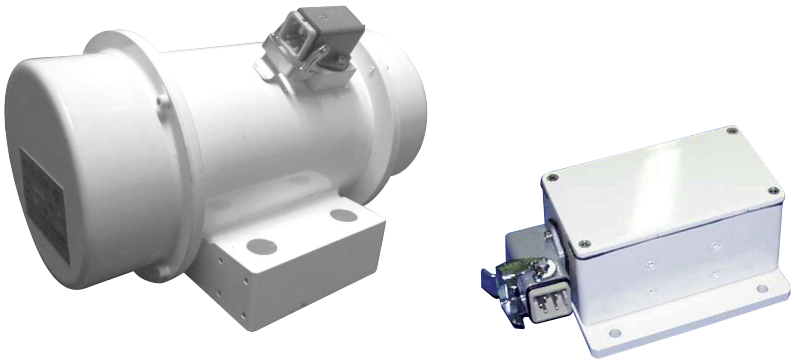
Active control systems of noise and vibrations



INTRODUCTION

Active isolators cancel the incoming vibration by generating a dynamic force of same magnitude in opposite phase through the use of electrodynamic actuators, thus improving the low frequency performance of the suspension.

The objective is to improve the insulation of vibration in the range 10 to 1000 Hz even more – according to the needs of the application.

The applications of STRACTIVE are endless : reactive silencer, electric motor, transformers, internal combustion engines, structures, pumps,...

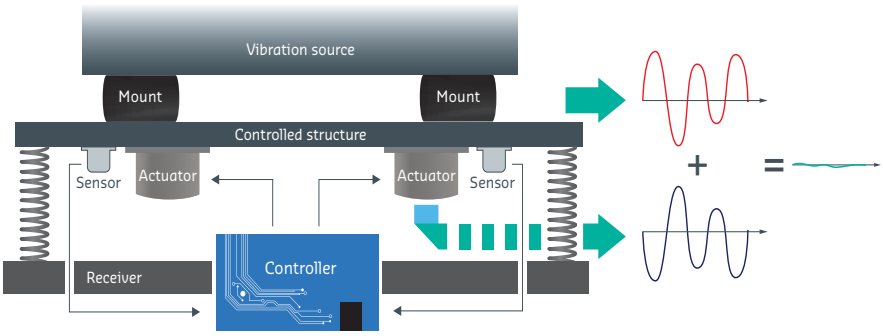
EXAMPLES OF APPLICATIONS

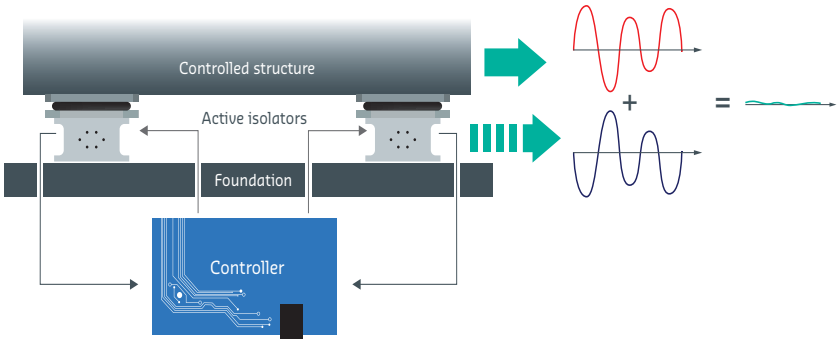
- Oceanographic research vessel : improves the threshold of sonar detection.
- Extends crew shift.
- Submarines : reduce noises.
- Diesel engines / ventilation systems : reduction of air noises by active silencers.
- Machine tools : improvement of precision and life cycle of manufacturing tools.

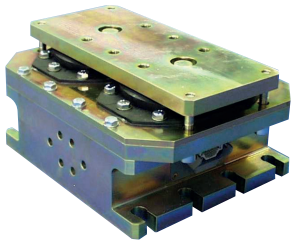
ADVANTAGES

- To improve dynamic isolation offered by passive suspensions of the same stiffness.
- To improve uncoupling between structures.
- To simplify the installation of the equipment by reducing or eliminating inertia blocks.
- To reduce structural stress and increase life.
- To reduce noise.
- To reduce movement of connections to equipment
- Excellent vibration reduction : 12 to 36 dB of additional filtering compared to the passive solution only.
- Total suppression of the most annoying harmonic.
- Performance upgrade of existing machines with minimum impact (Add-on kit).
- Space & weight saving.
- Improve the professional environment in term of noises and vibrations exhibition.
- Reduce submarines noises.

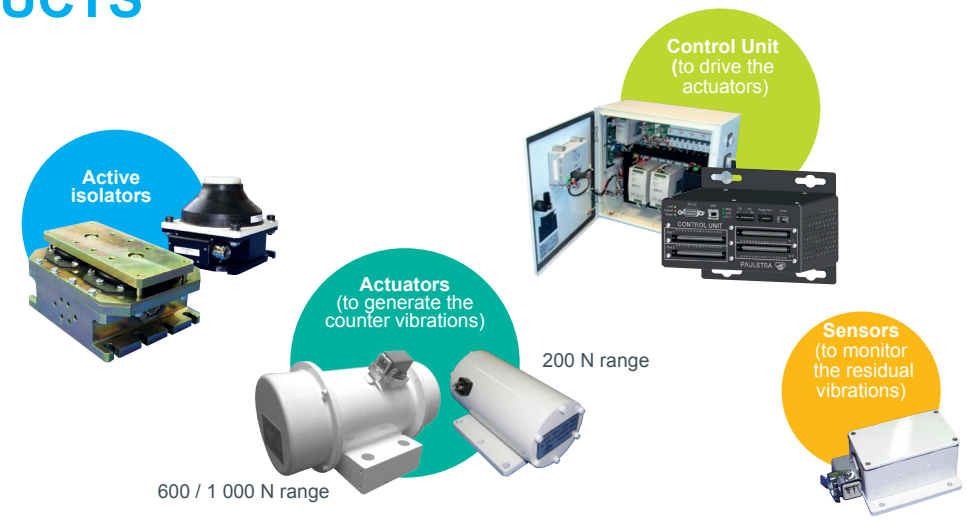
PRINCIPLE





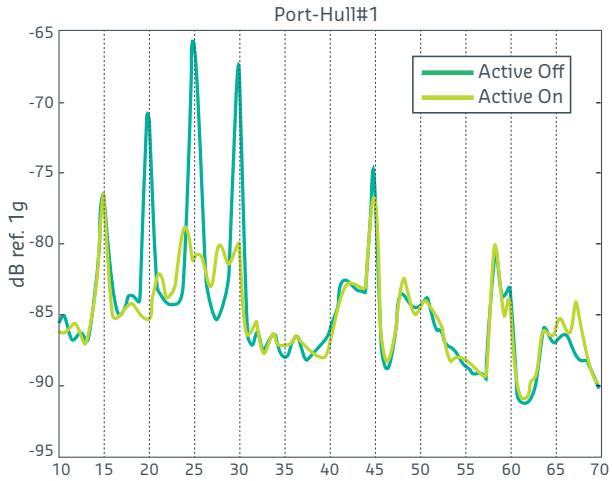


PRODUCTS

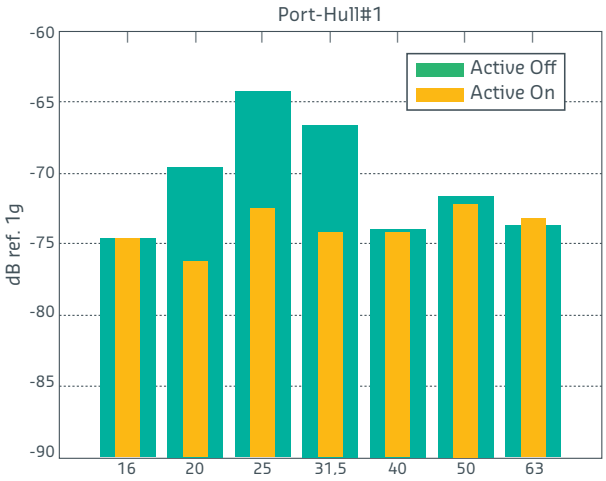


EXAMPLES OF RESULTS

Active Vibration Control Test Results



Fréquency (Hz)



1/3 Octave band (Hz)