

To whom it may concern

Winterthur, 31. August 2018

Statement: Contaminated fuels | fuel quality for WinGD diesel engines

Dear Sir/Madam,

Winterthur Gas & Diesel (WinGD) was informed about a number of engines affected by clogged filters and seized or damaged injectors, fuel pumps or other fuel injection components (e.g. Injection Control Unit, Flow Limiting Valve). The most common cause of the problem is a bad quality (contaminated) fuel sold to ship operators at different geographical locations. Recently (April–August 2018), the contamination was detected for some of the fuels bunkered in Houston region, Panama or Singapore. Detailed analysis revealed presence of carboxylic acids, phenolic or nitrogen containing compounds, which should not be present in the fuel. All kind of engine types have been affected, conventional RTA and electronically controlled RT-flex or X-series engines. WinGD recommends to order fuels according to the ISO 8217:2017 standard which specifies the marine fuels. Detailed fuel requirements by WinGD can be found in the technical bulletin “Diesel engine fuels” (see below). This guideline is in line with both MARPOL Annex VI – Regulation 18.3 and ISO 8217:2017 standard – Clause 5, which states that the fuel shall not contain any added substances or chemical waste which either is harmful to personnel or jeopardizes the safety of ships or adversely affects the performance of the machinery.

Due to countless chemical substances leading to fuel contamination, a listing of them is not feasible. Detection of this contamination using standard methods mentioned in ISO 8217:2017 is usually impossible. However, if ship owners have doubts about the fuel quality, WinGD recommends to perform additional tests for each received fuel beyond those mentioned in the Table 1 or 2 of ISO 8217:2017. Analysis by GC-MS or FTIR can indicate chemical contamination of the fuel. Ship operators should also request from suppliers a quality assurance and management of change procedures as mentioned in Annex B of ISO 8217:2017, which should ensure that the resultant fuel is compliant with the requirements of Clause 5. Additionally, a good practice is the presence of all parties during a sample collection, which should be confirmed by a written statement.

Depending on the kind and extent of damages, emergency operation in most cases is possible. Please refer to the engine manuals and / or related bulletins, which are available on WinGD’s homepage. In some cases, cleaning of components can help to rectify the problems, in other cases exchange of components is required. For operational advices, spare part deliveries and repair offers, please contact your nearest official service representative for WinGD engines.

WinGD Technical Bulletin “Diesel engine fuels”

<https://www.wingd.com/en/documents/fuel-lubricants-water/fuel/>

Yours sincerely,



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