

JETS<sup>™</sup> VACUUM AND WASTE TREATMENT TECHNOLOGY SMALLER CRAFT BOATS



# WHEN FLEXIBILITY AND RELIABILITY MATTERS





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When the sea is your workplace, it is vital that every onboard system is robust and reliable. Jets<sup>™</sup> offers flexible and durable sanitary solutions that make life easier for everyone on board, even when conditions get rough.

With 30 years' experience behind us, we know what is required aboard a craft boat, and we offer sanitary solutions that can easily be tailored to your customer's specific needs. In fact, our focus on customization and quality has already made Jets<sup>™</sup> the solution of choice for more than half of all vessels equipped with vacuum sanitary systems.

Crews around the world appreciate the reliability and high standard of our sanitary systems. The simplicity of a Jets™ vacuum system provides trouble-free operation and comfortable sailing. Its inherent flexibility also gives you greater freedom in your design choices.



VACUUMARATOR<sup>™</sup> PUMP BY JETS<sup>™</sup>

### A SMARTER SANITARY SYSTEM FOR ANY TYPE OF VESSEL

The scalability of Jets<sup>™</sup> vacuum solutions allows their use in virtually every possible scenario, from tugs and fishing boats to fish feed vessels and fast ferries.



### THE HEART OF OUR SYSTEM



The unique Vacuumarator<sup>™</sup> pump is the heart of any lets<sup>™</sup> system. It creates vacuum, macerates sewage and discharges – in one single-pass operation.

The Vacuumarator™ pump is the most compact and reliable vacuum generator available for sanitary systems. It is highly efficient in transporting any combination of black and grey water under vacuum.

The first Vacuumarator™ pump, invented and made by Jets™ in 1989, was a revolutionary sanitary solution. Since then we have continuously developed and refined our technology, and expanded the capacity range.

Renowned for their reliability and impeccable quality, more than 60,000 Vacuumarator<sup>™</sup> pumps by Jets<sup>™</sup> are currently in operation worldwide. Some 12,000 vessels in operation enjoy the reliability and comfort of Jets<sup>™</sup> sanitary systems.



#### THE UNIQUENESS OF THE VACUUMARATOR<sup>™</sup> PUMP:

UNSURPASSED RELIABILITY

#### FLEXIBILITY

Small footprint and low eight allow unique installation flexibility.

The Vacuumarator<sup>™</sup> pump is the most reliable vacuum generator available for vacuum toilet systems.

### HIGH CAPACITY

The Vacuumarator<sup>™</sup> pump provides unmatched system performance.

## A SMARTER SOLUTION

Vacuum toilets have a number of advantages over traditional water-flushing toilets, as they use air instead of water to transport sewage. This airflow vents away toilet odours, and improves hygiene by preventing pathogenic aerosols from spreading.

The plumbing is also more flexible, as you no longer have to depend on gravity for the toilets to work properly. The vacuum system can lift waste water vertically and uses compact 50 mm pipes, saving 80% space compared to traditional 110 mm pipes. Definitely a smarter solution thanks to our strong and reliable Vacuumarator™ pump.



### AN EXTREMELY FLEXIBLE SYSTEM

Low water consumption, smaller pipes and easy installation. With flexible plumbing, it is plain sailing to fit a smart sanitary solution on board.

Vacuum sanitary systems require significantly smaller diameter waste pipes and their non-reliance on gravity means they can flush in any direction – even upwards. This offers greater flexibility with regard to where the toilet is positioned on board. Furthermore, the waste water from the shower and washbasin can be integrated into the same system.

With easy installation, operation and maintenance, the Jets<sup>™</sup> vacuum sanitary system is the perfect choice for all types of craft boats.

### VOD

#### Vacuum On Demand

This system is perfect for up to 4 toilets and/or grey water interface units. In a VOD system vacuum is only generated when a toilet is flushed (Vacuum on Demand). This approach results in a system with simple and cost efficient operation – easy to install and easy to maintain.

#### A TYPICAL JETS™ VACUUM SYSTEM CONFIGURATION:





#### CVS

#### Constant Vacuum System

In a Constant Vacuum System, vacuum is maintained in the piping at all times. The Vacuumarator<sup>™</sup> pump starts and stops automatically, activated by the vacuum level in the piping via a pressure sensor. Suitable for installations with more than 4 toilets and grey water interface units.



### RELIABLE AND DURABLE TOILETS FOR TOUGH CONDITIONS

### Nothing about a sanitary system is more important than reliability. And that is what Jets<sup>™</sup> delivers.

Throughout the industry, Jets<sup>™</sup> toilets have a well-earned reputation for reliable operation. They are hygienic, and simple and quick to clean. The durability and high quality of our sanitary systems make them perfectly suited for use in demanding conditions aboard a craft boat.

However, with crew comfort an increasingly important aspect of ships' interior outfitting, customers now want their toilets to be well-designed and visually pleasing as well. In response to this new trend, Jets<sup>™</sup> has successfully enlisted the help of leading Scandinavian designers in developing elegant, yet highly functional toilets. For added convenience, all our models are equipped with soft-close lids as standard.













## THE HIGHEST **STANDARDS**

of our streamlined production process.

Product development, production, logistics and service are carried out by a handpicked network of internal and external resources, keeping our customers worldwide satisfied by delivering quality on time – every time. All Jets™ products are carefully assembled and thoroughly tested.

This quality control ensures customer satisfaction through high reliability. Our globally implemented quality system means all Jets<sup>™</sup> facilities around the world adhere to the same strict testing procedures, ultimately resulting in a carefree voyage for your customers.

> ISO 9001:2015 CERTIFIED

To ensure unsurpassed quality and environmental compliance, Jets Vacuum AS Management System is certified in accordance with ISO 9001:2015 and ISO 14001:2015. These and other certifications help inspire and promote continuous improvement at Jets™

### All Jets<sup>™</sup> products and systems are manufactured to the highest standards, and quality control is an integrated part

ISO 14001:2015 CERTIFIED



### In all our global markets, Jets<sup>™</sup> is trusted to deliver products and systems to the highest standards.

This is part of the reason why more than 60,000 Vacuumarator  $^{\scriptscriptstyle\rm TM}$  pumps by Jets<sup>™</sup> are in operation worldwide. Jets<sup>™</sup> has accumulated unique know-how and expertise in vacuum toilet systems and marine sanitation for three decades. This experience is available to all of our customers.

We are the preferred supplier for cruise and offshore ships, passenger and naval ships, craft boats, yachts and pleasure boats. Every second ship built with a vacuum sanitary system worldwide, chooses Jets™.

time.

### SOME OF OUR MORE NOTEWORTHY DELIVERIES INCLUDE:

- 1. KRILO CARBO, built by Brødrene Aa
- 2. KNM SKJOLD, built by Umoe Mandal
- 3. ISLAND PERFORMER, built by ULSTEIN
- 4. EDDA FIDES, built by Astillero HJ Barreras

## TRUSTED TO SUPPLY **CUSTOMERS WITH** HIGH DEMANDS

You can trust Jets<sup>™</sup> to deliver a well-proven and highly reliable system – every



Pioneering eco-efficient technology



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