

Our markets



Energy



Industry



Maritime

Why Discom?



Less noise



Clean air



Less use of resources

Relieve our customers



By developing longlasting relationships



Sustainable footprint



We always aim for 100% result

www.discom.eu

Stage V ready is possible against minimal investments

Discom makes existing engines Stage V-ready

Maritime exhaust specialist Discom has developed an exhaust system to ensure that new and existing Caterpillar 3512 engines will meet the Stage V emission standards. The system was developed in collaboration with Yerseke Engine Services (YES) and installed in the 'Vera Pax' push-barge that VEKA in Werkendam is completing for Belgian inland shipping expert Fabian De Wachter.



'This is the first cargo ship that can sail continuously meeting the NRMM EU Stage V standards,' says Werner van Well, account manager at Discom. The entire system was tested last summer according to the E3 cycle, under the supervision of Bureau Veritas Paris. The emission tests were carried out by Pro Monitoring in Barneveld and HAN University of Applied Sciences. 'Our testing room looked like a laboratory,' adds YES director Jan de Braal with a laugh. 'We don't expect any problems with the nitrogen oxide measurements. The 3512C was already CCR2 certified and therefore adjusted for the reduction in nitrogen oxides. This does mean particulate emissions will be higher, but we met the standards for fine particulate matter with our filters with ease. This system also makes it possible for to meet the Euro 6 standard which applies for heavy trucks.'

SCR and particulate filter

The exhaust system is suitable for new and existing engines and combines selective catalytic reduction (SCR) with a particle filter. 'It's easy to use,' says Van Well. 'The management system warns you when the filter needs to be replaced, which is usually around 10,000 hours. All you have to do is unscrew some bolts. We will check the system annually and are responsible for its overall performance. It's our job to make things as easy as possible for inland shipping companies. We can check the measurement data remotely before and after the catalytic converter to see if and for how long the standards have been exceeded. Regulatory authorities could also be granted access to this data.'





More information



Michael van Wijk

E : michael.vanwijk@discom.eu

T : +31 (0)78 681 09 60



Werner van Well

E : werner.vanwell@discom.eu

T : +31 (0)78 681 09 60

Not hiding

Fabian De Wachter sees his Stage V push-barge as a real market statement. 'I'm a stubborn entrepreneur. Many shippers claim that the inland shipping industry isn't green enough. But here we are. I look forward to landing new assignments.' With this considerable investment, De Wachter is making his ship future-proof. 'You have to be prepared for the future. It would be a shame to build something new or to repower a ship, just to have it be outdated a few years later. But if everyone is hiding, nothing gets done. Especially now that we know how problematic climate change will be.'

Rocket science

That doesn't mean De Wachter is taking the 'greening' process too far. 'I do what I believe in. A solid engine with a solid exhaust system works for me. Business security is my number one priority. A passive catalytic converter isn't exactly rocket science. And it's a good thing too, because that means it's not susceptible to defects. The expertise of both Discom and YES has been an indispensable confidence-booster. Our collaboration has been perfect so far. Being the first means facing the necessary bumps in the road, but we managed to solve them just fine.'

Stage V ready

Discom's exhaust system has generated considerable interest already. Once the Vera Pax is completed on 11 November 2017, it won't be long before more Stage V ships take to the water. The Stage V-ready solution by Discom is perfect for entrepreneurs who aren't ready to take that step but whose ships need repowering or an engine overhaul. 'If the ship's open anyway, you can prepare for the installation of the exhaust system with a minimal investment,' explains Van Well. 'Once you're ready to switch to Stage V, you just add the filters and hook everything up without having to rebuild your entire engine room. That saves a lot in terms of investments.'

Technical Details

Stage V limits	P >300 KW		
	Limit	Measured	Percentage below the limit value
Nox Emissions	1,8	0,897	50%
CO Emissions	3,5	0,034	99%
HC Emissions	0,19	0,004	98%
PM Emissions	0,015	0,0032	79%
PN Emissions	1 x 10 ¹²	2,18 x 10 ¹¹	78%

