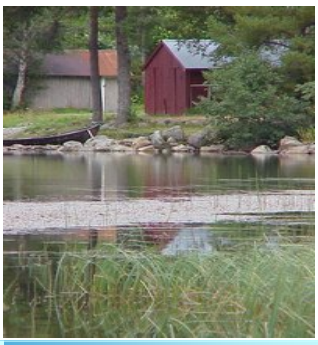
JETS As



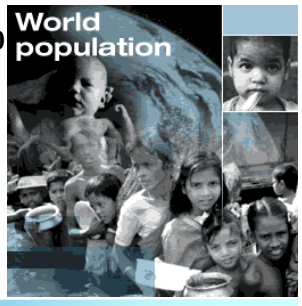


1. The idea
2. Technology/products
3. Applications/markets

Protecting water



- **2006: > 6.500.000.000**



……..and we need water – clean water

- **Just normal WCs (6 l/ flush) consumes a minimum of 84.500.000.000.000 l/year**
- **Vacuum Closets (VC) are using less than 10% af this volume**



World population;

•Year 2020 > 8.000.000.000

•By replacing WCs with VCs, there will be water enough for all to reach the highest standard of sanitation…. and much,much more!



An important discovery

Versuch mit den Magdeburger Halbkugeln
Otto von Guericke (1602-1686)

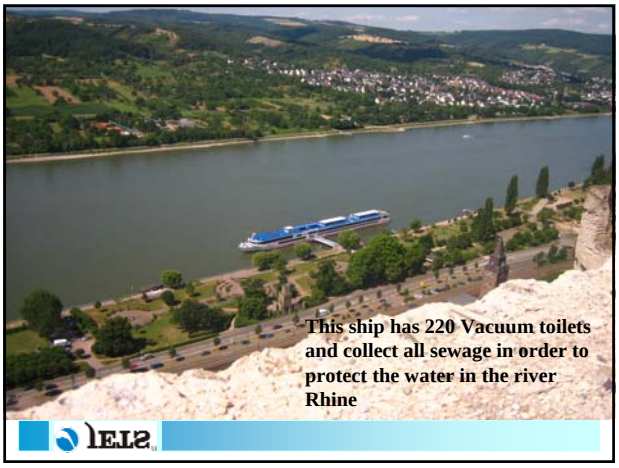


Basic knowledge for understanding the main principles of modern vacuum sanitation technology



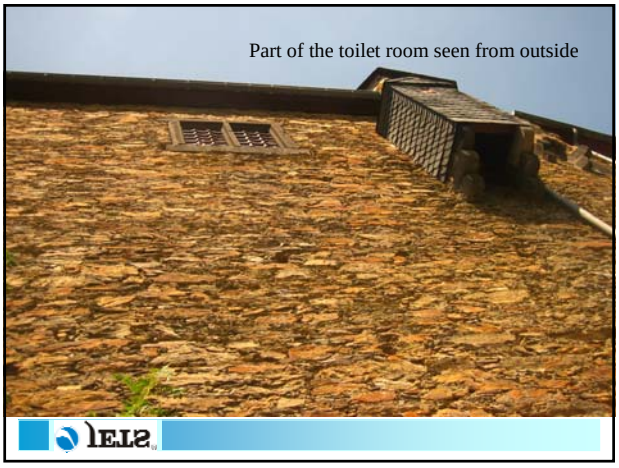
Another important discovery











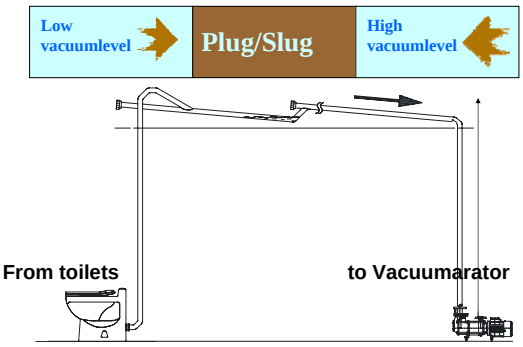


”Fra bord til jor

The 1700-century version

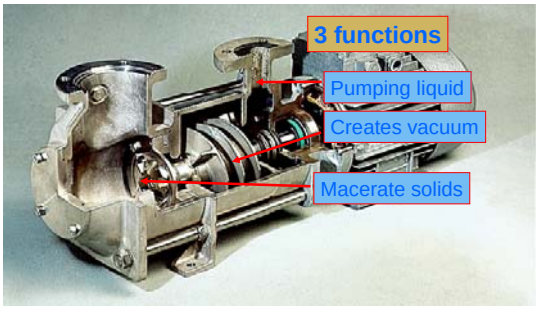
A version for the 2100-century buildings require vacuum technolog

Liquid transport by vacuum

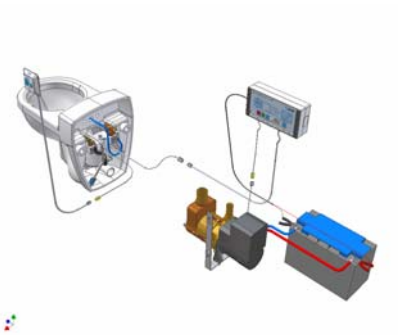




Vacuumarator – main principles



The solar energy version



Some toilet models



Jets 50

Floor



Jets 59

Wall

Two main types of Jets system:

***CVS*-pneumatic operated toilet-valve- any kind of system**

***VOD*-electric operated valve-for small and compact systems**



This is a toilet valve/ controller for a vacuum toilet

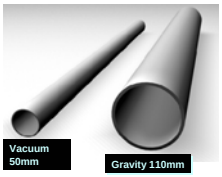
Type; Jets FD/VPC

This valve is part of a vacuum toilet connected to a constant vacuum system (CVS).



Benefits

- Water used only for keeping the bowl clean- not for transportation of sewage
- Volume of sewage reduced corespondingly
- Efficient for closed systems – preventing polution
- Small diameter piping
- Independent of gravity
- High level of sanitation independent of local infrastructure



Reduced water consuption- less sewage

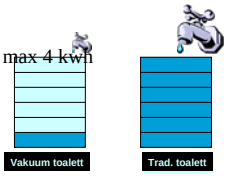
Normal WC: 5000 x 6 x 6 l. =180.000 l./day

Jets VC : 5000 x 6 x 1 l. = 30.000 l./day

Water saved 150.000 l./day

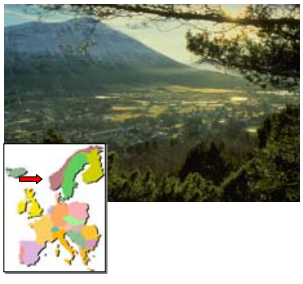
Saving per year 54.750.000 liter

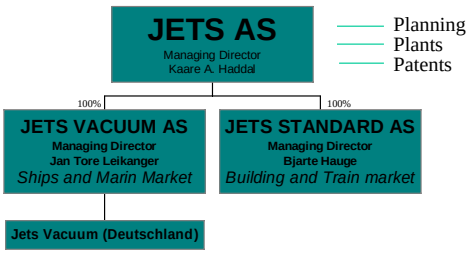
Consumption of energy per year/person max 4 kwh



Jets AS Hareid

- Development, manu-facturing and sale
- Envoronmental technology
- Maritime origin
- Land based growth potential
- World wide market
- World leading technology





Jets As is also a major shareholder in Mjøs Metallvare-fabrikk AS and Jets Korea Ltd,

Jets Vacuum As (Deutschland) Ratzeburg





•Toiletasembly
•Distribution- EU

Norwegian University of Life Sciences (UMB)





National research programme-NAT-Natural waste water treatment technology- 1997

Source separation of waste water- 25 student compartments equipped with Jets Vacuum Toilet System and natural based greywater treatment system developed by UMB



Cruise ship in the harbour of Shanghai



Coastal car ferry, West Norway

The Chinese train version



EXPO FOR TRAIN EQUIPMENT IN CHINA



Jets systems installed over the years in a high number of Navy ships.

Jets is now also available for military use on shore



Prison - ”Hekte”

- Skanska Stockholm
- Huddinge Sweden
- 138 toilets



Fish processing plant

- Global, Norway1999
- Connected to public sewerage system



Summerhouses

- Engeskaret, Hareid1998
- 25 summerhouses in one system



Summerhous/”hytte”

- With no water or el. installation- 1999
- Solar panel/ 12 V battery



Hotel

- Sæletun, Bergen 1999
- Norges Miljøvernforbund
- Local greywater treatment



Hospital

- Les Cadrans Solaires Vence, France -1992
- 138 toilets
- Renovation



Private homes

- Torvetua, Bergen 1998
- Block & Watne
- 80 homes
- Source separation with local greywater treatment



Private villa

- Hareid, 1995
- 3 toilets+ graywater
- Connected to public sewer







Jets sewage discharge systems for marinas and recreation areas



Jets vacuumtoilets for small buildings



The new Jets 10 NT combined with the Jets Bio has dramatically improved the sanitation level. Sewage related environmental problems are finally solved without investment in new infrastructure.



www.jets.no