



**Customer Success Story:**  
Biodiesel Producer

**Market Segment**  
Manufacturer and industrial

# Eaton improves biodiesel loading system

**Location:**  
USA

**Challenge:**  
To reduce filtration costs

**Solution:**  
Eaton's QIC-LOCK™ MAXILINE™ filter housing

**Result:**  
Improved filtration efficiency and reduced costs

*Eaton's solution totally eliminated the costly, inefficient duplex cartridge filter in the loading system.*

## Background

Quality requirements are rising fast in the alternative fuel market and the final product has to conform to tighter than ever standards. A biodiesel manufacturer originally installed a vertical duplex cartridge unit to filter biodiesel from a storage tank into trucks and rail cars.

## Challenge

The purpose of the filter was to remove any storage tank related impurities from the product before transport to customers. The vertical cartridge vessels had bottom outlets which raised the vessel opening over six feet high. The expensive, jumbo cartridges used in the vessels were extremely heavy and difficult to remove. The operators did not have a platform or other method to position themselves for safe and easy removal of dirty cartridges. Several changes of cartridges were required to filter a single batch.

The customer desired a lower cost filter system which would be easier and safer to operate, while still achieving quality filtration. The ultimate goal was to filter one batch, over 900,000 gallons of biodiesel, without having to change filters.

## Solution

A local distributor took a trailer mounted Eaton QIC-LOCK MAXILINE multi-bag filter housing to the customer to demonstrate how the quick opening cover and low profile design would offer improved operational and safety advantages. The filter housing holds twelve filter bags and could filter the entire batch at one time eliminating the duplex requirement.

**EATON**

Powering Business Worldwide

## Result

After extensive testing with different types of Eaton filter bags the customer concluded that the Eaton filter housing would improve filtration efficiency and reduce costs and replaced the old duplex cartridge filter with the QIC-LOCK MAXILINE multi-bag filter housing using Eaton's DURAGAF™ extended life filter filter bags. Looking to the future the customer is considering using Eaton's new HAYFLOW™ filter element for even longer service life when they begin to process larger batches of biodiesel.



The revolutionary **QIC-LOCK opening mechanism** is the answer to users' demands who work in an environment where productivity and safety are the key priorities. It is safe to use and simple and fast to operate. Standing in place, the operator can rotate the hand wheel and open the cover. There is no requirement to have full movement and access around the housing or use any tools as with conventional bolted closures.



**DURAGAF filter bags** – Extended-life material results in fewer filter bag change-outs, improves operating efficiencies and reduces operating costs.

**North America**  
44 Apple Street  
Tinton Falls, NJ 07724  
Toll Free: 800 656-3344  
(North America only)  
Tel: +1 732 212-4700

**Europe/Africa/Middle East**  
Auf der Heide 2  
53947 Nettersheim, Germany  
Tel: +49 2486 809-0

Friedensstraße 41  
68804 Altluisheim, Germany  
Tel: +49 6205 2094-0  
An den Nahewiesen 24  
55450 Langenlonsheim, Germany  
Tel: +49 6704 204-0

**China**  
No. 3, Lane 280,  
Linhong Road  
Changning District, 200335  
Shanghai, P.R. China  
Tel: +86 21 5200-0099

**Singapore**  
100G Pasir Panjang Road #07-08  
Singapore 118523  
Tel: +65 6825-1668

**Brazil**  
Av. Ermanno Marchetti, 1435 -  
Água Branca, São Paulo - SP,  
05038-001, Brazil  
Tel: +55 11 3616-8461

**For more information, please  
email us at [filtration@eaton.com](mailto:filtration@eaton.com)  
or visit [www.eaton.com/filtration](http://www.eaton.com/filtration)**

© 2020 Eaton. All rights reserved. All trademarks and registered trademarks are the property of their respective owners. All information and recommendations appearing in this brochure concerning the use of products described herein are based on tests believed to be reliable. However, it is the user's responsibility to determine the suitability for his own use of such products. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by Eaton as to the effects of such use or the results to be obtained. Eaton assumes no liability arising out of the use by others of such products. Nor is the information herein to be construed as absolutely complete, since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations.

US  
09-2011