

# Methanol Engine – Purging strategy

Purging of the methanol injection system is a Class requirement to remove toxic compounds and inert the injection system in case of component failure and maintenance work required.

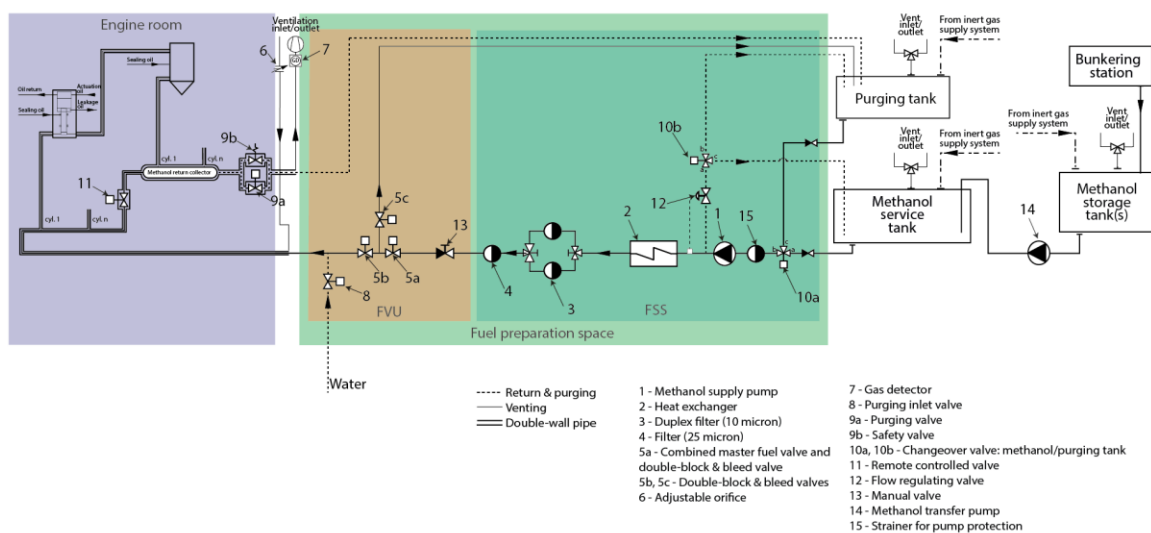
WinGD strategy comprises three options:

1. Nitrogen purging
2. Diesel (MDO/MGO) purging
3. Water (boiler feed water) purging

Currently, the preferred option is water purging due to the good miscibility characteristics with methanol. Water would enter the engine from the same methanol feed line and flush the entire methanol injection system. The mixture is then collected in a separate purging tank and consumed during back-up diesel operations. No additional connections and valves are required on the main engine for purging purposes only.

Diesel (MGO/MDO) is seen as a future upgrade option due to the lubrication and cooling benefits it will bring. Nevertheless, Class compliance demonstrations and testing activities would be required before a full release. Nitrogen is seen as the least favourable solution, due to gas to liquid purging low effectiveness.

The water purging system would be integrated in the engine interface with the vessel as shown below:



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