

INNOVATIVE ENVIRONMENTAL SOLUTIONS

WATER & ENVIRONMENTAL SYSTEMS

VOLUME TWO | ISSUED JULY 2020

POWERFUL CAPABILITIES FOR A GLOBAL MARKET

RENOWNED BRANDS THAT PROVIDE TRUSTED SOLUTIONS

Pentair Environmental Systems is a manufacturer and supplier of a suite of renowned products and services totally focussed on the provision of environmental control and monitoring solutions to industry. At Pentair Environmental Systems we work closely with our customers to provide the best solution for the application, integrating products and expertise to deliver real and measurable outcomes. From components to complete and integrated turn-key solutions Pentair Environmental Systems is positioned to meet all needs. Globally.

WHEREVER YOUR SYSTEMS GO, PENTAIR ENVIRONMENTAL SYSTEMS CAN BE THERE

Air Pollution Control markets, particularly in the Power Generation market are international markets. Pentair Environmental Systems reaches around the globe with manufacturing locations or offices in Australia, USA, China, UK, Germany, Italy and Malaysia. A network of distributors extends out reach throughout all of South America, Mexico, Canada, throughout Europe, Japan, Korea, Hong Kong, throughout South East Asia, South Africa and New Zealand. In combination we provide outstanding reach for sales, service and expertise.

SOLUTIONS DRIVEN BY INNOVATION, EXPERTISE AND ENGINEERING

Pentair Environmental Systems does not take shortcuts to provide a sharp price. We understand that in the Power industry, risk of systems failure is the most expensive liability. We provide value by minimising risk. Our state of the art filter cleaning test laboratories and computational fluid into applications and systems designs Systems. and are focussed on optimising solutions. In combination with more than 35 years industry experience and our unique Goco cleaning systems application modelling tool, we can provide high quality answers and short circuit months of customer testing and research activity. Our insightful answers are relied upon every day by key players in the Power Generation industry for real and measurable outcomes – such as data availability for monitors, or intervals between filter changes and component services for dust collector systems.

REAL WORLD MANUFACTURING FOR BEST VALUE

Pentair Environmental Systems is an ISO 9001 Quality Systems accredited manufacturer. Our systems ensure that we provide dependable, market leading product and service quality. We not only talk about environmental solutions, it is inherent to our business – Pentair Environmental Systems is accredited to dynamics skills provide unique insight ISO14001, Environmental Management

> Our quality and expertise ensures that the components and systems supplied by us will provide dependable service at the highest performance. We provide outcomes that are real, measurable, and focussed on eliminating risk.

This is achieved through outstanding facilities. These include the world's largest header tank manufacturing plant providing over 1000 ASME or CE (PED) certified filter cleaning systems per month to our customers for global destinations. Through design and manufacturing our products meet a range of safety requirements including CSA, UL, CE, ATEX.

GOCO. YOUR COMPETITIVE ADVANTAGE

We support this process through GOCO, consultation and additional performance testing and modelling using computational fluid dynamics.

ELIMINATE RISK

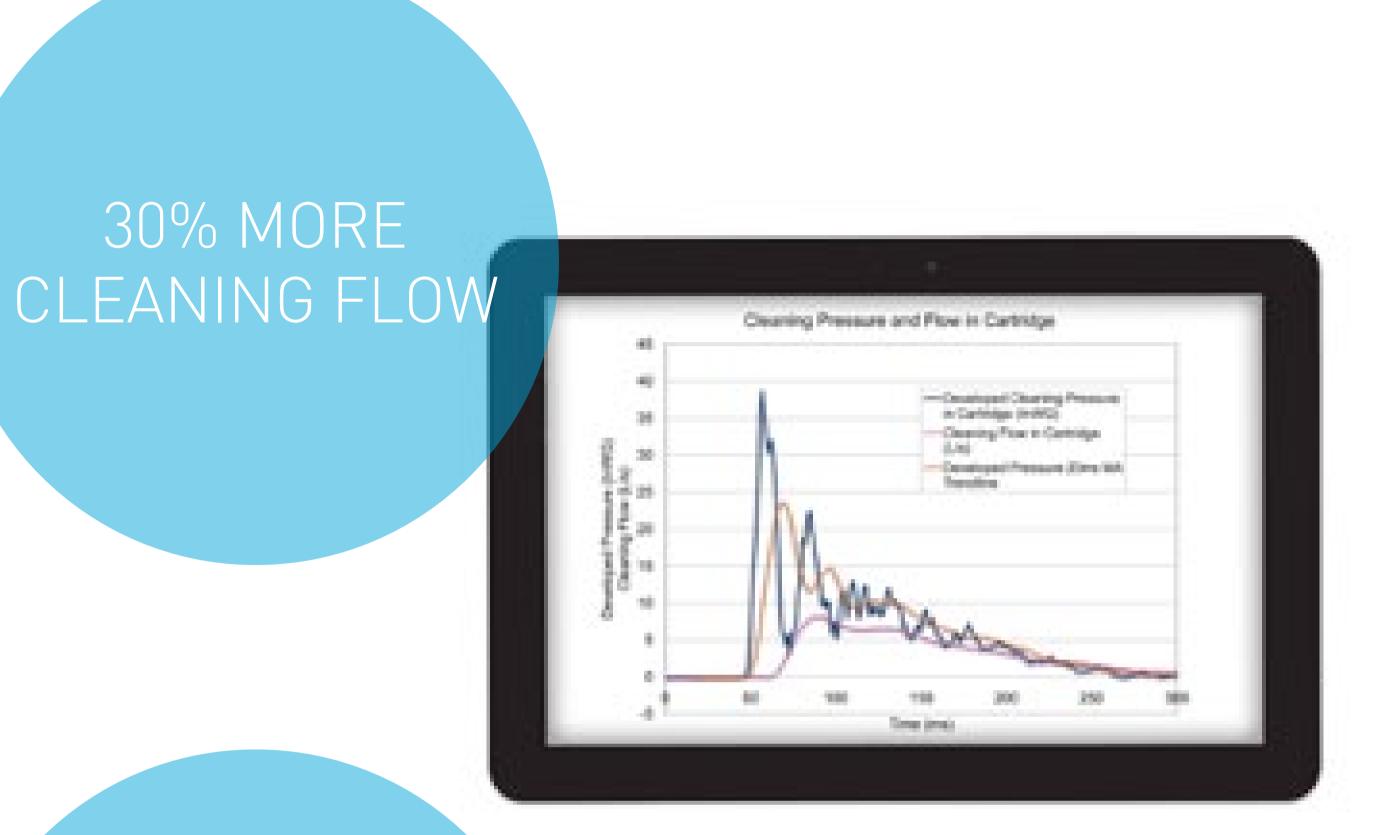
- Make the system more robust against changing dust loads
- Reduce risk of system failure

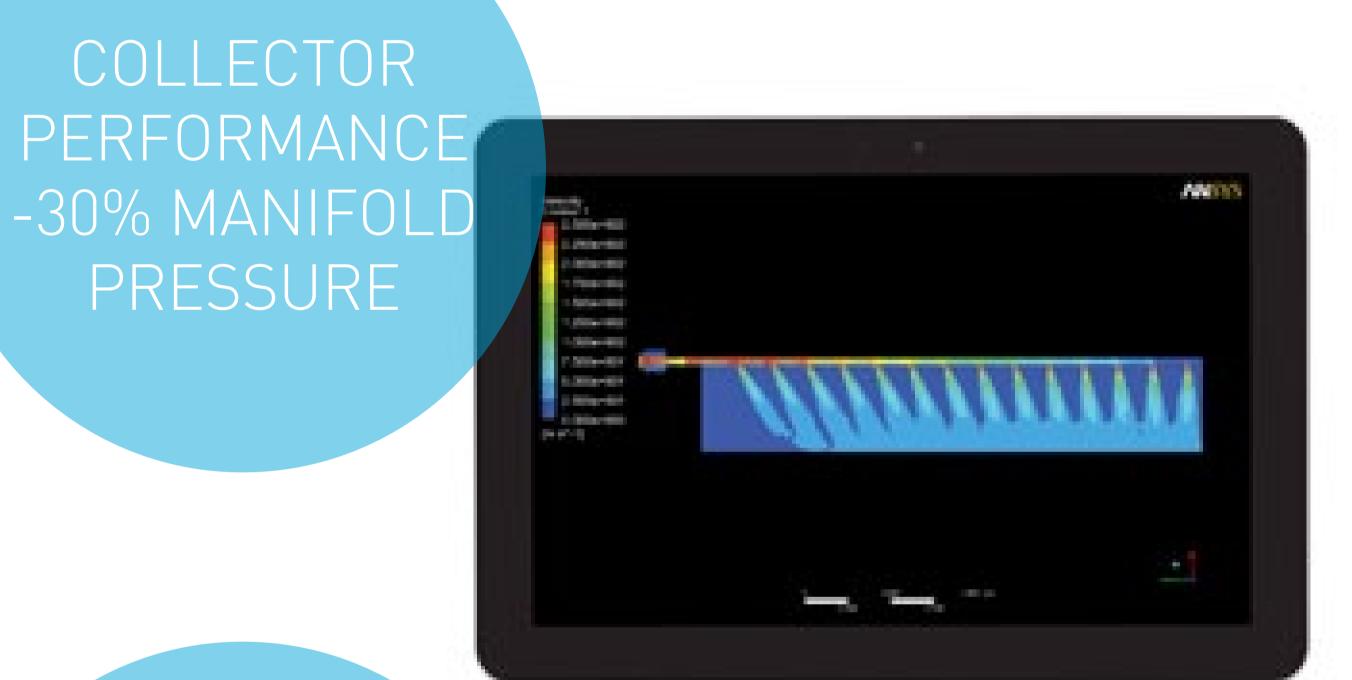
MINIMISE OPERATING COSTS

- Reduce compressor demand
- Pulse noise reduction

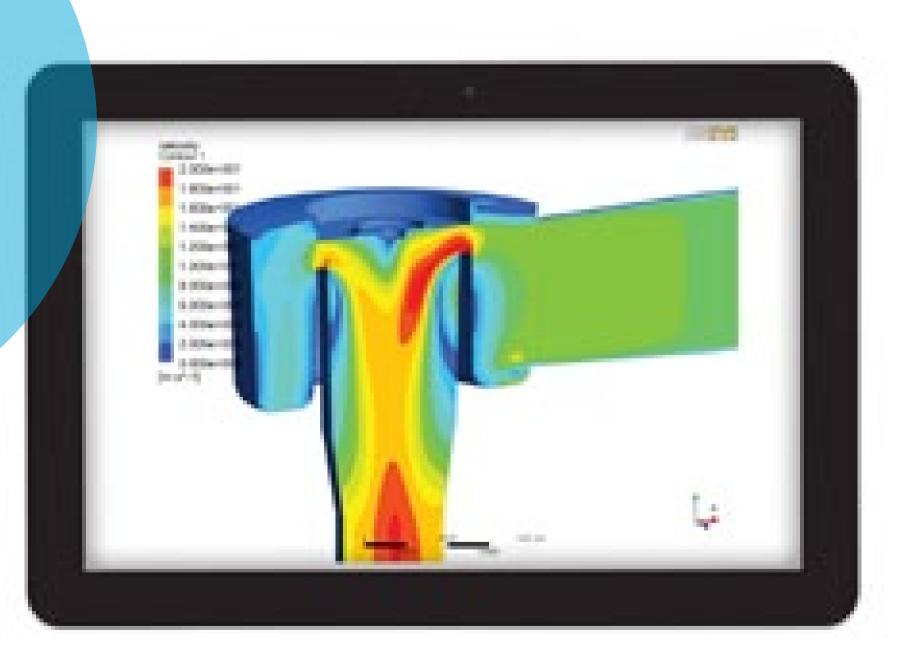
INCREASE FILTER LIFE

- Improve scrubbing efficiency
- Reduce pulse rate to clean filters on dP
- Increase filter life reduce maintenance frequency





REDUCING COLLECTOR BUILD COST



REVERSE PULSE JET VALVES WITH SHOCKWAVE TECHNOLOGY

GOYEN SERIES 4

Goyen develops and manufactures the world's most efficient, high performance components for reverse pulse jet filter cleaning valves:

- Class leading performance better pulse cleaning than ever
- Highly responsive reduced compressed air costs
- Shockwave diaphragm no spring failures
- Convenient range of mounting styles

High performance, reverse pulse jet diaphragm valves for filter cleaning applications. Features the Shockwave diaphragm with integrated Close

- Power generation
- Mining and resources
- Steel and cement

BETTER PULSE CLEANING THAN EVER!

- CV = 26.0
- Kv = 22.5
- Best in class from 0.3 Bar (4.4 psi) to 8.6 Bar (125 psi)

BETTER CONTROL OF AIR USAGE

- Responds to electrical signals as short as 50ms
- Consistent fast response to closing

PNEUMATIC INSTALL REQUIREMENTS

	METRIC	US/IMPERIAL
Supply compressed air pressure range	0.3 to 8.6 Bar	4.35 to 124.7 PSI
Compressed air temperature (Shockwave diaphragms)	-40°C to 82°C	-40°F to 180°F
Compressed air temperature (Viton diaphragms)	-40°C to 232°C	-40°F to 450°F
Media type	Air of inert gases only	





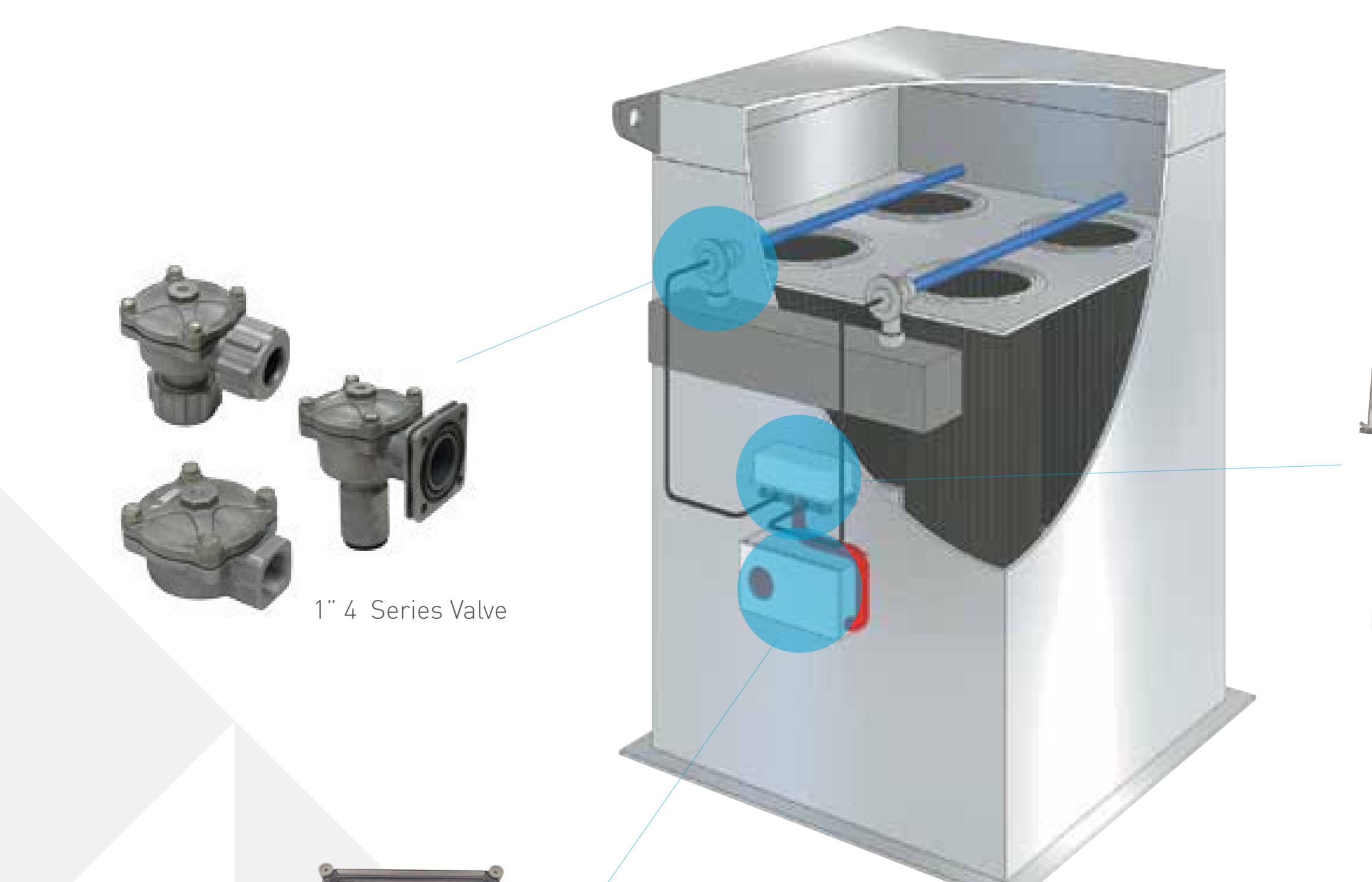






CLEAN AIR SOLUTIONS FOR BULK SOLIDS AND MATERIALS HANDLING

Goyen and Mecair provide trusted and trouble free components and systems for bulk solids and materials handling applications. A wide range of valves, solenoid pilots, manifolds, and controls are available to suit any system need from the smallest silo venting filter, to large scale bulks solids handling.

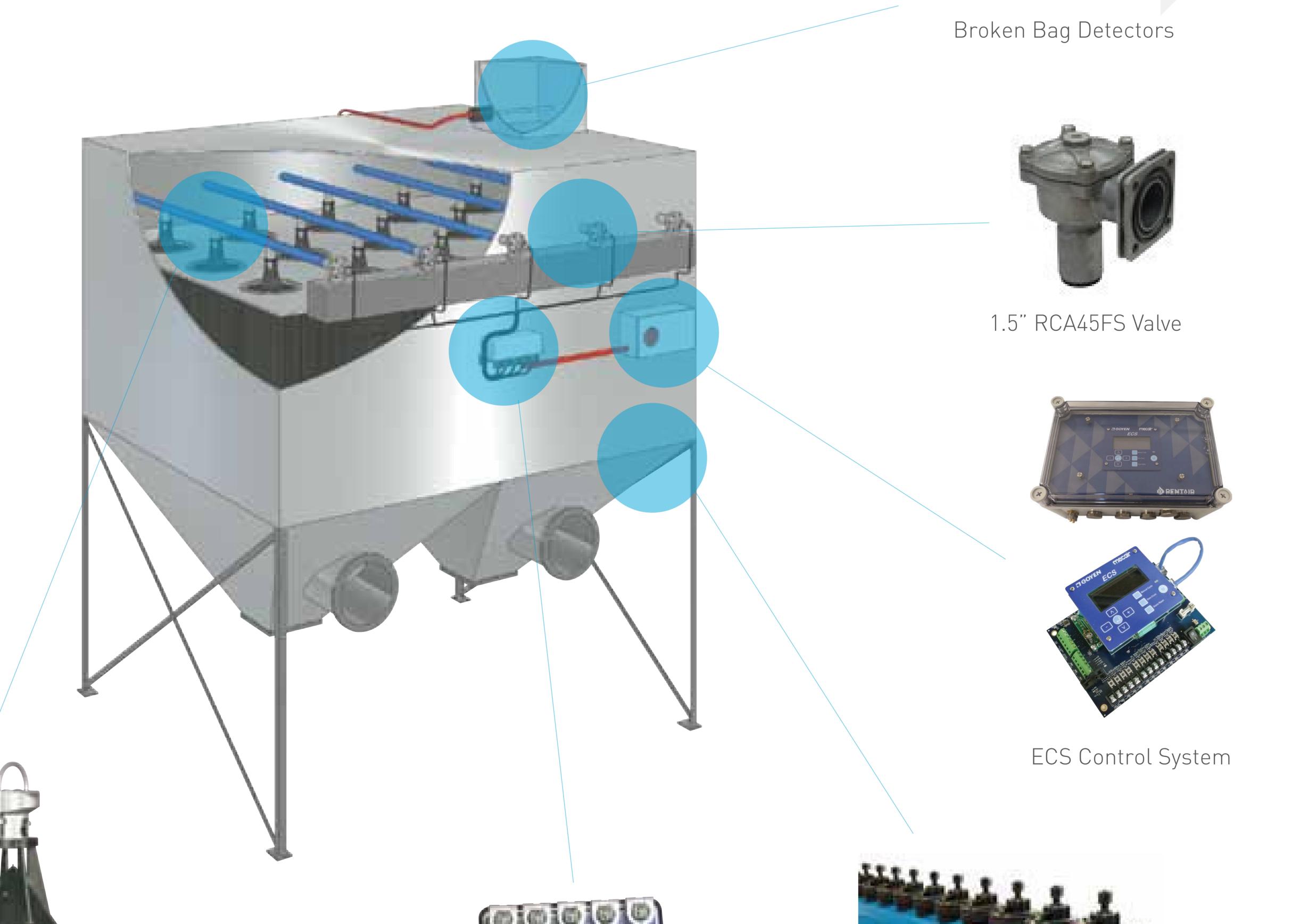




FILTER CLEANING SOLUTIONS FOR

Cartridge Cleaning Cone

In the manufacturing environment, Goyen and Mecair's expertise and quality products can minimise the operating costs of your dust collectors. Intelligent design, specification and operation of the filter cleaning system will significantly reduce the operating and maintenance costs of the dust collector through longer filter life and reduced energy consumption.



3.5V Solenoid Pilots



EMISSION MONITORS

FFD, FFA and PEM

 Dramatically reduce downtime Thanks to reliable and effective monitoring of your baghouse filtering performances
Dual alarm set points to detect and anticipate filter failures due to (i.e.) broken bags

Better overview

- All models feature a 4-20mA output
- The FFA features an easy to use external control unit with color display – The PEM features a Modbus Real Time U (RS485) input/output interface
- Sensitive dependable measurement
- Alarm delay and data averaging user selectable to avoid false alarms
- Automatic short-circuit check on the PEM

Wide operating range

 Flue gases temperature can range from -20°C (-4°F) up to +250°C (+482°F) Ambient temperature can range from -20°C (-4°F) up to +55°C (+131°F) Dust level response from <0.1 mg/m³ to 500mg/m³

Certified to meet your needs

IECEx (PEM only)

US-EPA MACT compliant (FFA and PEM)

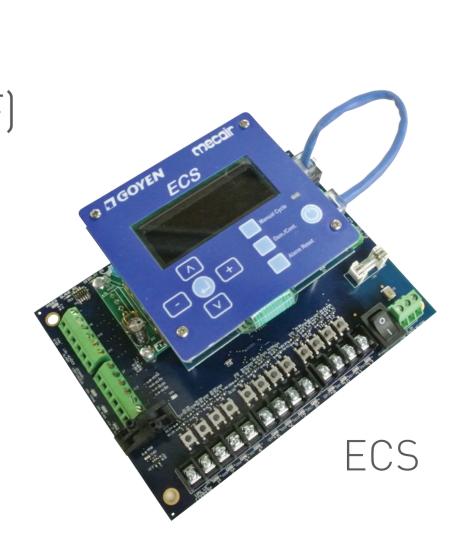
CONTROLLERS

DS, IS/ISP and ECS

Full suite of controls

- DS: 20° C to $+60^{\circ}$ C (-4° F to $+140^{\circ}$ F)
- IS/ISP & ECS: -40°C to +60°C (-40°F to +140°F)
- Certified to meet your needs

cULusCE



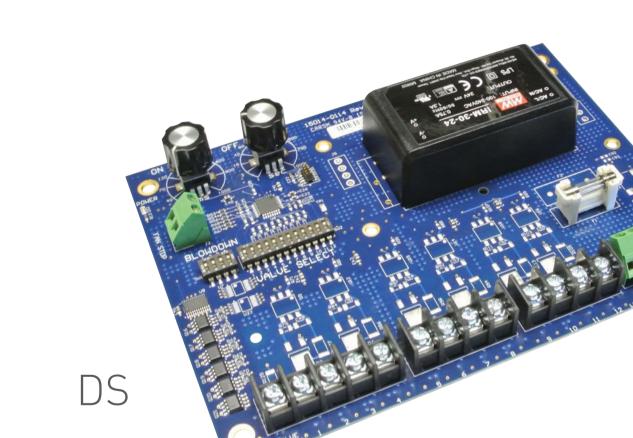




















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