

# DRIVE-IN BOATWASH® TECHNOLOGY

THE REVOLUTION IN HULL CLEANING



**Drive-in Boatwash®** 



## DRIVE-IN BOATWASH®

*Brush hull cleaning by Drive-In Boatwash® Technology is changing the landscape of boat maintenance.*

- Drive-In Boatwash® designs, manufactures and installs machines for brush-washing boats in water. The machines offer a cost effective and convenient system of boat maintenance to boat owners and marina operators.
- Drive-In Boatwash® caters for both motor and sail boats up to 16m (53ft).
- The convenience and effectiveness of the process facilitates regular boat washing and excellent boat maintenance, entirely eliminating the need for antifouling paint.
- Even the toughest fouling is removed in a matter of minutes, and any debris is collected in a large basin underneath.



Quick



Efficient



Inexpensive



Environmentally  
friendly



No chemicals





## ★ QUICK & EFFICIENT

**Four boats washed per hour** – Machines can be set up as a self-service  
**Cost efficient** – Greater boat performance and speed with less fuel consumption

*Sail in, sail out – 15 minutes to wash a boat*

*“To let personnel handwash a boat takes almost a whole day.  
Drive-In Boatwash does it in 15 minutes.”*

Björn, Shipyard owner

*“Most of our members know how to operate and use it by themselves.”*

Robbie Bergqvist, Vice President of Bosö Boat Club, Stockholm

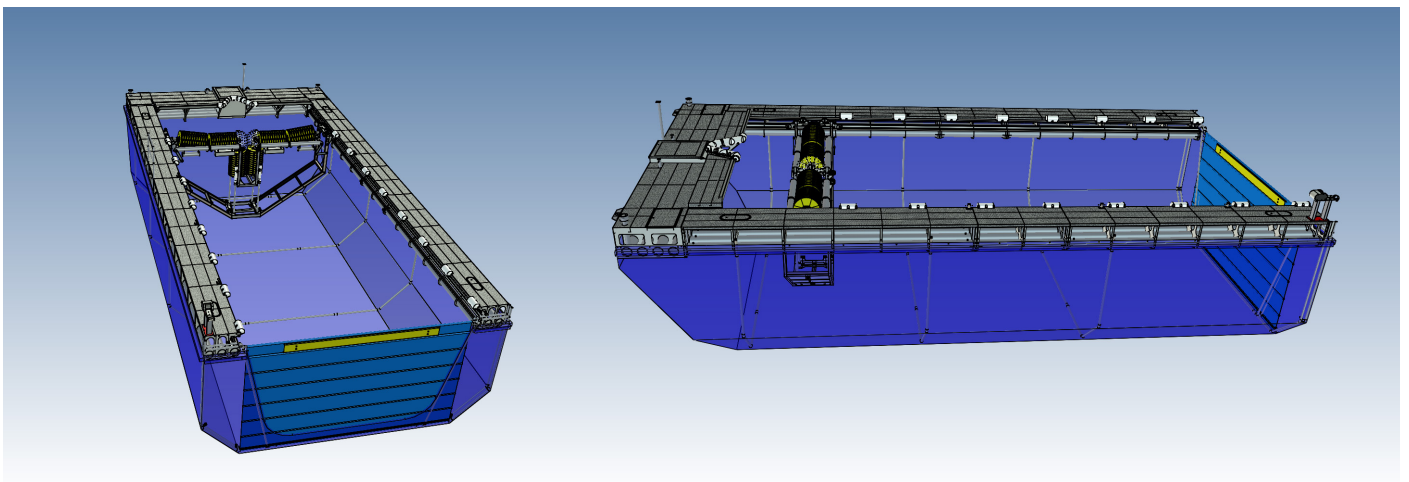




## ENVIRONMENTALLY FRIENDLY

- ✓ Reduced fuel consumption, less CO<sub>2</sub>
- ✓ No chemicals used
- ✓ Eliminates the need for antifouling paint
- ✓ Supports environmental regulation on antifouling. Mechanical brush washing is a recommended environmental strategy for antifouling elimination\*
- ✓ Supports consumer conversion to antifouling elimination
- ✓ Reduces consumption of chemicals in the marina area e.g. cleaning acids
- ✓ Safer working environment for marina service personnel e.g. no high pressure hull washing or sanding
- ✓ Any toxic waste generated (during consumer conversion) is safely collected and disposed of

\*As recommended by the WWF (World Wildlife Fund, 2016) and the Swedish Marine and Water Management Authority (2016)



With the pool liner beneath the boatwash, debris is collected, contained and safely disposed of.



# THE CONCEPT IN SCANDINAVIA

## ANTI-FOULING

The Baltic Sea currently has special conservation status. With many shallow and sheltered harbors shared by both marine life and boats, the impact of anti-fouling has been detrimental. The Baltic seabed has been polluted and parts of it are dying. Now the Scandinavian authorities are working towards banning all toxic antifouling products and reversing the impact.

Brush hull washing, as recommended by the WWF (World Wildlife Fund, 2016) and the Swedish Marine and Water Management Authority (2016), offers a real alternative to the industry.

*“All marinas where boats are regularly raised and/or washed should offer a solution for hull washing. In the long run, biocidal paints should be completely phased out, and developing boat hull washers is an important part of this.”*

– Report from the Swedish Agency for Marine and Water Management 2012:10

## BOAT MAINTENANCE LOGISTICS

Having a Drive-in Boatwash machine facilitates boat maintenance logistics for marinas, e.g. all boats can be quickly cleaned and prepped prior to seasonal lifting or drystacking.

Boat owners can avail of the service in a timely manner and at short notice, e.g. before they take out their boats and when they return to the marina.

Customer and client feedback is very positive and continues to encourage further uptake of the technology. Marina owners and operator experience an increase in revenue with minimal disruption to their existing services and resources.

There has been a rapid uptake of DIB technology in Swedish harbors and this is now accelerating as a result of the success of the machines.

*“We were able to decrease the use of anti-fouling by 90% in one year. That saves the ocean from 180 kilograms of zinc each year.”*

Robbie Bergqvist, Vice President of Bosö Boat Club, Stockholm



 **INEXPENSIVE**

**AVERAGE SAVINGS FOR BOAT OWNERS WITH DRIVE-IN BOATWASH\***

MARINA MAINTENANCE	COSTS	DRIVE-IN BOATWASH MAINTENANCE	COSTS
Antifoul	\$3000	Antifoul	\$0
Lift / Launch / Wash	\$250	Lift / Launch / Wash	\$0
Mid-Season Scrub	\$200	Drive-In Boatwash wash (6 @\$100 per season)	\$600
Total	\$3450		\$600
Annual Savings			\$2850

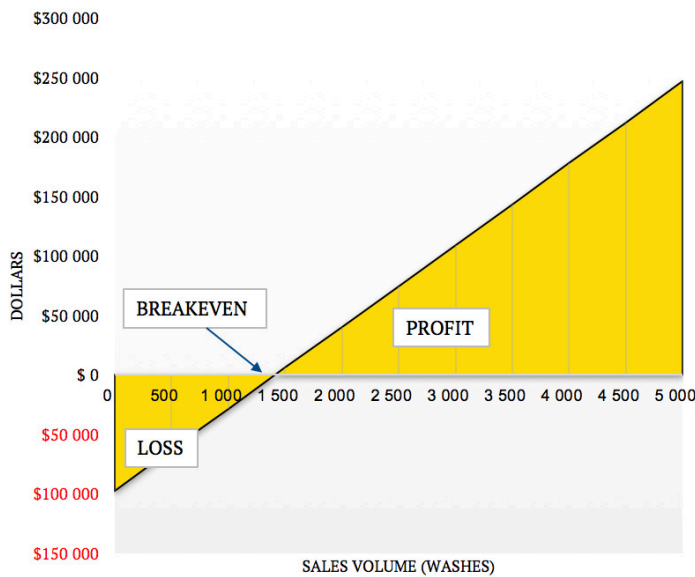
\* Based on a calculation for a boat size of 38 feet in USD for West Coast US



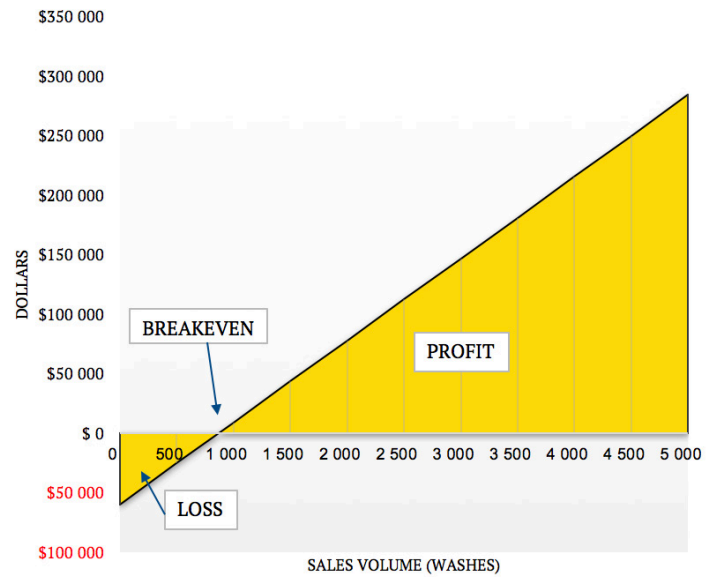
# POTENTIAL EARNINGS FOR MARINAS/INVESTORS

## BREAKEVEN ANALYSIS CHARTS - YEARLY SALES

**Depreciation 5 years**  
Breakeven point at 1414 washes

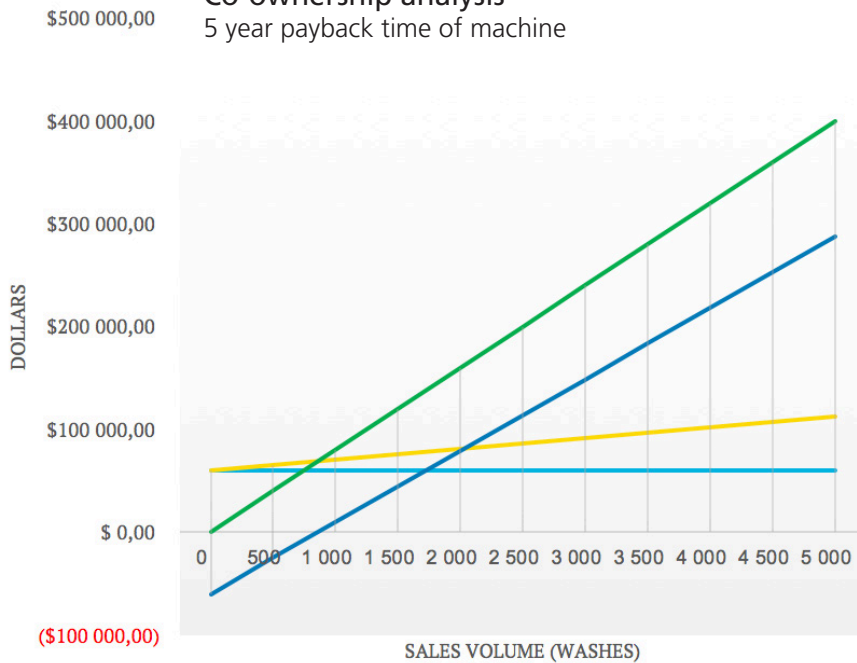


**Depreciation 10 years**  
Breakeven point at 869 washes



Example: 4,000 washes per year gives surplus after all expenses and amortization of \$200,000 before taxes.

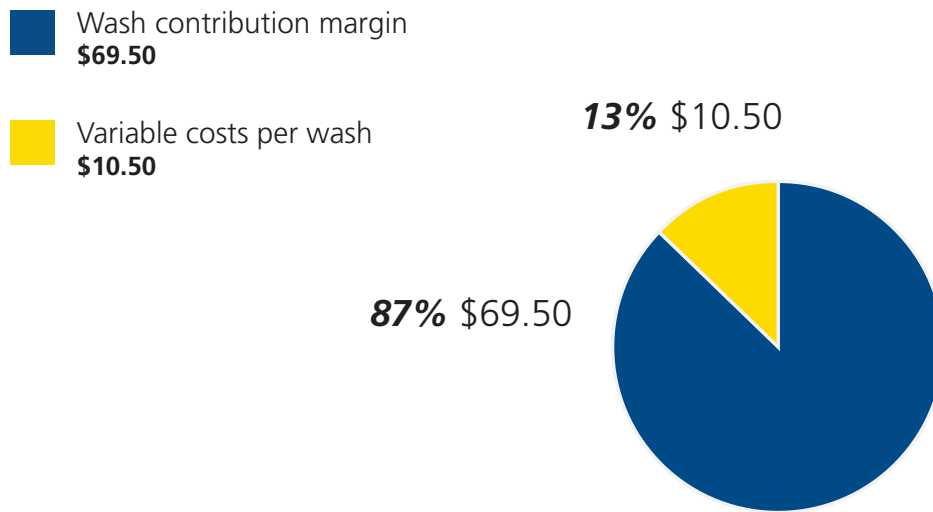
**Co-ownership analysis**  
5 year payback time of machine



- FIXED COSTS PER PERIOD
- TOTAL COSTS
- TOTAL SALES
- NET PROFIT (LOSS)

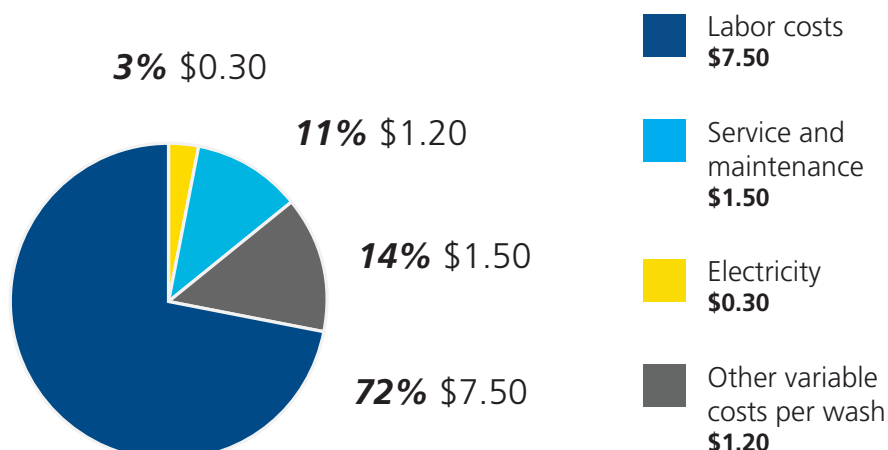
# POTENTIAL EARNINGS FOR MARINAS/INVESTORS

## WASH CONTRIBUTION MARGIN



From an average wash income of \$80, \$69 is net income.

## VARIABLE COSTS PER WASH





# BIGWASH



FOR MOTOR AND SAILBOATS UP TO 53 FT





## HOW IT WORKS

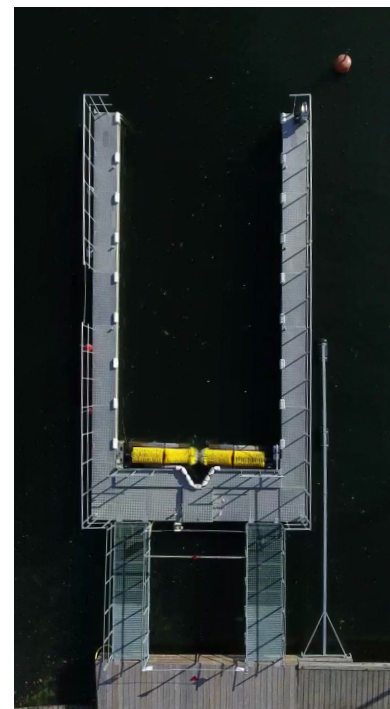
- The boat is moored in the U-shaped dock
- Six rotating brushes made from high density polymer adjust automatically to the boat hull
- Brush pressure is hydraulically controlled
- The machine is operated by a hand held remote control
- The brushes move back and forth along the length of the boat, removing all fouling
- Fouling is collected in a large basin underneath for disposal
- No chemicals are used and the process takes 15 - 20 minutes in total



See it in action at <https://youtu.be/RuxxGZR5XdA>







One machine can handle 6,000 washes a year.  
That's 1,000 boats being washed 6 times on average.

## BIGWASH CAPACITY

### MAXIMUM BOAT SIZES

	LENGTH	WIDTH	DEPTH
<b>BIGWASH 12</b>	39 ft (12 m)	13 ft (4 m)	7.8 ft (2.4 m)
<b>BIGWASH 14</b>	46 ft (14 m)	16 ft (5 m)	7.8 ft (2.4 m)
<b>BIGWASH 16</b>	53 ft /16 m)	16 ft (5 m)	7.8 ft (2.4 m)

Measurements can be adjusted on request.





## INSTALLATION REQUIREMENTS

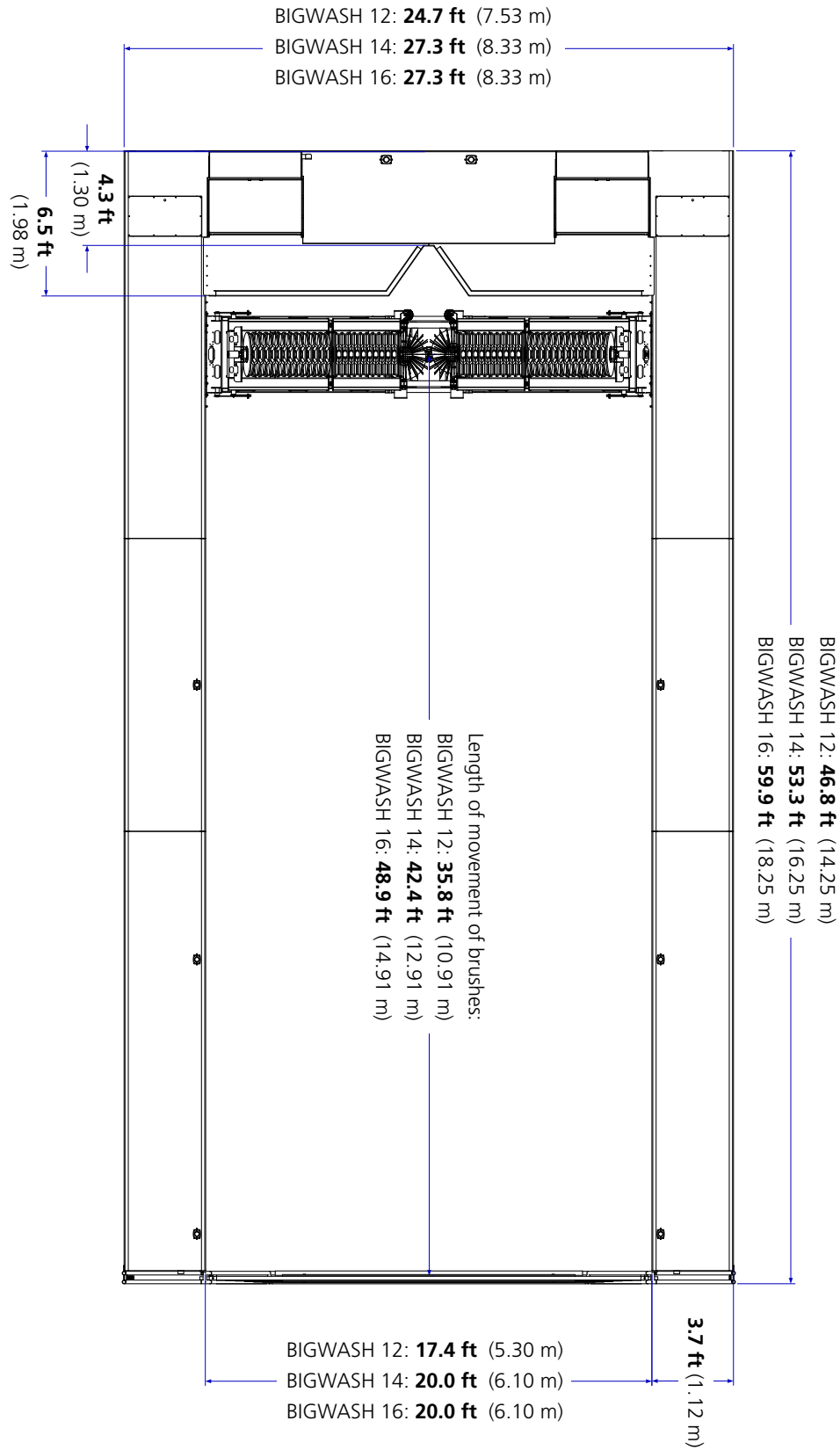
- ✓ Docking space: width 30 ft (8.5 m), depth 11.5 ft (3.5 m)
- ✓ Electric grid standard: 3 phase 400 volt
- ✓ Electric power connection
- ✓ Mobile crane
- ✓ Transportation
- ✓ Two 40 ft containers for BIGWASH, one for MINIWASH

## THE CUSTOMER IS RESPONSIBLE FOR THE FOLLOWING

1. Legal permits, and approvals
2. Electric grid standard
3. Electric power connection field work (if any)
4. Arrangement of dock space and electric power approx. 30 ft (8.5 m) dock space, 11.5 ft (3.5 m) depth
5. Local installation manpower - estimate 4 fitters x 3 days, 1 electrician 1/2 day
6. Crane hire
7. Participation in final acceptance test on site



# MEASUREMENTS





# MAINTENANCE

BIGWASH is built to last and is designed for low maintenance.

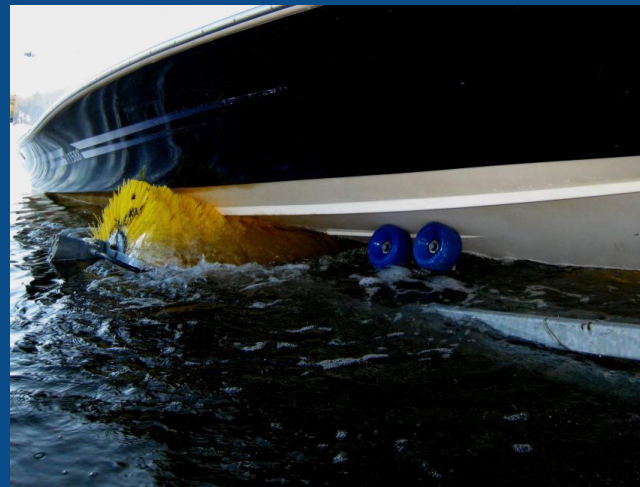
TIMEFRAME	MAINTENANCE
Annually	Visual Inspection Oil filter replacement Clean collection basin
Every 3 Years	Hydraulic oil change Brush replacement* Zinc anodes replacement**
Every 7 Years	Replace hydraulic motors*

\*Depending on usage

\*\*Depending on water salinity



# MINIWASH

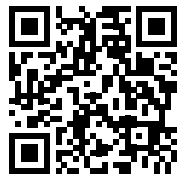


FOR MOTORBOATS UP TO 25 FT



## HOW IT WORKS

- Miniwash works like a boat trailer with 2 brushes to the rear
- Miniwash reverses down boat ramp
- Boat is winched on to miniwash
- Brushes adjust automatically to the hull
- Brush pressure controlled hydraulically
- Cleaning cycle takes 15-20 minutes



See it in action at  
<https://youtu.be/QW5EBC4A9ZU>

## MINIWASH CAPACITY

### MAXIMUM BOAT SIZE

LENGTH

29 ft (9 m)

WIDTH

8 ft (2.6 m) and adaptable





## CUSTOMER TESTIMONIALS

*“Before washing: 30.5 knots top speed, after washing 40 knots top speed.  
Fuel consumption at 25 knots down from 0.8 to 0.6 l/n.m.”*

Ola Hansson with a Buster XI 115 Hp

*“There is no reason to paint when you have a  
Boatwash. Saves both money, time and my back.”*

Jan Gudmundsson, 55 years

*“Our members save a lot of money  
on fuel and maintenance.”*

*“We were able to decrease the use of anti-fouling by 90% in one year...  
That saves the ocean from 180 kilograms of zinc each year.”*



**ROBBIE BERGQVIST**  
Vice President, Bosö Boat Club



Watch the full interview at  
[https://youtu.be/GMy3\\_KfOfpg](https://youtu.be/GMy3_KfOfpg)





**DESIGNED AND MANUFACTURED IN SWEDEN**

PATENT PENDING





## CONTACT INFO



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