

# Jets Sanitary Systems for Navy and Coast Guard



**JETS**

Sanitary Systems  
- made to please

# Jets efficient sanitary systems for all navy applications, from Patrol Boats to Aircraft Carriers

Jets systems are easy to fit into the design  
and easy to integrate with any STP / MSD.  
They are easy to install, operate and maintain.

Compact  
- low weight

- Saves weight
- Saves space
- Allows design flexibility
- Saves installation time
- No tank needed to create vacuum

## Systems Solutions

- We can take responsibility for the whole sanitary discharge system
- Optimal performance for any naval vessel – from patrol boats to aircraft carriers
- From individual components to turnkey solution
- Wide experience in both advanced and simple systems

## Competitive solutions with low LCC

- Saves space
- Produces vacuum with less energy
- Low maintenance
- Compatible with any STP
- Global after-sales service
- Modular flushing mechanism for easy replacement of individual parts
- ...results in low Life Cycle Cost

## Robust and reliable

- Preferred solution used in a wide range of naval vessels
- Design based on extensive international expertise
- High-quality materials for long life
- Proven technology - thousands of installations worldwide
- Excellent MTBF

## Environmental solution

- Saves water
- Improves sewage treatment processes
- Easy to comply with environmental regulations
- No defoaming chemicals needed



**JET'S**  
Sanitary Systems  
- made to please

# Toilets

Jets supplies a complete range of high-quality toilets for naval vessels.



WALL-MOUNTED VITREOUS CHINA



DECK-MOUNTED VITREOUS CHINA



STAINLESS STEEL



SQUAT PAN

The vacuum-powered controller (VPC) mechanism for flushing allows replacement of individual parts for easy, low-cost maintenance and repairs.



# The Jets

The robust Jets solution has proved highly practical for naval vessels. In-line installation of the Vacuumator combined with a small footprint and low weight allows for unique installation flexibility and considerable weight savings compared with other systems.

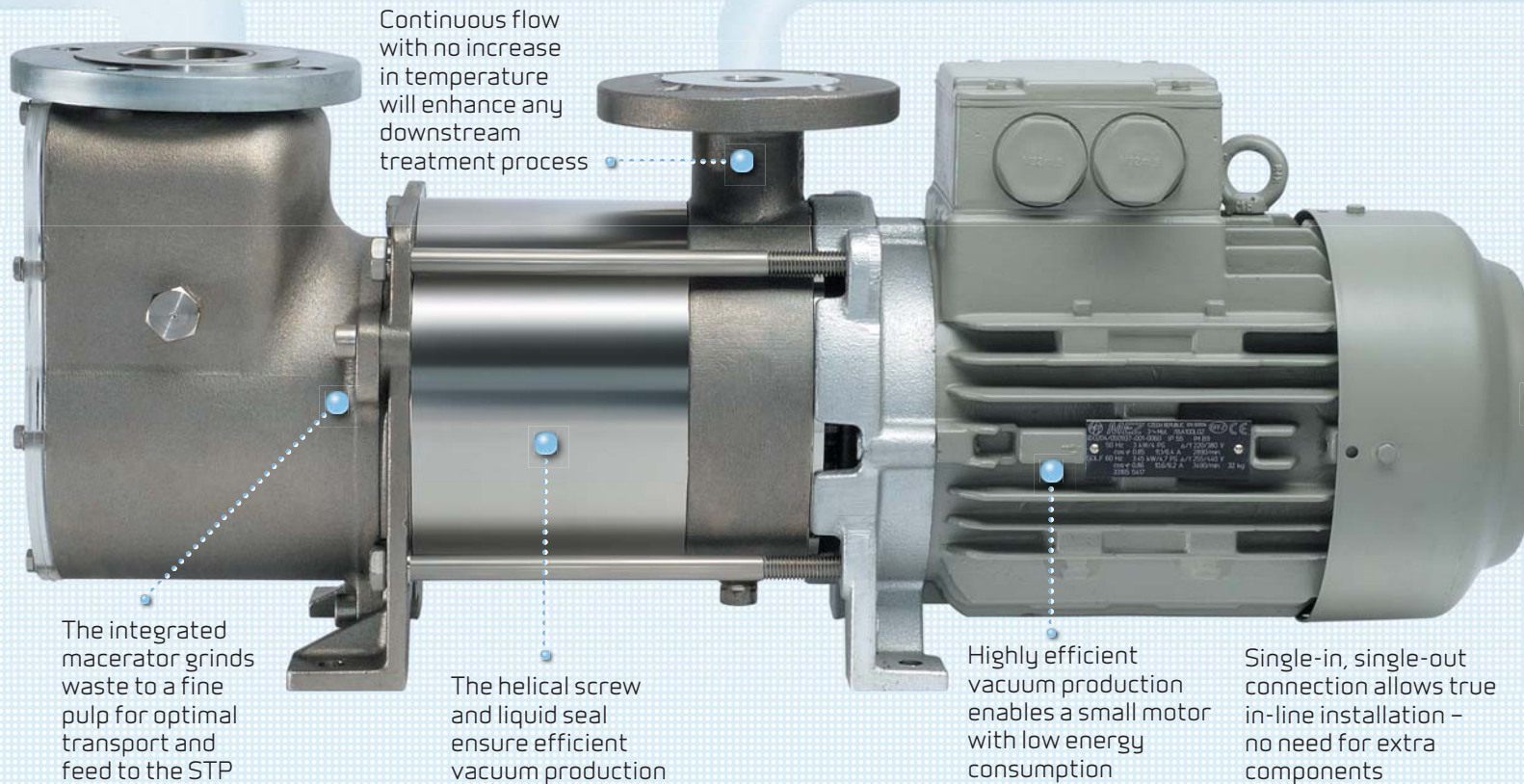


# System

## The unique Vacuumarator

The patented Jets Vacuumarator is the heart of our system. The ingenious Vacuumarator is the most compact, efficient and reliable vacuum generator available for vacuum toilet systems.

Jets offers a full range of possibilities from individual components to complete prefabricated modules with vacuum units and sewage treatment plants, as well as a collecting tank if desired.



### VACUUMARATORS



MINI: JETS 10NT



SMALL: JETS 15MB-D



MEDIUM: JETS 25MBA



LARGE: JETS 65MBA

# Ship designers appreciate

Very flexible system

Small footprint

No tank needed to generate vacuum

In-line vacuum generators

Low weight

Solid technical support and assistance at all levels

Extensive documentation

# Shipbuilders appreciate

In-line vacuum generators - easy to install

Low weight

Minimal space requirement

Solid support at all levels

The Jets at-your-service attitude

# Navies appreciate

Highly reliable operation - easy to inspect and maintain

High-quality materials for long component life

No need for anti-foaming additives

Integrated macerator

High capacity with redundancy

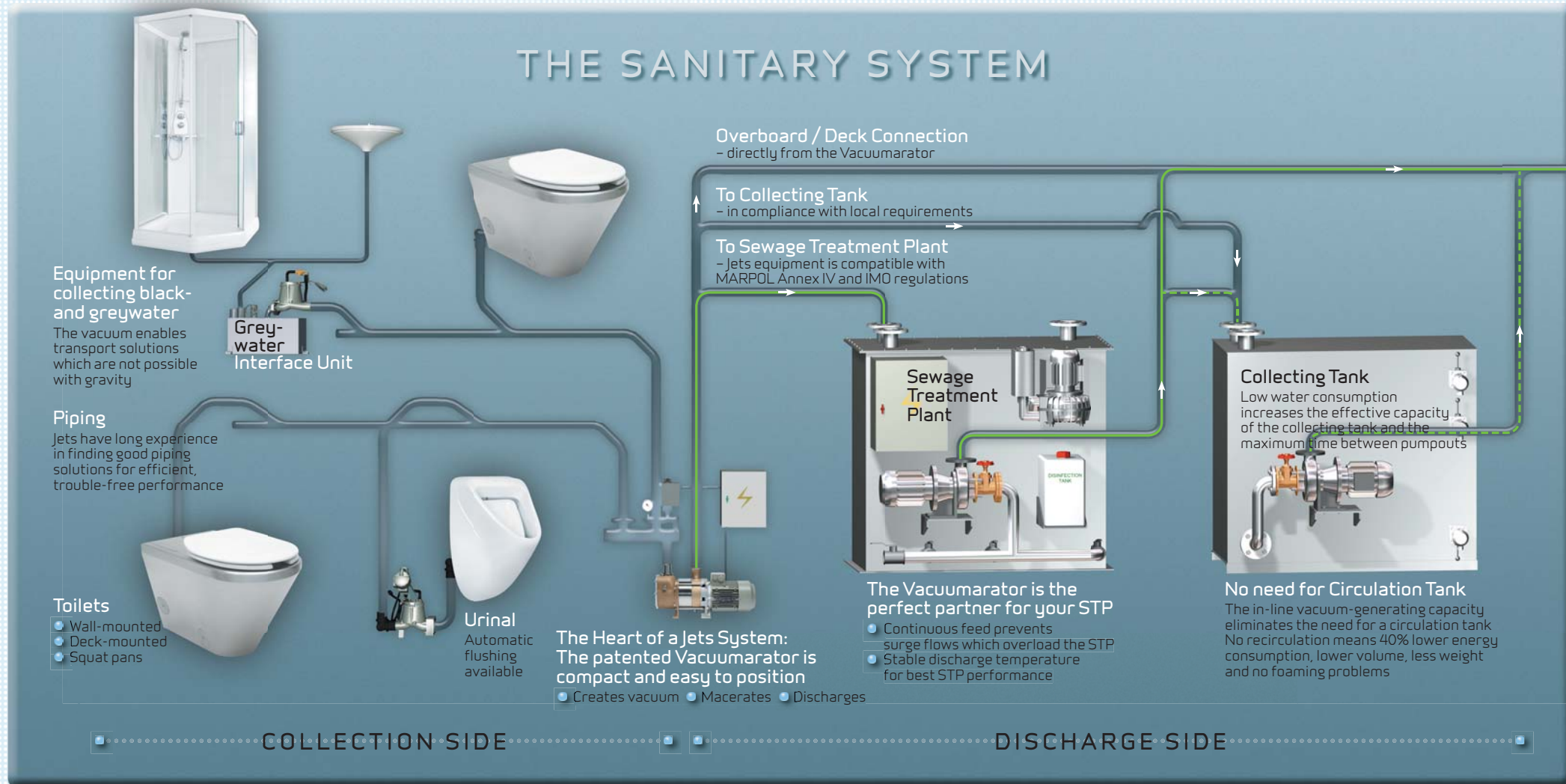
Specialized marine and naval experience

Optimal interface with sewage treatment plant

Global support

# From small patrol boats to large aircraft carriers – Jets takes care of...

## THE SANITARY SYSTEM



# JETS Experience from more than 250 navy vessels - worldwide



## SOUTH AFRICA

MEKO 200A CORVETTES - SOUTH AFRICAN NAVY

The compact, flexible Blohm + Voss MEKO design has been a great success among several navies. MEKO 200A SAN is a series of 4 corvettes built by the Blohm + Voss + HDW for the South African Navy. All the vessels are fitted with a Jets toilet system interfaced with Hamann sewage treatment plants.

Photo: Courtesy of Blohm+Voss



## BRUNEI

CORVETTES FOR ROYAL BRUNEI NAVY

Among the latest ships from BAE's famous Yarrow yard are the three corvettes recently built for the Royal Brunei Navy. These highly effective 95-meter vessels will patrol Brunei's national waters to protect commercial shipping from piracy. They are all fitted with Jets toilet systems.

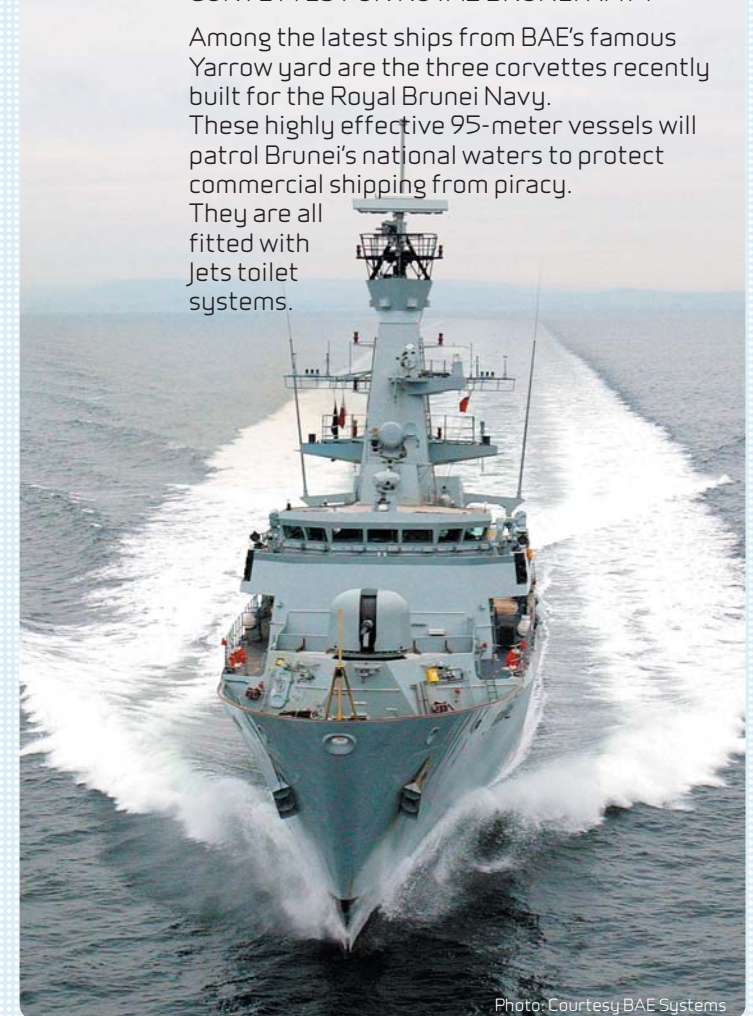


Photo: Courtesy BAE Systems





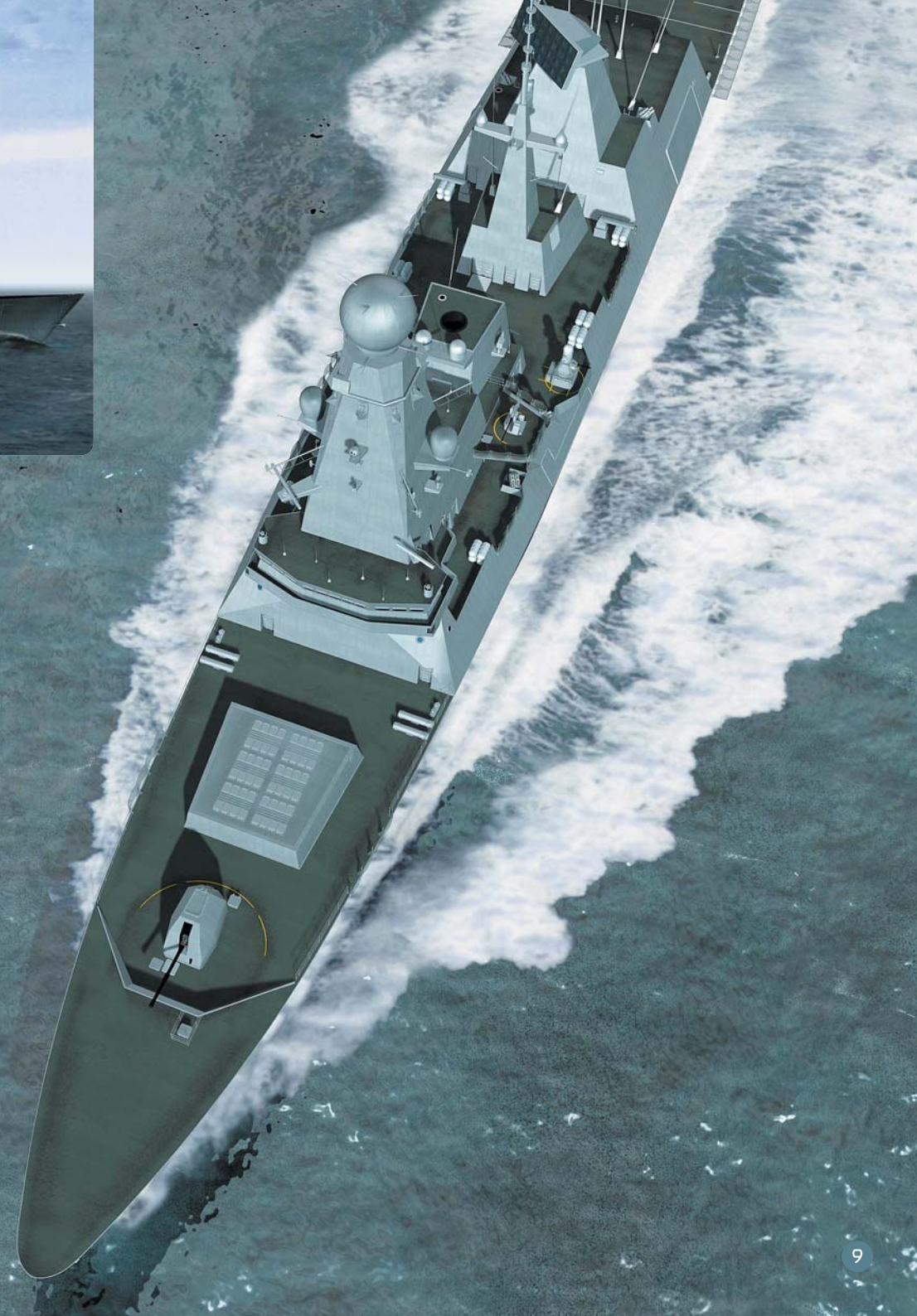
UK

### TYPE 45 DESTROYER - ROYAL BRITISH NAVY

The sophisticated Type 45 destroyer will form the backbone of the Royal Navy's anti-air warfare defence for the first part of the 21st century, providing fleet protection as well as protection of friendly forces in hostile territory. BAE Systems' Yarrow yard in Glasgow has been awarded 8 of the proposed 12 ship packages.

All these ships will be fitted with a Jets Sanitary System.

Artist's impression: Courtesy of BAE systems.





## NORWAY

NORWEGIAN COAST GUARD KV "HARSTAD"

The Coast Guard vessel KV "Harstad" is 83m long with a top speed of 18 knots. In addition to patrolling of the fisheries, it is equipped for towing and for submarine rescue.

The hull was built at Aker's yard in Romania and outfitted at Aker Brattvåg in Søviknes, Norway. KV "Harstad" has 52 Jets toilets and a Jets Vacuumrator Module.





## DENMARK

DANISH NAVY'S "ABSALON" SUPPORT SHIP

The Danish Navy's "Absalon" is the second of two new flexible support ships. These are the largest and most versatile ships in the Danish Navy – designed for participation in international operations. Both ships are fitted with 2 Jets systems.



## NORWAY

FAST PATROL CRAFT  
ROYAL NORWEGIAN NAVY

The Royal Norwegian Navy's first Fast Patrol Craft of the Skjold class – built by Umoe Mandal. An extremely lightweight ship designed for use in coastal waters. The Jets lightweight and compact sanitary system was a natural choice.



## SPAIN

FRIGATES  
ROYAL SPANISH NAVY

F100 Frigates built at Izar Ferrol.



## FRANCE

HELICOPTER CARRIERS – FRENCH NAVY

"Mistral" – one of two helicopter carriers built by Chantiers de l'Atlantique for the French Navy. Both are fitted with 2 x Jets 50MBA Vacuum units and 262 toilets.

Photo: Courtesy of Alstom Marine – Bernard Biger.



There is an optimal JETS Sanitary System  
...for one toilet....30 toilets....or thousands



Small or large -  
JETS deliver  
unmatched  
system performance



**JETS**<sup>®</sup>

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