

# Performance Optimization

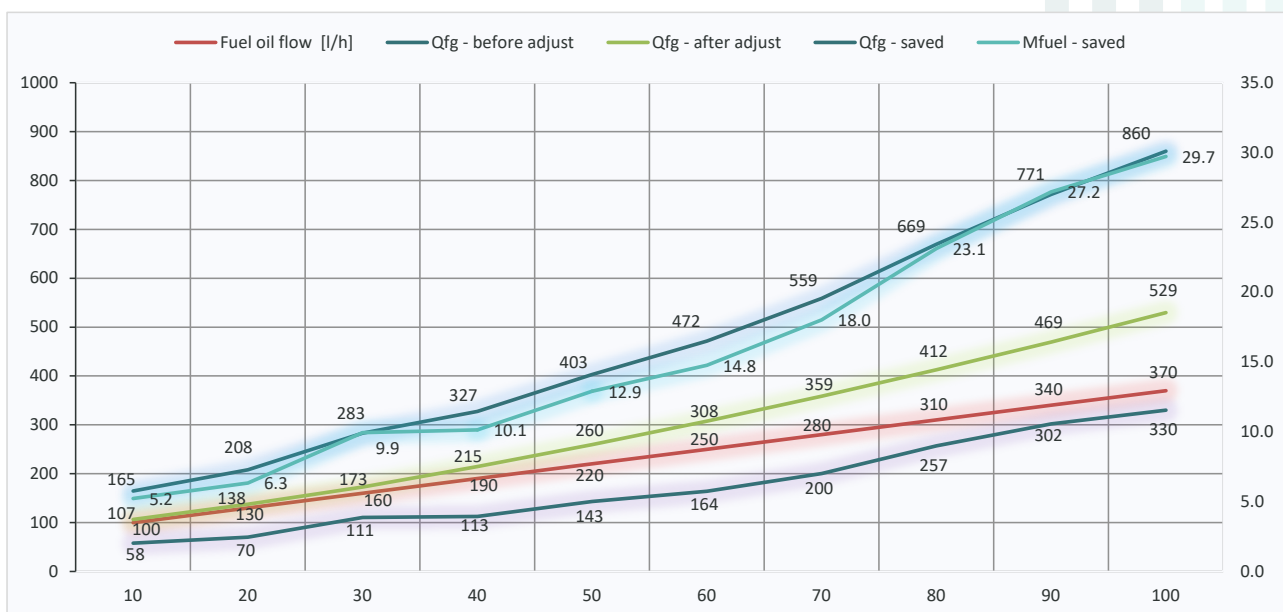
The focus on emissions and Greenhouse gasses has never been as intense as it is today and the "NET-ZERO" goal by 2050 set out by the IMO is forcing actions to be taken.

Global Boiler Aalborg has many years experience in performance optimization of your complete boiler and steam/condensate system and besides the obvious benefits such as improved fuel efficiency, reduced maintenance etc., this is also reducing your GHG emissions. Less fuel equals less emissions.

We offer:

- Burner check and tuning
- Steam and condensate system check, i.e. hotwell, dump condenser, reg. valves, steam traps.
- Pressure part inspections
- Mechanical and chemical cleaning
- Low load reduction on specific burner types

<b>Qfg - before adjust</b>	kW	165	208	283	327	403	472	559	669	771	860
<b>Qfg - after adjust</b>	kW	107	138	173	215	260	308	359	412	469	529
<b>Qfg - saved</b>	kW	58	70	11	113	143	164	200	257	302	330
<b>Mfuel - saved</b>	kg/hr	5.2	3.3	9.9	10.1	12.9	14.8	18.0	23.1	27.2	29.7



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Pressure part inspections are not only relevant for repair preparation and material evaluation.

A timely inspection of furnace, pressure part, uptake and economizers etc. will also show if the boiler is contaminated with i.e. soot in the smoke tubes or lime stone in the water space.

Even a thin layer of soot will have a big impact. I.e. a 0,5mm layer covering your heating surfaces will reduce heat transfer with approx. 16%

An oil contamination on the water side will have similar big impact with a reduction of approx. 13% heat transfer when contaminated with a 0,5mm layer.

Lime stone on the water side will also reduce heat transfer but not nearly as significant as soot and oil contamination. I.e a 1mm limestone layer will only reduce heat transfer with approx. 6 %

Note: *It is very important to keep in mind that contamination on the water side also poses a high risk of overheating and structural failure as result!*

