



Balance

Striking the right balance

With over 200 major superyachts now successfully fitted with MarQuip exhaust systems, it is clear that we are the leading professionals in this highly specialist area.

Designing an exhaust system for a superyacht always poses unique challenges. In addition to cleaning the exhaust gas, many other issues have to be taken into account in order to ensure the most efficient result. Key parameters include noise attenuation, cooling the exhaust gas, optimising back pressure values and making the most of the available space.

All this has to be achieved while staying within budget, adhering to the latest regulations and maintaining a strict time schedule. As each of these areas interact with one another, they all ultimately influence the outcome of the design.

With so many factors to consider, designing a superyacht exhaust system is all about making the right choices. And you also have to consider the many different ways of emission reduction. All of them require their own solution and take a bite out of the available space and budget.

If you are looking for an optimal exhaust system for your superyacht, the only sensible approach is to bring in a professional exhaust system supplier that you can trust to do the job properly. False economies always backfire!



Moonen Shipyards



Royal Huisman Shipyard



KEEP IT CLEAN

More and more authorities are rejecting 'dirty' yachts from their harbours and marinas, only allowing in yachts that will not pollute the water and air. Owners are also becoming increasingly aware of the advantages of having a 'green' yacht, without black spots on the hull or undesirable fumes. MarQuip is an acknowledged expert on the design and delivery of eco-friendly exhaust systems.

Below you see a 3D drawing of a recent exhaust system we supplied to ISA in Italy. From the engine outlet, the exhaust gas goes directly into a silencer with an integrated catalytic converter. By using the silencer we can guarantee proper noise attenuation. From there we go to a soot trap with an automatic burner, a Nauticlean® by HUG engineering, with the possibility to bypass the Nauticlean®.

Next you will see a MarQuip water injection piece which injects water from the middle of the pipe. Here the exhaust gas temperature is cooled down rapidly and efficiently before going into our water separator (scrubber) where the water and the exhaust gas are separated. This separator also serves as an extra silencer.

All the above is designed within the requested back pressure and noise reduction limits. By using such an exhaust system we can guarantee that the yard's client will enjoy the cleanest and most silent system available.



EMISSION REDUCTION

Noise	Soot	NOx	SOx	CO,HC
Silencer	Soot trap	SCR* Urea	Scrubber Low sulfur Fuel	Catalytic Converter

*Selective Catalytic Reduction

TIPS FOR (GREEN) EXHAUST REFITS

- Be early. It is imperative to contact us long before the yacht arrives at the yard as our engineers are highly experienced in finding space for all the exhaust components. To make the best possible custom-engineered design we need to become involved as soon as possible.
- It also pays dividends to provide as much information as possible. If available, we would like to receive build drawings in DWG. We also need all engine data. For underwater exhausts a DWG drawing is required showing a wave pattern at different speeds.
- As data can change after delivery of the yacht, please check it for accuracy.

Comfort

Moving in silence

Most people do not build a yacht in order to go roaring across the open seas and lakes. On the contrary, they are looking to get away from the noise and stresses that are inherent in a life at the top. Owners opt for a yacht that is a unique symphony of technology and design, allowing them to enjoy nature surrounded by home-from-home comforts and without the constant background hum of traffic and machinery. The only sounds they expect to hear are the gentle lapping of the waves and the cries of water birds.

It is precisely for this category of yacht owners that MarQuip builds dedicated exhaust systems. Each system is scientifically tailored to the vessel in question and her specific engines, offering an unrivalled reduction in noise and vibration. The result is a superyacht that travels noiselessly over the water while her engines still deliver power at their full potential.



Oceanco



ISA



"The MarQuip (exhaust) system is a very reliable and silent system. At MarQuip they know what they are talking about and they do what they promise"

Gerwin Supheert
After sales engineer – Amels

"The reason for working with MarQuip is that we have to reach very low noise levels and they are the best in the world"

Sjaak van Capellen
Technical director – Silentline

"May I thank you for your expert professional advice and calculations throughout the modifications"

Jason lambe
Captain – MY Oxygen

Exhaust refits

Refits need a very different approach than new builds and you rarely start with a clean slate. A great deal of flexibility and ingenuity is needed to achieve a successful design for the exhaust.

The specialists at MarQuip have performed all kinds of refits. We have solved noise and vibration issues, changed above the waterline exhaust into underwater exhausts, and upgraded existing exhausts into green exhausts with exhaust gas cleaning units.

By making use of our newly developed modular silencer, it is possible to replace almost any silencer without having to rebuild the complete engine room. All we need is an access door of 60 cm.

Each refit is unique but all refits have one thing in common: It is crucial to make a professional plan. Making use of MarQuip's vast experience in refits will save you considerable time and money.

Refit



KEY REASONS FOR CHOOSING MARQUIP

1 ONE-STOP SHOPPING

Partner with MarQuip and we will take care of the complete delivery of your custom-built exhaust system. Our input starts at the engine flange and ends with the outlet of the exhaust on the hull. The scoop of the under water outlet can also be delivered.

In addition to our highly efficient silencers, water injection pieces and water separators, we can also deliver compensators, bellows, all piping, valves, mounting materials and green exhaust solutions. All parts can be delivered within class rules.

By having one company fully responsible for the complete delivery of the exhaust system, you save considerable time and money on your total buying costs. You will also have a single point of contact taking care of the complete exhaust system.

2 FREE UP YOUR ENGINEERS

Designing an exhaust system involves a combination of theory and practice, with many diverse issues to take into consideration. Next to silence, you also have to think about back pressure, temperature, class rules and the available space in the engine room. By making use of our vast experience in designing complete exhaust systems, you can free up your engineers to focus on your core competency.

3 100% GUARANTEED RESULTS

Due to our proven track record on over 200 superyachts, your exhaust system comes with a 100% guarantee on performance. For underwater exhausts we make use of a scoop that is an integrated part of the back pressure calculation. By leveraging on MarQuip's expertise you eliminate trial & error and save considerable time and money.

4 YOU CAN TRUST US TO DO THE JOB FOR YOU!