





# Vibratec Akustikprodukter AB Marine & Navy

Vibratec is specialized in anti-vibration, damping, noise and shock protection for different offshore applications such as vibration isolation of turbo compressors, turbine generators, accommodation modules and piping. We also do on-site surveys, specially designed noise enclosures and tuned mass dampers.

We provide:

- Engineering
- Custom designs
- Manufacturing and stock
- Installations
- Documentation
- Noise and vibration measurments















**Expansion Joints** 

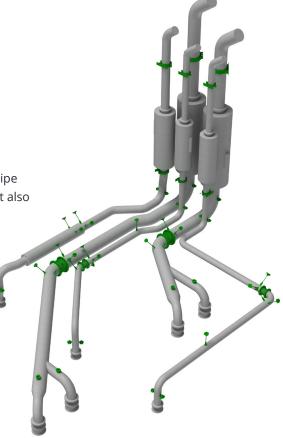
## Complete Pipe Clamps

## Pipe Suspension

Vibrations in pipe systems can lead to resonant problems and fatigue in pipes and structures. These problems can be prevented by correctly dimensioned and positioned supports and bellows. Vibratec can supply different types of vibration isolated pipe supports completely in AISI316 or higher quality if needed:

- \* Fixed and sliding supports
- \* Pendulums
- \* Pipe clamps
- \* Expansion joints

The pipe vibrations may be further reduced using additional pipe dampers. Vibratec offers solutions with friction dampers, that also can be used in combination with vibration isolators.





Stena Explorer

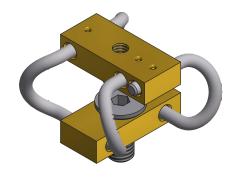


Ulstein X-Bow



M/S Visby and M/S Gotland







7002, All metal Isoaltors

Wire Rope Isolators

**Elastomer Shock Mounts** 

# Sensitive Equipment

Using Vibratec's extensive range of Wire Rope Isolators and elastomeric shock mounts, most equipment can be suspended successfully. Examples of common applications are electronic boxes, computers, monitors, radar units and similar. To use the correct equipment for the particular stress of Your case, Vibratec engineers performs the correct shock calculations.





Rolls-Royce Kamewa AB



Kongsberg Defence & Aerospace AS



HMS Visby & Helsingborg







**Exhaust Silencers** 

Splitter Attenuators

Catalytic Converters

## Silencers and Emission Control

The standard reactive and absorptive silencers we have in stock can be combined to achive high attenuations. In addition to the standard range we can also customize silencers based on specific customer demands.

- Suitable silencers or combinations thereof are dimensioned based on
- · demand for attenuation
- · distance from source
- · gas flow
- · max allowable back pressure
- noise spectrum
- length of end pipe

If the input noise spectrum from the engine is not available we can either calculate this based on rotational speed, effect and number of cylinders or find values from our data base of previous projects.

The silencers can if necessary be equipped with lifting lugs, mounting brackets, spark arrestor, catalytic converter or catalytic soot filter.





Transocean Searcher



Seismic Vessel HMS Sovereign



Grandweld Shipyards, Craneboats







All-Metal Spring Isolators

**Rubber Isolators** 

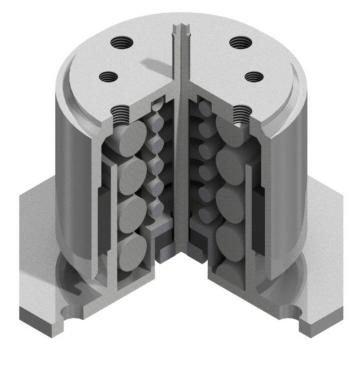
**Customized Spring Packages** 

# Propulsion Engines and Generator Sets

Isolation of propulsion engines and generator sets can be done by using rubber or all metal isolators. Depending on the application we can choose from a vast array of different solutions designed to work the best with your equipment.

Vibratec dimensions an optimal solution with respect to your engine effect, gear box, coupling and forces due to roll, pitch and heave. Data sheets for some of the products we use can be found below. In difficult cases we use customized solutions to reach the desired vibration isolation performance.







CB90-class fast assault craft



Swedish Sea Rescue Society



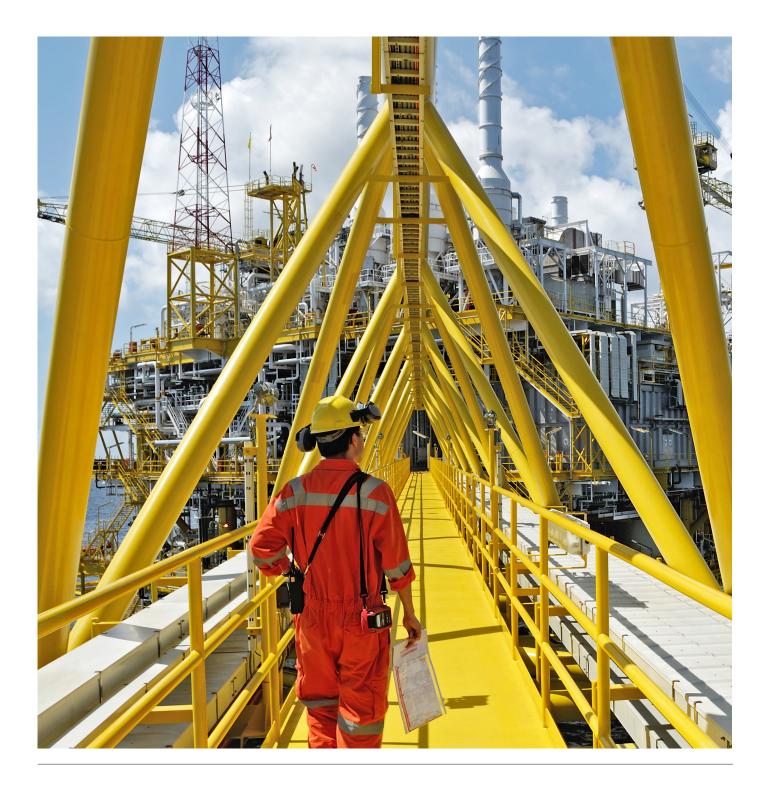
Swedish Coast Guard patrol vessel

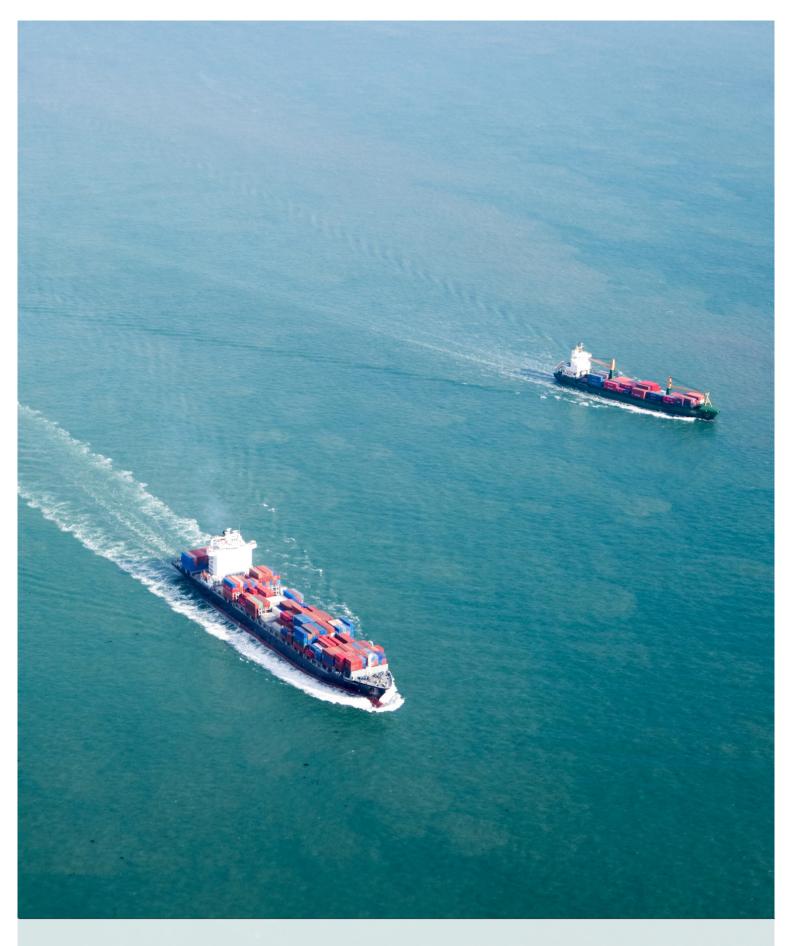
# Measurements & Surveys, Installation and Supervison

Vibratec has a number of employees that can undertake various installation jobs, measurements and surveys on offshore units. Thorough investigations and skilled personnel are vital for a correct design and installation, and in the end optimal function.

Typically Vibratec undertakes jobs within noise & vibration control as complete projects involving AVM's, exhaust & ventilation silencers, damping treatment of steel decks, pipe dampers, noise enclosures and TMD's (Tuned Mass Dampers).

A site survey prior to a project or preparation of budget for executing can also be performed by Vibratec. If additional measurements of noise and vibration are required Vibratec can perform vibration and sound measurements for internal use for engineering purposes or for control of obtained noise reduction.





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