

## G&O VIBRATION COMPENSATORS

Eliminating the source of vibration



**G&O MARITIME GROUP** 

MARINE LIFE WITHOUT FOOTPRINTS

### GERTSEN & OLUFSEN VIBRATION COMPENSATORS

Gertsen & Olufsen is the market leader in vibration compensation onboard maritime installations. Our installations are renowned for their extreme operational excellence and reliability.

Guide force moments, unbalanced moments, axial thrust, hull beam and propeller induced vibrations are well-known issues related to low speed two stroke diesel engine. Vibrations often lead to limited engine performance, cracking, reduced mechanical strengths, abnormal wear on rotating machinery or failure of electronic components.

The servo driven moment compensator reduces or even eliminates the source of vibration due to the unique technology that creates an exact opposite direction with a counterforce identical to the force induced by the engine. The imbalance is neutralized and no stress or vibrations will be transferred into engine foundations and neighboring structures.

### Key features includes

- Size of force can be adjusted from 0-100%, to get exact counterforce required. Adjustment range 1 kg.
- Direction of force can be adjusted from 0 to 360°, to get precise direction of force +/- 1°.

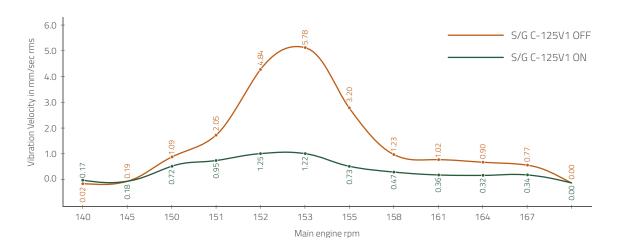
- Unique frequency controller enables a fast and precise phase synchronization. 3000 pulses per engine rpm.
- Recommended by leading classification societies, ship-owners, engine- and shipbuilders worldwide.
- A design that leads excess and break energy back to the net.



Vertical vibration compensator



Horizontal vibration compensator



# ELIMINATING UNWANTED VIBRATIONS AND IMPROVING ENGINE PERFORMANCE AND COMFORT

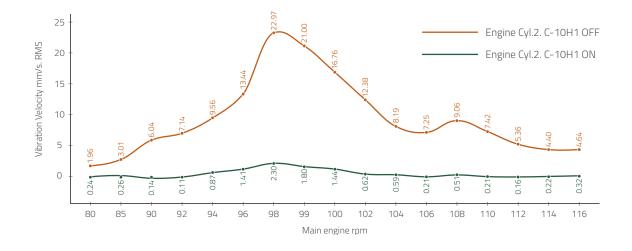
#### **Compensator facts**

- Improved engine performance and comfort.
- Low energy consumption and a better fuel economy. In dependent operations – use when needed.
- Easy adjustment of force and direction.
- Easy installation, without operations interference. Reduced maintenance costs.

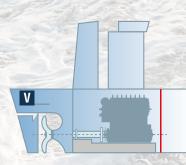
Whether a resonance is present, reduction of external moments and guide force moments means better and smoother running engines. The vibration compensator can be used as a preventive maintenance tool reducing wear on most engine related equipment as well.

Installing the vibration compensator is a relatively simple project that does not interfere with the operation of the vessel. Once installed, no further adjust-ments or operational attendance are required.

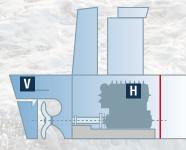
G&O Compensator range	
Туре	Moment
C-125V1	Vertical
C-200V1	Vertical
C-600V1	Vertical
C-10H1	Horizontal
C-20H	Horizontal
C-40H	Horizontal
C-65H	Horizontal
C-90H	Horizontal



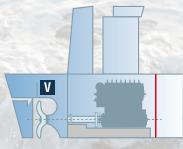
# SIMPLE AND EASY INSTALLATION WHERE THE COMPENSATOR IS NEEDED



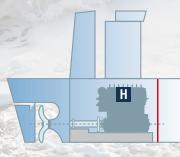
External 2<sup>nd</sup> order moment:
 A vertical compensator is placed in the steering gear room.



 External 2<sup>nd</sup> moment and H-moments: 2<sup>nd</sup> order compensator in combination with horizontal compensator.

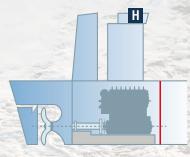


Propeller induced vibrations: 2<sup>nd</sup> order compensator above the propeller.

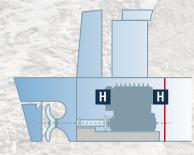


Guide force H-moments:

 A horizontal compensator is placed directly on the engine gallery.



 Hull and propeller vibrations:
 A horizontal compensator is placed in vessel structure.



 X-moment, guide force: 2 counter rotating horizontal vibration compensator.



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