

# MCS SERIES

CONDENSATE SEPARATORS

60 through 7000 SCFM



# MCS CONDENSATE SEPARATORS

## Simply clean condensate.

### SIMPLY SUPERIOR

The Mattei MCS range of oil water separators use a technologically advanced proprietary filtration media to separate oil from water in the condensate discharged from compressed air and gas systems. This non-carbon based and 100% recycled media actively absorbs oil while repelling water resulting in clean condensate that can be disposed of cleanly and inexpensively.

Condensate from compressors, refrigeration dryers, coolers, filters or any other drain points are piped directly to the MCS oil water separator. Here it passes directly into the primary filter which provides three critical functions:

- Depressurizes the condensate
- Traps solid particles protecting the secondary filter
- Catches bulk hydrocarbons within a high capacity oil absorbent

Next, the condensate passes through a deep bed of advanced filtration media which absorbs the oil providing outlet oil concentrations down to 5 ppmv or less so the remaining water can be disposed of safely and in compliance with environmental regulations.



Advanced MCS filtration media

- 100% performance - even on synthetic compressor lubricants\*

- Lower life cycle costs - long media life and simplified maintenance



Optional wall mounting brackets

- Lower outlet concentrations - down to 5 ppmv or less

- Space saving - smaller footprint for easier installation

- Environmentally friendly recycled materials

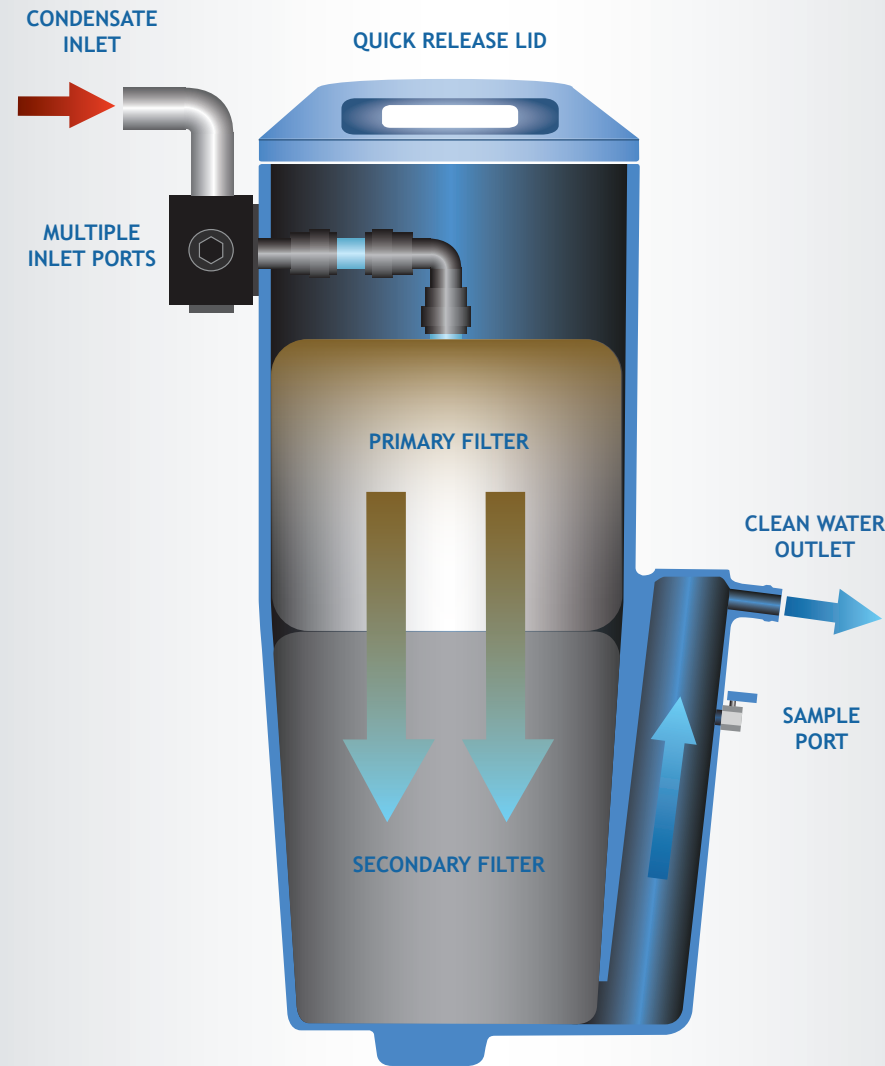
- Treatment for systems up to 10,000 scfm with a single unit

- Peace of mind - the most reliable product of its kind



Quick & easy to install & maintain

The MCS range of oil water separators are a reliable and cost-effective solution to the problem of contaminated condensate.



### CLEAN AND CLEAR

A typical compressed air or gas system produces thousands of gallons of oil contaminated condensate every year. Collecting, storing and disposing of this oily condensate is messy and expensive.

Mattei understands your needs and has created the range of high-performance MCS oil water separators to remove oil and other contaminants from your condensate allowing you to dispose of it safely and inexpensively. The MCS lets you stop paying for condensate disposal with this simple and cost effective approach to condensate treatment.

Get your money's worth.  
GET A MATTEI.

### REDUCE DISPOSAL COSTS BY 99.9%

A typical compressed air and gas system can produce thousands of gallons of condensate per year. This condensate may be as much as 99.9% pure water - so why pay thousands of dollars per year to dispose of water when you can clean it simply and effectively and pour it down the drain? The Mattei MCS range of oil water separators removes the oil from the water in your condensate so you can dispose of it cleanly and safely, drastically reducing your condensate disposal costs.

The MCS is not your typical oil water separator. Its advanced design and unique environmentally friendly oil absorbing filtration media takes separation technology to a whole new level. No messy carbon bags. No settling tanks full of untreated condensate. No external oil collection containers. Just simple and effective condensate treatment.

Get your money's worth. Get a MATTEI.



Figure 2: MCS Service Indicator ensures timely replacement of media

### ENVIRONMENTALLY FRIENDLY

The MCS is not only technologically advanced, it is also environmentally friendly. Unlike carbon used in traditional separators, MCS filter media is made from 100% recycled materials using environmentally sustainable manufacturing techniques. Separating your condensate is good for the environment. Using recycled materials to do it... even better.



Figure 3: Environmentally friendly

# GUARANTEED PERFORMANCE & RELIABILITY

## GUARANTEED PERFORMANCE

- The advanced filtration media provides long media life and outlet concentrations as low as 5 ppmv even with synthetic compressor lubricants\* and all without the size, weight and mess of a settling tank, bags of carbon or oil collection container.

## EASY TO SIZE

- No complex sizing tables and charts
- Size your unit on just your air or gas flow
- Fit applications up to 10,000 scfm with a single unit

## EASY TO INSTALL

- Package includes everything you need for installation
- Ready for use - no pre-soaking!
- Small footprint for tight installations
- Multiple inlet connections for multiple drain points
- Wall mounting kits available for many models

## EASY TO MAINTAIN

- Service intervals up to two years or longer
- Quick release lids for easy access
- No special tools required
- No settling tank to empty and clean
- No funnels to adjust
- No pre-soaking of media bags
- Replace the media in less than 15 minutes
- No oil collection container to dump & clean
- Service indicator ensures timely media replacement

## ENVIRONMENTALLY FRIENDLY DESIGN

- 100% recycled (and recyclable) filtration media
- Environmentally sustainable manufacturing practices

## HIGH QUALITY CONSTRUCTION

- Single piece molded body 100% tested for zero leaks

## WARRANTY

- Peace of mind - The MCS 120 through MCS 2500 come standard with a 10 year warranty! Conditions apply.



# ADVANCED FILTRATION MEDIA

Traditional condensate separators use activated carbon which is messy and requires pre-soaking, a long contact time and frequent replacement. The Mattel MCS is a new approach to oil water separation using a new, advanced, proprietary, non-carbon based media that attracts oil and repels water - it's as simple as that.

Traditional separators rely on settling tanks and the ability for the oil to separate from the condensate mixture, but many synthetic oils won't settle out due to having a specific gravity very similar to water. The heat of compression and timed solenoid drain valves compound the problem as they emulsify the condensate prior to reaching the separator. The MCS condensate separators don't rely on a settling tank.

Sizing a traditional separator often requires that you consider condensate flow while accounting for ambient conditions, compressor type, oil type, pressures, temperatures and other equipment. The MCS oil water separators can be sized quickly and easily based on just the air or gas flow. Nothing else!

The settling tank on a traditional separator makes the unit big and heavy requiring valuable floor space that must be level for the unit to perform correctly. The MCS oil water separators don't need a settling tank and use less floor space, so they can fit where you need them to. In addition, unlike carbon, the advanced media bags require no pre-soaking - your separator is ready to use, right out of the box.

Unlike the traditional heavy, dusty bags of activated carbon that need to be pre-soaked, the technologically advanced filter media comes in clean, lightweight, easy to handle bags that require no pre-soaking for quick and simple media replacement. Additionally, there is no settling tank to clean and no oil collection container to empty. The oil is trapped in the filters for easy disposal.

Maintenance is now even easier with the addition of a new Service Indicator. The easy to read time strip lets you know exactly when it's time to install a new media kit so you're sure to comply with local discharge standards.



The disposable MCS 60:  
Perfect for small applications.



The MCS 120 through 1250:  
Simply clean condensate.



Two tower MCS 1800 & 2500:  
Innovative & cost effective.



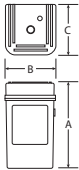
The MCS 3500 & 7000:  
Built for high condensate flow.

# MCS SERIES TECHNICAL FEATURES

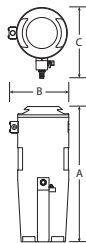
| Model                          | Inlet                    |                          | Outlet |                    | Rated Flow <sup>(2)</sup> |      | Dimensions (inches) |      |          | Weight (net) | Wall Mounting Bracket | Replacement Media Kit |
|--------------------------------|--------------------------|--------------------------|--------|--------------------|---------------------------|------|---------------------|------|----------|--------------|-----------------------|-----------------------|
|                                | NPT/PTC <sup>(1)</sup>   | NPT/PTC <sup>(1)</sup>   | scfm   | Nm <sup>3</sup> /h | A                         | B    | C                   | lbs  | Part No. | Part No.     |                       |                       |
| <b>MCS 60</b>                  | 1/4" (x1) <sup>(1)</sup> | 3/8" (x1) <sup>(1)</sup> | 60     | 102                | 9.4                       | 5.5  | 5.5                 | 2.9  | Included | MCS 60 MRK   |                       |                       |
| <b>MCS 120</b>                 | 1/2" (x4)                | 3/4" (x1)                | 120    | 204                | 19.7                      | 8.5  | 10.1                | 6.0  | 120 WMK  | MCS 120 MRK  |                       |                       |
| <b>MCS 360</b>                 | 1/2" (x4)                | 3/4" (x1)                | 360    | 612                | 25.8                      | 13.6 | 11.1                | 7.9  | 360 WMK  | MCS 360 MRK  |                       |                       |
| <b>MCS 900</b>                 | 1/2" (x4)                | 3/4" (x1)                | 900    | 1529               | 38.9                      | 17.0 | 19.5                | 32.6 | -        | MCS 900 MRK  |                       |                       |
| <b>MCS 1250 <sup>(3)</sup></b> | 1/2" (x4)                | 3/4" (x1)                | 1250   | 2124               | 38.9                      | 19.1 | 19.5                | 45.0 | -        | MCS 1250 MRK |                       |                       |
| <b>MCS 1800</b>                | 1/2" (x8)                | 3/4" (x1)                | 1800   | 3058               | 38.9                      | 38.9 | 20.5                | 69.0 | -        | MCS 1800 MRK |                       |                       |
| <b>MCS 2500 <sup>(3)</sup></b> | 1/2" (x8)                | 3/4" (x1)                | 2500   | 4248               | 38.9                      | 43.2 | 21.5                | 95.0 | -        | MCS 2500 MRK |                       |                       |
| <b>MCS 3500</b>                | 3/4" (x2)                | 3/4" (x1)                | 3500   | 5947               | 39.4                      | 39.4 | 27.6                | 319  | -        | MCS 3500 MRK |                       |                       |
| <b>MCS 7000</b>                | 3/4" (x2)                | 3/4" (x1)                | 7000   | 11,893             | 39.4                      | 43.3 | 43.3                | 467  | -        | MCS 7000 MRK |                       |                       |

| Specifications                               | MCS 60                                     | MCS 120 to 2500 | MCS 3500  | MCS 7000  |
|--|--|-----------------|---|---|
| <b>expected media life <sup>(4)</sup></b>    | 8000 hours @ 30 cfm<br>5000 hours @ 60 cfm | 5000 hours      | 16000 hours @ 3500 cfm<br>8000 hours @ 5000 cfm | 16000 hours @ 7000 cfm<br>8000 hours @ 10,000 cfm |
| <b>maximum oil carry over <sup>(5)</sup></b> | < 20 ppm                                   | < 20 ppm        | < 20 ppm  | < 20 ppm  |
| <b>warranty</b>                              | 1 year                                     | 10 years        | 2 years   | 2 years   |
| <b>max condensate inlet pressure</b>         | 232 psig                                   | 232 psig        | 232 psig  | 232 psig  |
| <b>inlet condensate temperature range</b>    | 35 to 110°F                                | 35 to 110°F     | 35 to 110°F                                     | 35 to 110°F                                       |

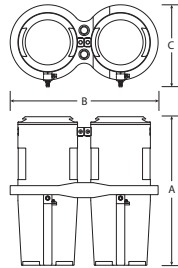
- (1) Inlet and outlet connections on the MCS 60 are push to connect. All other models are NPT threaded.
- (2) Sizing assumes an oil flooded compressor using mineral or synthetic lubricant with a maximum oil carry-over of 5 mg/m3 or less.
- (3) Available Summer 2015.
- (4) Media life decreases with increased condensate flow. For media life estimates at other flow rates contact Mattei.
- (5) For use with PAG compressor lubricants contact Mattei for sizing assistance.



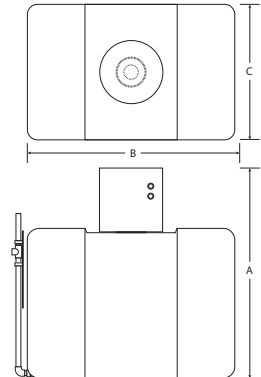
**MCS 60**



**MCS 120 to 1250**



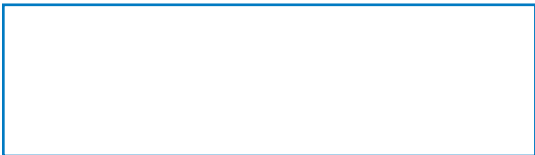
**MCS 1800 & 2500**



**MCS 3500 & 7000**



COMPANY  
WITH QUALITY MANAGEMENT  
SYSTEM CERTIFIED BY DNV  
= ISO 9001 : 2001 =



[www.matteicomp.com](http://www.matteicomp.com)

**U.S.A.**  
MATTEI COMPRESSORS Inc  
9635 Liberty Road, Suite E  
Randallstown, MD 21133  
Phone +1 410.521.7020  
Fax +1 410.521.7024  
e-mail: [info@matteicomp.com](mailto:info@matteicomp.com)



**ITALY**  
ING. ENEA MATTEI SpA  
Strada Padana Superiore, 307  
20090 VIMODRONE (MI)  
Tel + 39 02253051 - Fax +39 0225305243  
e-mail: [info@matteit.it](mailto:info@matteit.it)

**FRANCE**  
MATTEI COMPRESSEURS Sarl  
Tel +33 1 60081212 - Fax +33 1 60085252  
e-mail: [info@matteit.fr](mailto:info@matteit.fr)

**GERMANY**  
MATTEI KOMPRESSOREN DEUTSCHLAND GmbH  
Tel +49 7151 5002560 - Fax +49 7151 5002565  
e-mail: [info@matteit-kompressoren.de](mailto:info@matteit-kompressoren.de)

**GREAT BRITAIN**  
MATTEI COMPRESSORS Ltd  
Tel +44 (0)1789 450577 - Fax +44 (0)1789 450698  
e-mail: [info@matteit.co.uk](mailto:info@matteit.co.uk)

**RUSSIAN FEDERATION**  
ING. ENEA MATTEI SpA  
Tel +7-495-739 41 90 - Fax +7-495-739 41 90  
e-mail: [matteit@inbox.ru](mailto:matteit@inbox.ru)

**SINGAPORE**  
ING. ENEA MATTEI SpA  
Tel +65 6741 8187 - Fax +65 6741 6826  
e-mail: [matteit@singnet.com.sg](mailto:matteit@singnet.com.sg)