

# SSY in short terms

During a period of five years SSY has developed a revolutionary ship design and building method which fully uses the properties of super- and hyper duplex stainless steels to its maximum.

This technique is patented in its strongest form, an utility patent. The SSY building method reduces the hull weight by more than half compared to a conventional steel design, SSY will therefore match the weight of a carbon fiber hull. However the advantages over carbon fiber and other lightweight constructions are many. The duplex steel material has superior fatigue properties which means that the hull will principally have an everlasting technical life time. The duplex steels are not affected by sea water and does not require maintenance in terms of paint, refurbishing or polishing etc. The steel is delivered with a unique surface treatment which is achieved by a special polishing from the steel distributor. This gives a hull finish that does not require any toxic antifouling paint.

These are strong reasons for SSYs method to be used as both performance vessels and in areas of sensitive marine life. A SSY vessel will give a lower total cost of ownership due to that less to none maintenance is required as well as the physical fatigue properties of steel. All stated above has been proven in three prototype vessels of 7, 11 and the new 17 metre vessel "P16".

The international shipping industry stands for an enormous amount of global environmental impact due to heavy ships made non-effective by heavy weight design and marine growth on the underwater hull.

The solution to marine growth up until this day has been to use extensive amounts of toxic antifouling paint. The cost related to antifouling paint is according to US Defence report calculated to 83 billion US dollars per year.

SO2 emissions from one large shipping company (such as Maersk and MSC) corresponds to the equivalent of 9 billion cars. As an example a reduction of fuel usage by 10% will cancel all SO2 emissions from all 1 billion cars used globally today. This would be achievable by using SSY ship building method. This is why the SSY ship building method often is referred to as the greatest eco-innovation ever.

## Technical aspects

- Light weight hull
- Robust outer skin, crack and scratch resistant
- Fire resistant material
- Copes with ice, sand and rocks at a much higher level than other materials used in ship building
- Good ballistic properties

## ECO aspects

- No maintenance
- No antifouling paint
- Less fuel usage due to light weight design
- 100% recyclable, we offer refund of the hull material
- Energy efficient production due to less material used and that producing stainless steel requires one third of the energy compared to aluminum

## Economical aspects

- Less fuel usage or higher payload.
- Zero maintenance costs of the hull.
- Efficient construction.
- Lower total cost of ownership.

# Goals

- **No1 Goal**  
To make ship industry eco-friendly in order to secure marine life and seawater quality.
- **No2 Goal**  
Offer the uppermost high tech and high performance patrol vessels in large scale production.
- **No3 Goal**  
Offer the uppermost high tech and beautiful yachts in small scale production.