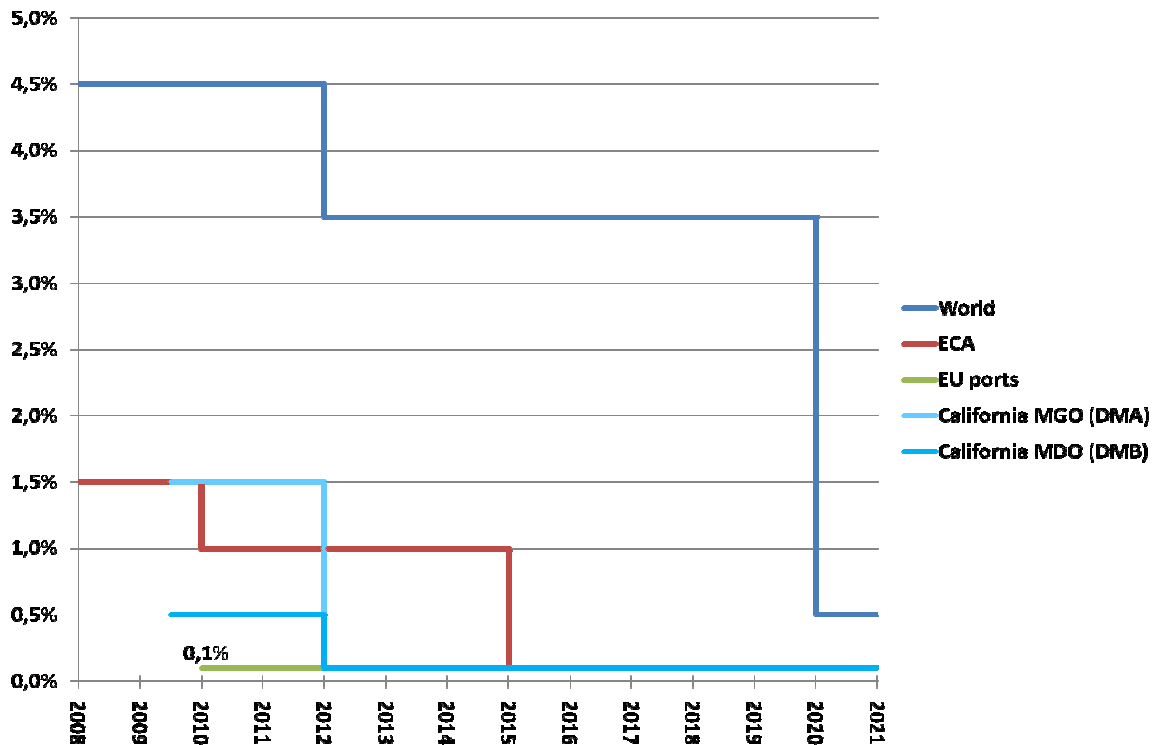


1. When will the different legislations come into force?

Please see the chart below.



2. How does the new regulation of burning fuel with 0.1% sulfur content affect pumps?

As of today there are only low-viscosity fuels available with sulfur content of less than 0.1%. It is the low viscosity that might harm the pumps, **not** the sulfur content.

3. What applications are affected?

Applications affected are booster pumps (circulation and supply), MGO transfer pumps and FO boiler pumps.

4. What is the minimum viscosity that COLFAX® pumps can handle?

Historically our screw pumps have been designed to handle viscosity as low as 1.6 cSt. However, our recent tests show that we will be able to handle viscosities down to 1.4 cSt in accordance with the ISO 8217 standard. For viscosities lower than 1.6cSt we recommend surface treated rotors and housings. Please visit the [IMO®](#) or [ALLWEILER®](#) brand sites for more information.

5. Can Colfax screw pumps handle the fuels in accordance with the ISO 8217 specification?

Yes, as mentioned in question 3, we do recommend surface treated rotors and screws, especially with operating on high-medium pressure applications (>20bars).

6. Do I have to change my existing gear pump installation when operating on the low-sulfur fuel?

In such a case we recommend that you upgrade as most gear manufacturers confirm minimum viscosity between 3-7cSt, which means that you could end up with a breakdown. Please contact [Allweiler](#) or [Imo](#) for consultation.

7. Why are the Colfax screw pumps better than existing gear pumps?

It is related to different design of pumps and how the pumps are being lubricated by the pumped media. For more information please see our technical white paper (coming soon).

8. Normally when we approach ports we switch from HFO to low-sulfur MGO. What are your recommendations regarding fuel switching related to your pumps?

If you are following the main engine manufacturers' recommendation of fuel switching, the pumps should be fine under the condition that viscosity will be kept above the minimum recommended.