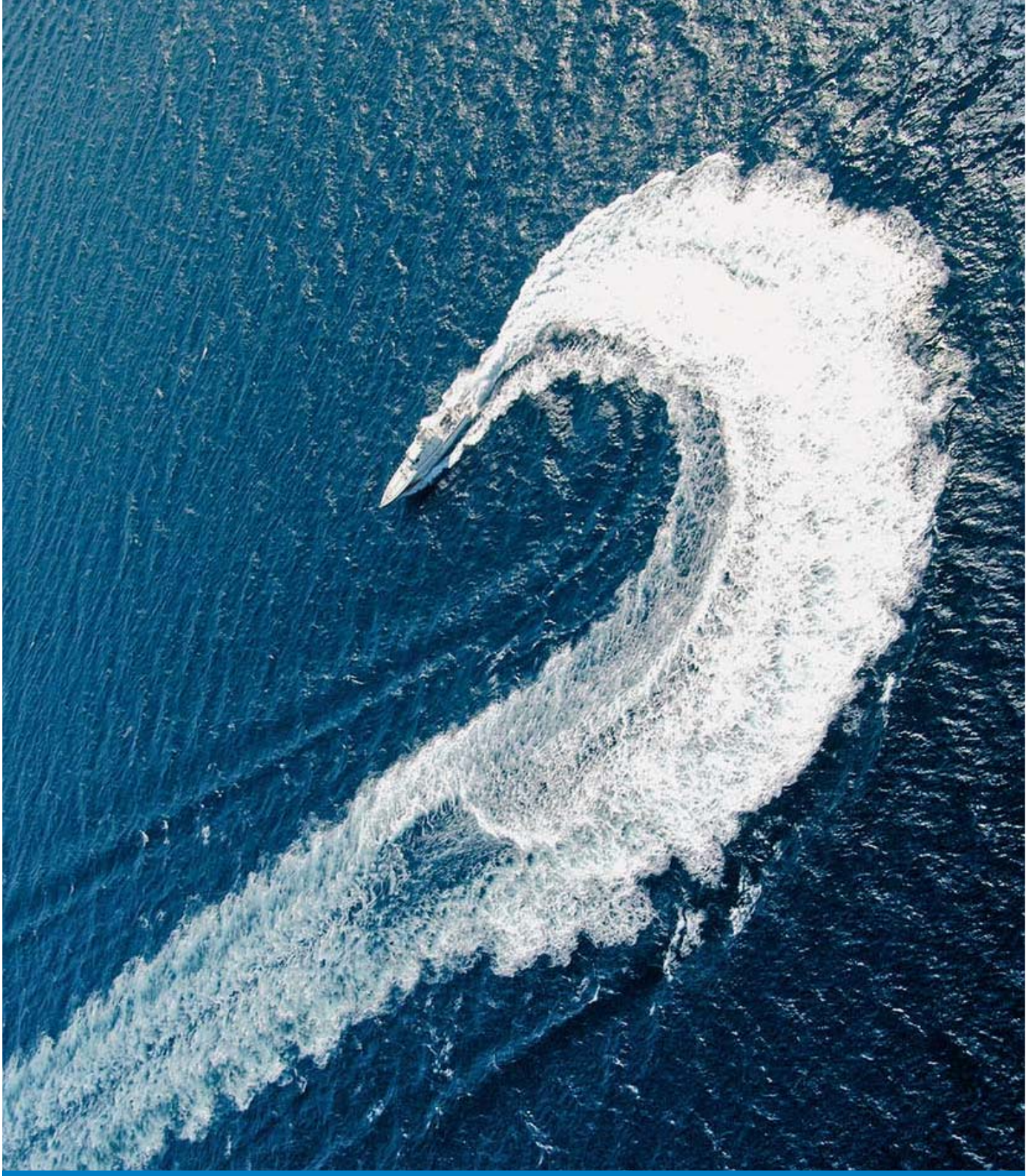
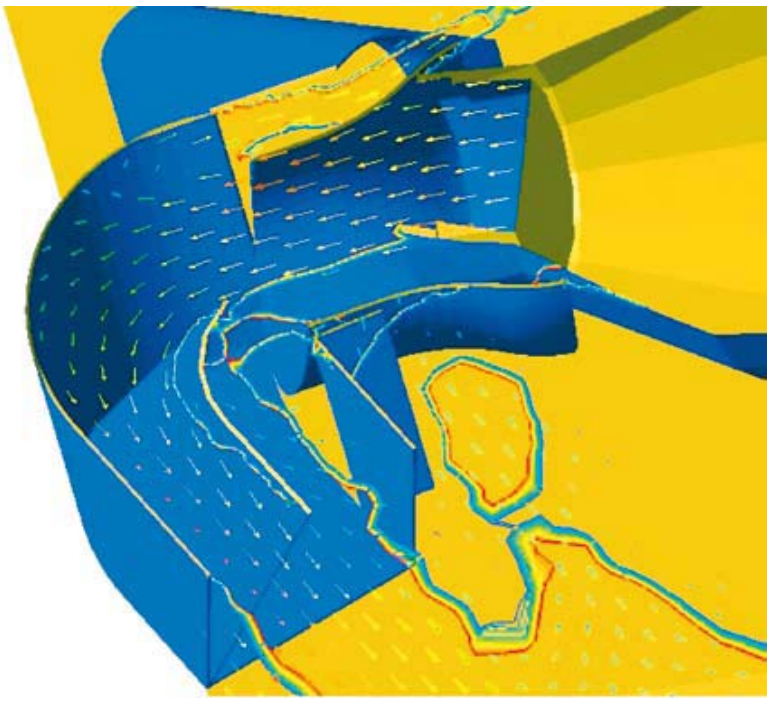


Marine Jet Power, MJP, is a world-leading supplier of waterjet propulsion systems for high-performance applications. Customers with uncompromising demands on heavy-duty design and great performance – navies, coast guards, yacht builders and various commercial operators – are satisfied users of the powerful waterjet systems provided by MJP. Worldwide.

Once upon a time...

...Marine Jet Power AB was founded as a joint venture between Marinteknik shipyard and the foundry, Österby Gjuteri, in 1986. The shipyard wanted to develop a water jet product and found a strong partner in Österby Gjuteri, a reputable foundry specialized in advanced stainless steel castings.
The following year MJP successfully delivered the first pair of jets for the pioneer vessel of the "Cinderella" series, a line of cruise ships operating in the Stockholm archipelago to this day. MJP became a fully owned subsidiary of Österby Gjuteri AB in 1993. That year the Swedish Coast Guard decided to use MJP waterjet propulsion systems for a number of vessels. This order marked the entry of MJP into the international market for coast guard, navy and military applications. Numerous prestigious installations have followed since. Today, MJP has achieved a world-leading position as a supplier of waterjet systems for demanding applications.

Strong ownership
Since 2007, MJP has been a part of Österby Marine, an industrial group primarily focused on high-quality products for marine applications.
The group also includes Österby Gjuteri and Alco propeller. The latter is a company with more than 80 years' experience of manufacturing propeller blades. The Österby Marine Group is owned by the industrial developers, Capilon. Financially strong ownership ensures that MJP has the means to remain a cutting-edge provider of waterjet technology. Capilon AB is listed on the OMX Nordic Exchange in Stockholm, First North list.



World class product development

The success of MJP waterjets has not only been achieved through top quality standards, but also through unique design solutions, including several patents. The engineers at MJP are constantly working on finding ways to improve the products, targeting high performance and low operational costs. These continuous efforts require skilled constructors as well as in-house facilities for research and testing. All of which MJP waterjets has.

Furthermore the Österby Marine Group, of which MJP is a part, is home to highly specialized expertise in several areas vital to the production of supreme water jet systems. This expertise includes advanced stainless steel casting, machining and high-tech facilities for simulation and evaluation. In addition to the skills and resources within the organization, MJP also works with a network of carefully selected partners with leading knowledge in specialized fields.

MJP waterjet applications

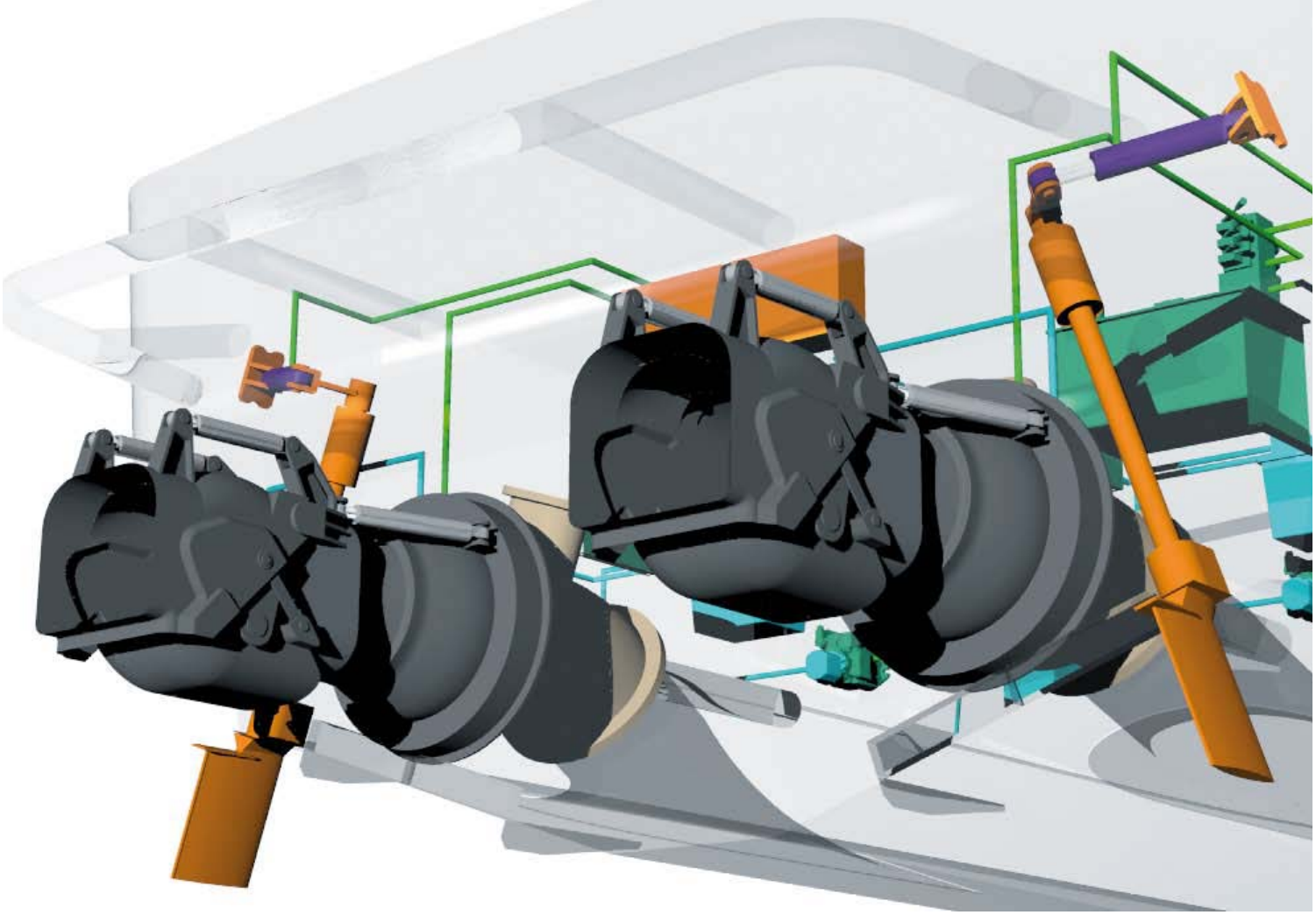
MJP waterjet systems in the fields of Commercial, Navy/Coast Guard and Yacht are satisfying demanding customers worldwide.

YACHT

COMMERCIAL

NAVY/COAST GUARD

SPECIAL APPLICATIONS



MJP – a comprehensive supplier of waterjet systems

The MJP offer stretches beyond the jets. The company also provides complete hydraulic packages and high-tech control systems, in other words complete water jet systems. All components provided by MJP are developed to optimize performance, maneuverability and operational costs for the end user.

COMPLETE HYDRAULIC PACKAGES

Each MJP jet unit has its own hydraulic and lubrication circuits for steering and reversing control. The systems are individually designed to match the requirements of each customer. Tank units can be made in various ways and trim flaps, interceptors or rudders can be fully integrated in both hydraulic and electric controls.

CONTROL SYSTEMS

The MJP control systems provide complete control of jet position and engine rpm control, i.e. all maneuvering of the boat. The systems offer numerous options such as additional steering stations, integration of rudders, trim tabs and so forth.

Why waterjets?

There are several reasons for choosing waterjets instead of conventional propeller systems: Protected propulsion with high efficiency, good maneuverability, shallow draft design, smooth engine load, less vibration and lower waterborne noise are a few obvious benefits of waterjets.

Why MJP waterjets?

Choosing MJP waterjets in particular provides even further advantages compared to other propulsion systems. Through careful engineering, including several patented design solutions, MJP has created unique high-quality systems offering great performance as well as low operational costs. The MJP waterjet systems are suitable for ships from approximately 15 meters of length and for powers in the range of 500 kW – 15 MW.

Key characteristics of MJP Waterjets:

HIGH PERFORMANCE

Thanks to unique pump and intake design, the MJP systems generates more thrust from installed power than competing systems. Nevertheless fuel consumption is maintained at a lower level. MJP's mixed flow pump, carefully shaped impellers, patented floating drive shaft and patented hub unit are some of the special features that optimize waterjet performance. Furthermore the MJP steering and reversing units offer efficient maneuvering at any ship speed.

HEAVY-DUTY DESIGN

MJP water jets are made of duplex stainless steel with superior wear and corrosion resistance compared to aluminum jet designs. In all aspects the MJP systems are carefully engineered to withstand operation in extreme conditions – such as very dirty and shallow waters – without compromising the vessel or the product itself.

WORLDWIDE SERVICE

With a worldwide network of sales and service representatives, MJP can provide service and maintenance adapted to the specific needs of every operator.
All customers are also offered direct service training at MJP's own facilities.

MJP waterjet designs

MJP jets are offered in two basic designs: the Compact Steering Unit (CSU) and the Double Reverse Bucket (DRB).

Which model makes the best alternative depends on the size and desired performance of the vessel. A larger jet will provide better cavitation margin and is therefore often the better choice at lower ship speeds. In principle, a larger jet will also provide higher efficiency and faster acceleration. On the other hand, a smaller jet, weighing less, can be more advantageous for a very fast vessel with extreme demands on maneuverability.

Optimized integration of systems

MJP makes tailor-made waterjet solutions to meet the needs of every operator. Extensive CFD studies are carried out and the design of the system is individually adapted for every vessel to guarantee maximum performance and fuel economy. MJP also provides installation supervision to optimize the integration of the systems in each vessel.

Characteristics of the MJP waterjets

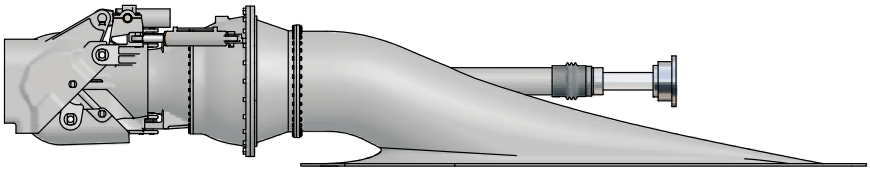
- High performance – low fuel consumption
- All duplex stainless steel design
- Thrust is taken in water jet pump
- Patented floating drive shaft
- Patented hub unit, accessible from aft
- Complete systems including hydraulics and lubrication
- Optional fully mechanical/hydraulic steering or electronic control

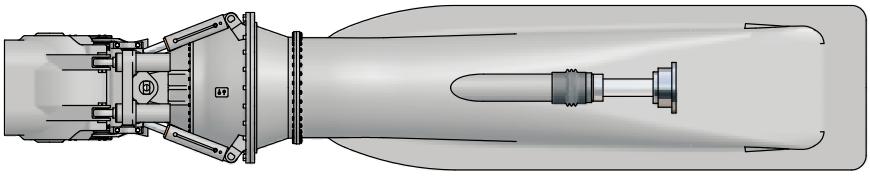
Quality assurance

MJP is certified according to ISO 9001. The MJP products meet the demands of all major classification societies such as ABS, BV, CCS, DNV, GL, LR, RINA…

CSU, COMPACT STEERING UNIT

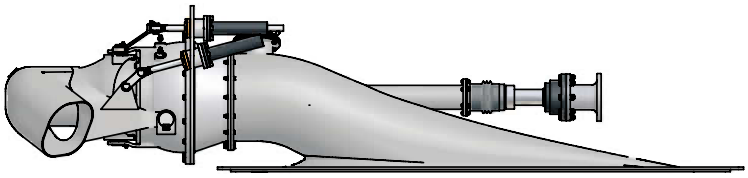
Available in a number of sizes from 450 to 1550 mm intake diameter.
Suitable for applications in the power range of 1000 – 15 000 kW.
Special feature: Patented cast steering unit – no welding

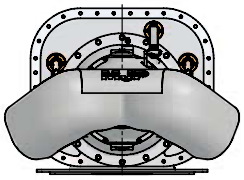


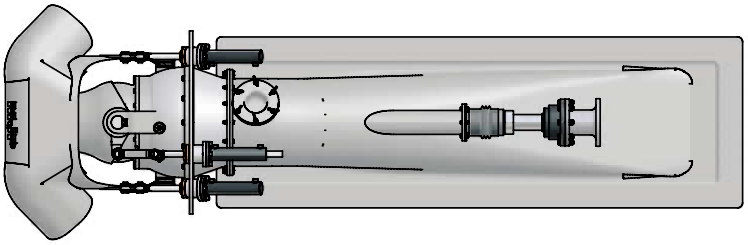


DRB, DOUBLE REVERSE BUCKET

Available in sizes from 350 to 500 mm intake diameter for applications in the power range of 800 – 1800 kW.
Special feature: Patented reverse bucket design – high reverse thrust and maneuvering forces. Inboard hydraulics.







“Our main goal is always to keep our customers happy and their business running.”

The straightforward service strategy of MJP