air flow rates between 210-1850 cubic feet per minute (CFM)
- Aluminum housing, available polished or black powder coat
- Dynamic vane precleaner
- Outlets 4.0-9.0 in. (10.1-22.8 cm)
- Self powered
- Self cleaning
- Saves on fuel costs

Applications

Racor engine air Precleaners are designed to be mounted on or connected to the air filter intake of a gasoline or diesel engine air cleaner.

Applications include:

- Construction and mining equipment
- Pumping plants
- Generator sets
- Material handling equipment
- Snow removal equipment
- Street sweepers



Bottom View

Specifications	123583440	123583550	123583660	123583665	123583770	123583990
Maximum Flow Rate	300 CFM (8.5 CMM)	520 CFM (14.7 CMM)	740 CFM (21.0 CMM)	580 CFM (16.4 CMM)	1190 CFM (33.7 CMM)	1850 CFM (52.4 CMM)
Height	4.8 in. (12.2 cm)	7.1 in. (18.0 cm)	7.1 in. (18.0 cm)	7.1 in. (18.0 cm)	7.3 in. (18.5 cm)	8.1 in. (20.3 cm)
Weight	5.0 lbs (2.3 kg)	8.0 lbs (3.6 kg)	9.0 lbs (4.1 kg)	8.0 lbs (3.6 kg)	11.0 lbs (5.0 kg)	14.0 lbs (6.3 kg)
Diameter	8.3 in. (21.1 cm)	10.6 in. (26.9 cm)	12.3 in. (31.2 cm)	10.6 in. (26.9 cm)	14.1 in. (35.8 cm)	17.1 in. (43.4 cm)
Inlet Diameter	4.0 in. (10.2 cm)	5.0 in. (12.7 cm)	6.0 in. (15.2 cm)	6.0 in. (15.2 cm)	7.0 in. (17.8 cm)	9.0 in. (22.9 cm)

Notes:

CFM = cubic feet per minute
CMM = cubic meters per minute

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