

# Air System protection



### **Heavy-duty protection**

Clean air is critical to the performance and life of your engine. For efficient combustion, a modern diesel engine requires several thousand times as much air as it does fuel. Under normal operating conditions, to burn one gallon of fuel you have to clean 15,000 gallons of air. Add a turbocharger to that engine, and air consumption requirements increase by 20% or more.

Proper air filtration is important because a small amount of dirt can cause a tremendous amount of engine damage. The purpose of the air filter is to promote long system life by keeping damaging contaminants away from sensitive engine components.

To improve dust holding capacity and air flow, Baldwin Filters uses two proven methods to separate and stabilize the pleated media.

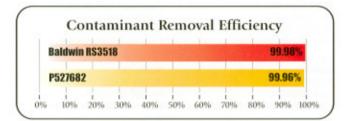
- PermaPleat® an embossing process that forms dividers between pleats which prevents bunching and insures uniform air flow.
- Beading a continuous bead of adhesive around the circumference of the filters metal wrap, either inner or outer, to lock the pleat tips in place and prevent movement.

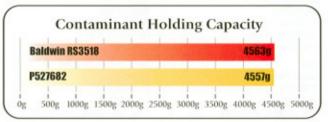
Baldwin Filters offers more than 2,200 air filters – the majority of which feature our PermaPleat construction. Baldwin filters supply the necessary protection for all engines.

# **Maximum performance**

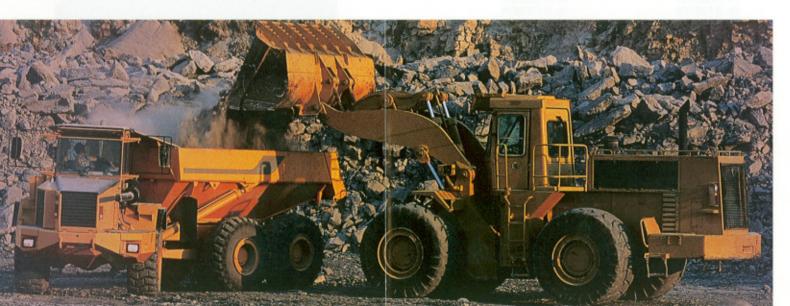
Baldwin Filters designs and manufactures heavy-duty air filters to the specifications established by engine and equipment manufacturers.

SAE J726 testing shows that Baldwin filters meet the requirements determined by the manufacturer in contaminant removal efficiency and contaminant holding capacity. The following product comparisons illustrate Baldwin's superior performance.





SAE J726 Test: Flow Rate 650 SCFM, PTI Fine Test Dust, Termination at 30° of water.



#### **Radial Seal Air**



- Heavy-Duty Radial Seal Gasket formed from a special urethane compound will not degrade under temperature extremes, changes in restriction or vibration.
- Flexible Outer Edges allow deflection for easy insertion and removal in housings which have minimum clearance.
- @ Raised Ring holds filter securely in place to prevent vibration.
- PermaPleat Construction provides even pleat spacing to prevent bunching and insure maximum element life.
- Spiral Glue Binding provides added pleat stability to optimize media effectiveness.
- Heavy-Duty End Cap Construction features a specially reinforced center portion designed to prevent constant flexing and potential failure during changes in intake pressure.\*

<sup>\*</sup> On models with inner diameters larger than 6".



#### Clean air is essential

An air filter that looks relatively clean may actually be too restrictive. Likewise, a filter that appears to be dirty, may still have thousands of miles or hours of useful life.

Since it is impossible to determine the true condition of an air filter by visual inspection, Baldwin recommends the use of an air restriction gauge, which more accurately measures acceptable restriction levels.

Before disposing of an old air filter, inspect it carefully for problems that may need correcting.

- Black, powdery coating may indicate the air intake is located too close to the engine exhaust.
- Dirt on the clean side of the filter element may indicate a dust leak due to the filter not sealing properly or a split in the filter media.
- Rust on the filter's metal parts may indicate that water is being drawn in with the air. Check the location of the intake and make sure water-venting ports in the induction system are clean and free of obstructions.

Baldwin does not recommend cleaning air filter elements, as the cleaning process might damage the filter — leading to premature engine failure.

## **Depend on Baldwin Filters**

Protect your equipment with heavy-duty Baldwin filters. When it comes to coverage, Baldwin Filters provides the widest range of heavy-duty lube, air, fuel, coolant, hydraulic and transmission filters in the industry.

Baldwin consistently manufactures filters designed to meet or exceed the quality, performance and supply requirements of original equipment and aftermarket customers.

Africa

Baldwin Filters South Africa

Ph: 27-21-534-0029 Fax: 27-21-534-3730

E-mail: africa@baldwinfilter.com

Australia & New Zealand

Baldwin Filters Aust., Pty. Ltd.

Ph: 61-3-9353-7300 Fax: 61-3-9353-7301

E-mail: australia-newzealand@baldwinfilter.com

Central & South America

Baldwin Filters

Ph: (786) 425-1896 Fax: (786) 425-9138

E-mail: latinamerica@baldwinfilter.com

China

Baldwin Filters

Ph: 852 2814 7722 Fax: 852 2814 7744

E-mail: china@baldwinfilter.com

Europe

Baldwin Filters N.V.

Ph: 32 3 328 18 88 Fax: 32 3 328 18 99

E-mail: europe@baldwinfilter.com

Nexico -

Filtros Baldwin de Mexico, S.A. de C.V.

Ph: 5255-5445-0660 Fax: 5255-5446-0677

E-mail: mexico@baldwinfilter.com

Middle East

Baldwin Filters

Ph: (308) 237-9782 Fax: (308) 237-9769

E-mail: middleeast@baldwinfilter.com

Russia

Baldwin Filters Ph: (308) 237-9749

Fax: (308) 237-9769

E-mail: russia@baldwinfilter.com

Southeast Asia & Pacific Rim

Baldwin Filters

Ph: 65-6382-6619 Fax: 65-6382-6182

E-mail: southeastasia@baldwinfilter.com

UK & Ireland

Baldwin Filters Ltd.

Ph: 44-1702-291668 Fax: 44-1702-290846

E-mail: uk-ireland@baldwinfilter.com





4400 East Highway 30 • P.O. Box 6010 Kearney, Nebraska 68848-6010 Phone: (308) 234-1951 • Toll Free: (800) 822-5394 Fax: (800) 828-4453 • Int1 Fax: (308) 237-9769 Internet: www.baldwinfilter.com