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Environmental legislation has resulted in more stringent requirements for noise control in vessels manoeuvring in ports close to residential areas.



© Sealon Shipping Ltd.

For working vessels noise insulation is required by the classification societies for recreation rooms and crew lounges.



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River cruise vessels with noise-reduced manoeuvring devices provide the best conditions for undisturbed voyages.

For transverse thrusters, azimuth grid thrusters and control & drive systems please see our other brochures:

Transverse Thrusters

- 50 kW to 1000 kW
- All right-hand rotation
- Up to 100° azimuth
- 4000 r/min in operation
- High-performance IP protection

Azimuth Grid Thrusters

- 360° steering grid
- Built-in motor gear
- Ready for grounding
- Suitable for shallow water
- Low-noise operating mode

Thruster Drives and Controls

- Customised systems
- All drive applications
- Specialised EC drives
- In-situ start-up operation
- New hulls and retrofits

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Low-Noise Thrusters



- Patented technology
- Reduced cavitation noise
- Recognised mega-yacht supplier
- Resiliently mounted drive assembly
- For transverse & azimuth grid thrusters



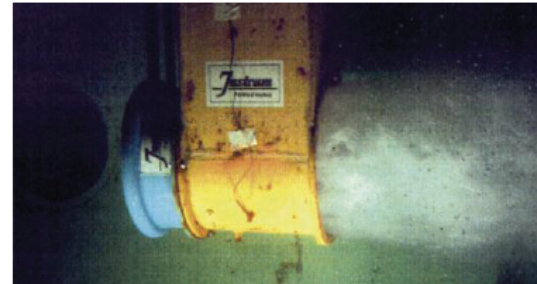
20/08/10



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Noise-reduced manoeuvring systems from Jastram meet the international mega-yacht industry's demand for the ultimate comfort.

Active and passive low-noise thrusters from Jastram offer sophisticated technologies for silent manoeuvring in ports and during offshore dynamic positioning.



Active noise reduction

In the mid-fifties, when the first transverse thrusters were being delivered, Jastram were already working on technologies for noise reduction.

Jastram applied for their first patent for a method for noise reduction in 1964.

Scientific research was performed by 'Jastram Forschung' in the eighties in an in-house test basin and on board several vessels. These experimental series and measurements established the basis for the calculation of the Jastram noise reduction systems.

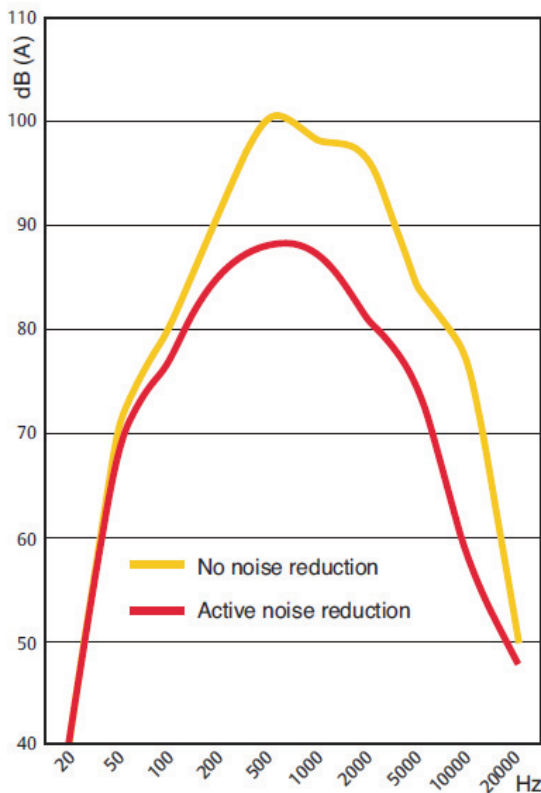
Cavitation is one of the main sources of noise in tunnel thrusters and can be effectively reduced to 15dB(A) through active noise reduction. The mixture of air and water reduces the noise both inside and outside the vessel.

Passive noise reduction

Structure-borne noise and ambient noise generated by mechanical vibrations can be diminished only by resiliently mounted gear, propeller and motor.

The resilient mounts were developed with both full-pipe and half-pipe tunnels to meet the requirements of varying installations for all hull designs.

The combination of active and passive noise reduction offers optimised results and is being used worldwide in workboats, commercial vessels, cruisers and yachts.



The ambient noise recording in a transverse thruster room shows the highest noise reduction in the audible frequency range.



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