OptiFlo® Compact





Design | Engineering | Manufacturing | Maintenance | Spare Parts





INTERNATIONAL



ENVIRONMENTAL SOLUTIONS

A versatile and compact unit for the metal industry

OptiFlo® Compact SPK is a dry dust collector that uses especially designed cartridges to offer a tailor-made solution aimed at meeting the needs of the metal and metallurgy industries. Reduces air emissions and guarantees a dust free working environment, increasing the industrial safety and improving the environmental conditions under which personnel are operating.

In terms of its air filtering capacity, it is worth noting that is can operate with a wide range of flows between 1,000m³/h and 20,000m³/h, with a unit size that is smaller than the other units operating in the same filtration range.

The answer resides in the modularity of its design. Available in different sizes, OptiFlo® Compact SPK can house between 4 and 16 filtering elements. The fact that the filtering elements are arranged in

rows and columns and mounted on a single plate, significantly reduces the space that is required for it at the plant.

OptiFlo® Compact SPK also has a built-in fan and electrical panel and incorporates its own dust discharge and collection system, turning it into a "plug and play" filtering unit, which may also be used as a plug-in unit depending on the characteristics of the application; indoors as well as outdoors.

Its operation is highly intuitive, based on an easy operation in terms of the connections and initial startup as well as its subsequent maintenance thanks to, among other things, the arrangement and accessibility of the components that comprise the system.

Built-in spark protection. Because safety is paramount

OptiFlo® Compact SPK incorporates a spark protection component at the inlet to the filtration chamber that prevents incandescent particles that are generated during the different metal transformation processes from entering the chamber and reaching the cartridges.

This is an essential component that, in addition to increasing the safety of the operators and the equipment itself, contributes to prolonging the service life of the filtering elements, which by extension, significantly reduces the replacement and maintenance costs.

The spark arrestor has a dual inlet: on the side and bottom. Both can be used for connecting the unit as well as for inspection depending on the characteristics and location of the machinery that is present at the plant. This element can also be located on any side of the filtering unit, which simplifies its installation since it adapts to the available space.

A strategic part in the process

Safely reduces emissions, sizing OptiFlo® Compact SPK according to your filtration needs.

- Welding
- Laser cutting
- Plasma cutting
- Shot blasting
- Metallizing
- Polishing and deburring
- Dry paint booth
- Machining





2 OptiFlo® Compact SPK





Recreation of a filtering process by:

- 1. OptiFlo® Compact SPK 3RC16
- 2. OptiFlo® Compact SPK 3RC16
- 3. OptiFlo® Compact SPK 2RC8 ATEX
- 4. OptiFlo® Compact SPK 2RC8 ATEX

The components of a *plug and play* solution



Model shown in the picture: OptiFlo® Compact SPK 2RC8 - ATEX

Fan

The built-in fan is located at the top of the unit and is protected by an soundproof box that helps reduce the noise to levels lower than that generated by external ventilation systems.



Compressed air cylinder

Built-in compressed air cleaning system; accessible for streamlining and simplifying maintenance and repairs.



Spark arrestor

Made using carbon steel sheet metal, it generates a lowering of the speed and a series of changes in the direction of the flow to prevent sparks from reaching the cartridges. This item includes an inspection panel that allows checking the condition of the component.

Electrical panel

Compact and highly intuitive, making it easier and faster to start-up the fan and the cleaning controller.



Reduces dust and multiplies the advantages

OptiFlo[®] Compact SPK incorporates an automatic counterflow compressed air cleaning system that allows operating continuously for prolonged periods of time, ensuring a constant load loss.

With a larger air inlet surface, the inlet speed is reduced, minimising abrasion of the filtering elements and improving the distribution of dust in the dirty air plenum. The result: a longer service life of the filtering elements and a greater filtration capacity than that of other units on the market with a similar number of cartridges. And all of this with a filtering system that is compact and modular.

ATEX

The OptiFlo[®] Compact SPK can also be installed in potentially explosive atmospheres.

The unit is offered with an ATEX option that guarantees a safer working environment by using venting panels or pressure release systems and flame arrestor.



- ▶ Greater efficiency.
- Longer operating life of the unit and the cartridges
- Reduction in required maintenance.
- Lower operating costs.



Model shown in the picture: OptiFlo® Compact SPK 2RC8 - ATEX

REDClean[®] Selecting a proper filter changes everything

The continuous efforts of AAF in R&D&i and the search for a greater efficiency in filtration have provided a wide range of cartridges capable of meeting the filtration needs of the most demanding industries.

The REDClean® Media line

REDClean[®] D/DFR

Mixture of cellulose and synthetic fibers reinforced with a "flame retardant" finish as an available option. MERV 11 efficiency rating.

REDClean[®] N/NFR

Aggregate of cellulose and synthetic fibers with nanofibers. leading technology in the industry with a MERV 15 efficiency rating, the highest rating with the lowest differential pressure. Also available with a "flame retardant" finish.

REDClean[®] S

Non-woven 100% polyester stocking that offers an excellent resistance to abrasion, temperature and humidity. MERV 11 efficiency rating.

The REDClean[®] cartridges are especially designed to reduce the loss of operating pressure and the compressed air consumption, which translates to advantages such as:

- ☑ Low energy consumption
- ☑ Excellent releasing of dust
- ☑ Extending of the service life
- ☑ Fewer cartridge replacements

Nano-fiber: the advanced technology that results in cost savings

The outer layer of nano-fiber that is incorporated in the REDClean[®] N and REDClean[®] NFR models enables to collect smaller particles, preventing these from penetrating the stocking.

This way the durability of the stocking is increased and the cartridge replacement frequency is decreased.

Patented by AAF, the technology based on the use of nano-fibers is leading the filtration market.

REDClean® SA

100% polyester stocking with an aluminium antistatic finish for ATEX applications. MERV 11 efficiency rating.

REDClean[®] M

Mixture of washable synthetic fibers. Excellent resistance to humidity and to high temperatures. MERV 11 efficiency rating.





Sales Offices

Europe

UK

Bassington Lane, Cramlington Northumberland, NE23 8AF, UK Tel: +44 1670 713 477 Email: aafep@aafintl.com

Spain

Urartea 11 Polig. Ind. Ali Gobeo 01010 Vitoria, Spain Tel: +34 945 214 800 Email: aafep@aafintl.com

France

Rue William Dian 27620 Gasny, France Tel: +33 2 32 53 60 60 Email: aafep@aafintl.com

Italy

Via Lario, 1 22070 Fenegrò (CO), Italy Tel: +39 031 35 25 311 Email: aafep@aafintl.com

Austria

Campus 21 Europaring F12 401 2345 Brunn am Gebirge, Austria Tel: +43 (0) 2236 677 628 0 Email: aafep@aafintl.com

Germany

Robert-Bosch-Str. 30-32 64625 Bensheim, Germany Tel: +49 (0) 6251 80368 70 Email: aafep@aafintl.com

Greece

1, Ifaistou & Kikladon 15354 Glika Nera, Greece Tel: +30 2106632015 Email: aafep@aafintl.com

Middle East & Africa

Turkey

Hürriyet Mahallesi Yakac1k D-100 Kuzey Yan Yol No: 49/1-2 34876 Kartal, Istanbul, Turkey Tel: +90 216 4495164/65 Email: aafep@aafintl.com

UAE

FZS1 BC01-BC04, Jebel Ali South, P.O. Box 263120, Dubai, UAE Tel: +971 4 8894 886 Email: aafep@aafintl.com

Saudi Arabia

P.O. Box 59336 Riyadh 11525, Kingdom of Saudi Arabia Tel: +966 1 265 0883 Email: aafep@aafintl.com

Americas

USA

9920 Corporate Campus Drive, Suite 2200, Louisville, KY 40223-5000, USA Tel: +1 502 637 0011 Toll Free: +1 800 477 1214 Email: aafep@aafintl.com

Mexico

Av. Primero de Mayo No. 85, Col. San Andrés Atenco, C.P. 54040 Tialnepantla EDO De Mexico, Mexico Tel: +52 55 5565 5200 Email: aafep@aafintl.com

Brazil

Rua Dr. Bacelar, 173-12°-andar-cj.121 Vila Clementino-CEP 04026-000 São Paulo-SP, Brazil Tel: +55 11 5567 3000 Email: aafep@aafintl.com

Asia Pacific

China

33 Che Cheng Road Wuhan Economic & Technological Development Zone Wuhan, Hubei Province PR, China 430056 Tel: +86 27 8447 3671 +86 27 8447 3672 Email: aafep@aafintl.com

Malaysia

Lot 6, Jalan Pengapit 15/19, Seksyen 15, 40000 Shah Alam, Selangor Darul Ehsan, Malaysia Tel: +603-5039 7733 Email: aafep@aafintl.com

Australia

2 Arctic Court Keysborough, Victoria 3173 Australia Tel: +61 3 9701 5251 Email: aafep@aafintl.com

The information in this document is the property of American Air Filter Company, Inc. and its affiliated companies (collectively, "AAFCI") and may not be copied or distributed to any third party, or used for any purpose other than that for which it is supplied, without the express written consent of AAFCI. While the information herein is provided in good faith based on information available when the document was created, it should not be relied upon as being complete or accurate, and the products advertised within this document, and their components and accessories, are subject to change without notice. AAFCI provides this information on an AS IS basis and makes no warranties, expressed or implied, or representations regarding same. This document does not establish, and should not be taken as establishing, and contractual or other commitment binding upon AAFCI or any of its subsidiaries or associated companies.

ISO Certified Firm ©2018 AAF International







ENVIRONMENTAL SOLUTIONS

BETTER AIR IS OUR BUSINESS®