

The first impression counts...

Coatings provide two primary functions - decoration and protection - that are of considerable economic importance. Container ships do not transport boxes only, they are also items of high value. And not to forget... good looking ships build-up confidence between the parties. Port-State Control, Port Authorities and others.

Damages

Corrosion damages on board is running into hundreds of thousands of dollars every year. Rust is your enemy No.1, it never sleeps and is frequently underestimated. It attacks your vessel around the clock, 365 days per year! Corrosion is a natural process that requires moisture and oxygen. Seawater a potential electrolyte, is the driving force behind. The rate of corrosion of unprotected steel is about 0,23 mm/year and in ballast tanks can be even more.

Rust silently undermines the structural safety of your vessel and in no time your ROI (Return of Investment) turns upside down.

The maintenance trap

Depending on the area, surface preparation is the step that takes the longest time for the job, and these days many vessels have no more than 100 working days per year available for preventive maintenance (deck + engine). This means 50-60 days only for de-rusting and painting. For traditional mechanical coating maintenance this is not enough and explains why so many vessel look poorly maintained after a relatively short time.



"Liquid fury" waterblasting

To avoid costly steel repairs proper surface protection is the only way to prevent of and waterblasting maintenance the cheapest way to get out of that "trap". Waterblasting is cost effective, fast and ecologically sound. On board we focus on cleanliness rather than profile. Long-lasting coating repairs highly depend on the quality of cleanliness, the quality of primers and topcoats.

500 bar/ 7,500 psi (U.S. NACE standard WJ-4) will result in clinical clean surfaces. Free of medium rust, clean out pits, invisible contaminations, and salt, the enemy No.1 of all coatings. After waterblasting the surface is optimally prepared and ready to be painted.

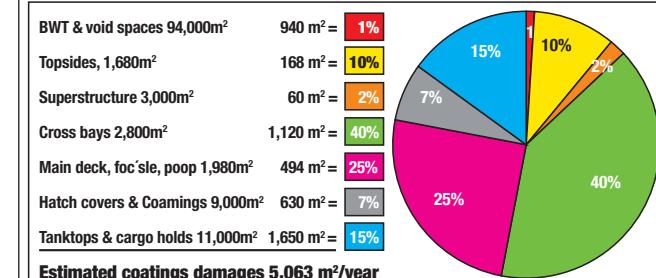
Any follow up coating will hold equally as long as on Sa 2 blasted surfaces. Combined with wet-surface tolerant primers (VOC free) the time savings can be up to 70 %. After blast "flash rust" light and medium might occur, which is acceptable to wet-and moisture tolerant primers.

The secret charm: 500 bar cannot not damage sound coating as it doesn't deliver enough energy to disrupt the lateral bond between sound coatings and steel. The only residue is the removed paint and rust – about 0,2 kg/ m².



On Board Maintenance

5500 TEU, 10 years old, surfaces subject to maintenance 123,460 m²
60 working days/year, mechanical derusting St 2



Theoretical output per men-hours:

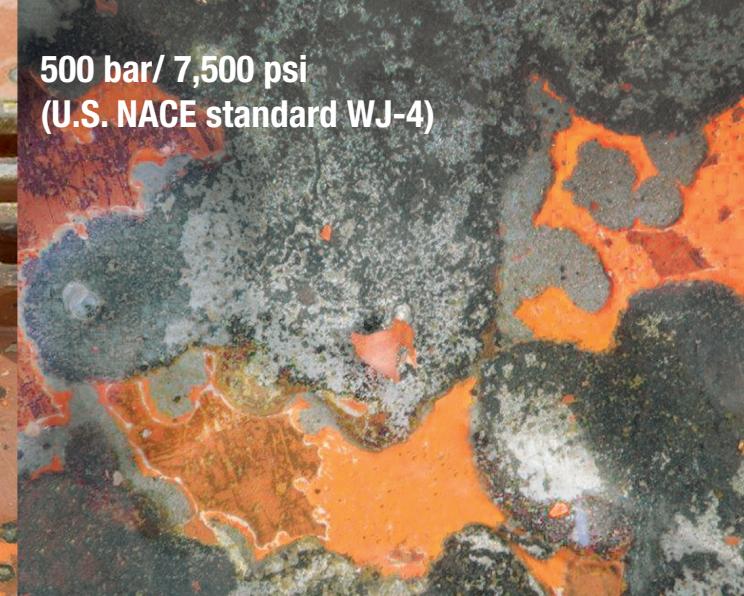
Waterblasting 500 bar (WJ-4): 7 - 13 sqm/h

Mechanical St-2 (power tool): 0,7 - 1,6 sqm/h

Sandblasting Sa-2: 15 - 20 sqm/h

DEN-Jet unconditionally provides "Maintenance solutions" for all vessels from 300 to 2500 bar and also ATEX Ex-proved machines.

DEN-Jet... there is no substitute!



**500 bar/ 7,500 psi
(U.S. NACE standard WJ-4)**

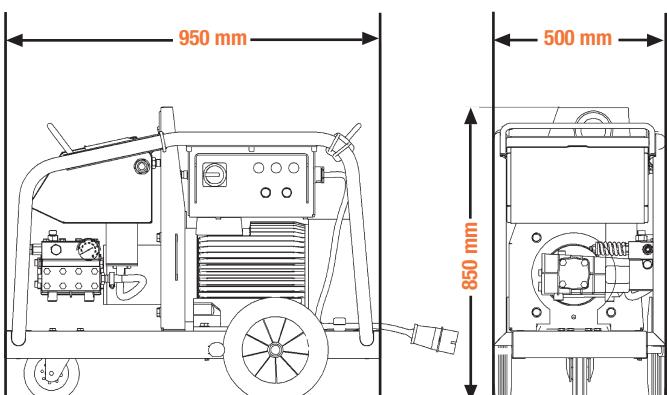
Fit for seagoing duties

- "Waterjetting" is suitable for all vessels and offshore installations
- Motor spray protected to IP 55
- The lifting eye and three wheel chassis allows easy handling and transport
- The water tank prevents of water hammering damages and serves as buffer
- Vital components are made of stainless steel
- Pressure built up smoothly, without recoil
- Automatic pressure relief for long life span of hoses and safe lance-handling
- DEN-JET „plug & go“ package includes all what you need
- Our "Bosun's Manual" simplifies operation
- Noise level: 78 dB D1 m, Lance 87 dB D 0,6 m
- Dimensions: fits for all vessels
- Low gravity point (save standing)

With the flat spray nozzle and suitable additives even minor oil spills and small fires can be handled whilst the water damage is minimised.

Experience shows that **MasterMariner500®** is a very useful maintenance tool that is welcome by crews and accepted aboard all vessels.

500 mm passes through most gangboards!



Environment:

DEN-JET Management and staff consciously sets new standards to comply with all environmental and H&S legislations.
DEN-JET is a Danish company. We manufacture HP-pumps in the range of 350 - 2500 bar (5075 - 37500 psi) and supply OEM parts to other known manufacturers. On request we offer tailor-made solutions for mobile and stationary pumps up to 2500 bar.

Customer service and sales office:

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Delivery ex works Denmark and Singapore

Contact:

Leader in on board waterjetting solutions

www.denjet.com



Technical data:

Working pressure: max 550 bar/ 1100 km/h (7975 psi)
Flowrate: 16 l/min - 4,2 g pm (960 l/h)
Medium: Freshwater, Inlet temp. max 50°C
Water supply: no pre-pressure required
Motor: 15Kw 440V 60Hz, (50 Hz in option)
Gross Weight: 170 kos
Optional: 550 bar 35 l/min, gross weight 630 kos

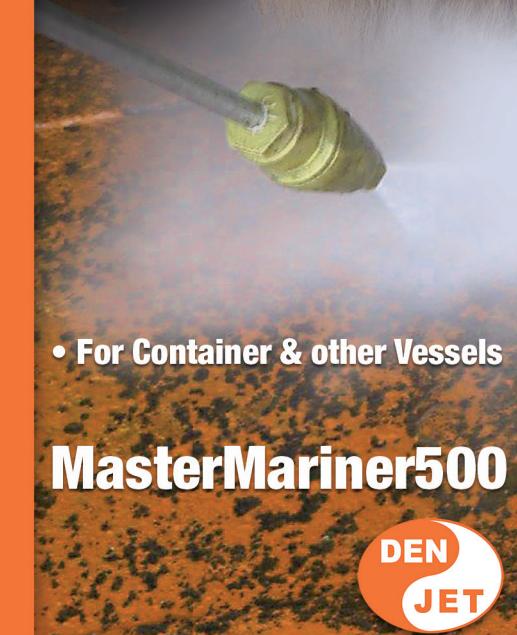
„Plug + go“ Package (500 bar):

- Lance with dump gun and trigger, 1000 mm
- Lance 450 mm w/f (confined spaces, ballasttanks)
- Jet nozzles (Rotating, fan, straight)
- Electric hour meter
- Water supply hose 25 m 3/4" with fastening clips
- Power cable 15 m, 32 Amp, with Reefer plug
- High pressure hoses 5 x 20 (100 meter)
- HP-hose connections
- Bosun's & Operation Manual
- Assembly tools
- Tool box (fixed)
- Repair kits for rotating nozzle
- Lashing belt ratchets for safe stowage and securing
- Watertight overall (Size L)
- Safety boots (800 bar)
- Safety helmet with ear protection and steel net visor
- Protection canvas PP-Textile, UV-resistant, orange

Stop never ending coating repairs!

Go for waterblasting!

The sooner you start the better!



- For Container & other Vessels

MasterMariner500

