Facet
Filtration Group®

Features

Facet Model UTR Transfer Units for Sewage Water are self-priming, designed to help suction of these waters, noiseless and able to handle small solids. They can suction sewage water from up to 7.5 m.w.c. and discharge them at a pressure of 15 m.w.c.

Electrical supply: 3ph/380V/50Hz. Connections: Universal conic coupling for any kind of mouths. Provided with an isolation valve at the end.
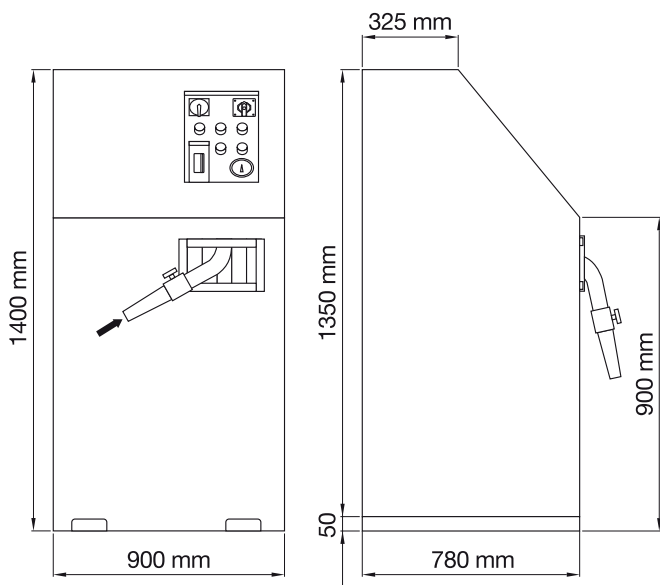
Facet Model UTR Units comprise:
- Universal conic suction connection
- 15 m of 1 ½" non collapsible suction hose
- Isolation valves at both suction and discharge
- Vandal proof cabin in stainless steel which assures no corrosion
- Electrical control panel with start/stop leds, switches and vacuostat

Results

To give an example, a ship with a crew of four people can generate in a journey up to 280 l of sewage. This sewage water cannot be discharged directly into the sea, so they must be stored onboard. Once in the dock they are discharged from the ship through the transfer unit to the corresponding treatment system.

In most of the ships, waters coming from urinals, W.C., showers and toilets (this is: black and grey waters) are discharged directly into the sea. Discharge of this sewage directly into the sea involves a very important harmful effect on ports and bathing areas.

To keep the quality of water everywhere and therefore also in ports and bathing areas is highly necessary by sanitary reasons, ecological reasons, social reasons and landscape reasons.

To avoid these harmful discharges you must use the Sewage Water Transfer Units together with an storage tank or a sewage treatment plant.

ООО «ТИ-СИСТЕМС» ИНЖИНИРИНГ И ПОСТАВКА ТЕХНОЛОГИЧЕСКОГО ОБОРУДОВАНИЯ
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UTR Series
For Marinas and/or Fishing Ports

325 mm

1400 mm

1350 mm

900 mm

50

900 mm

780 mm

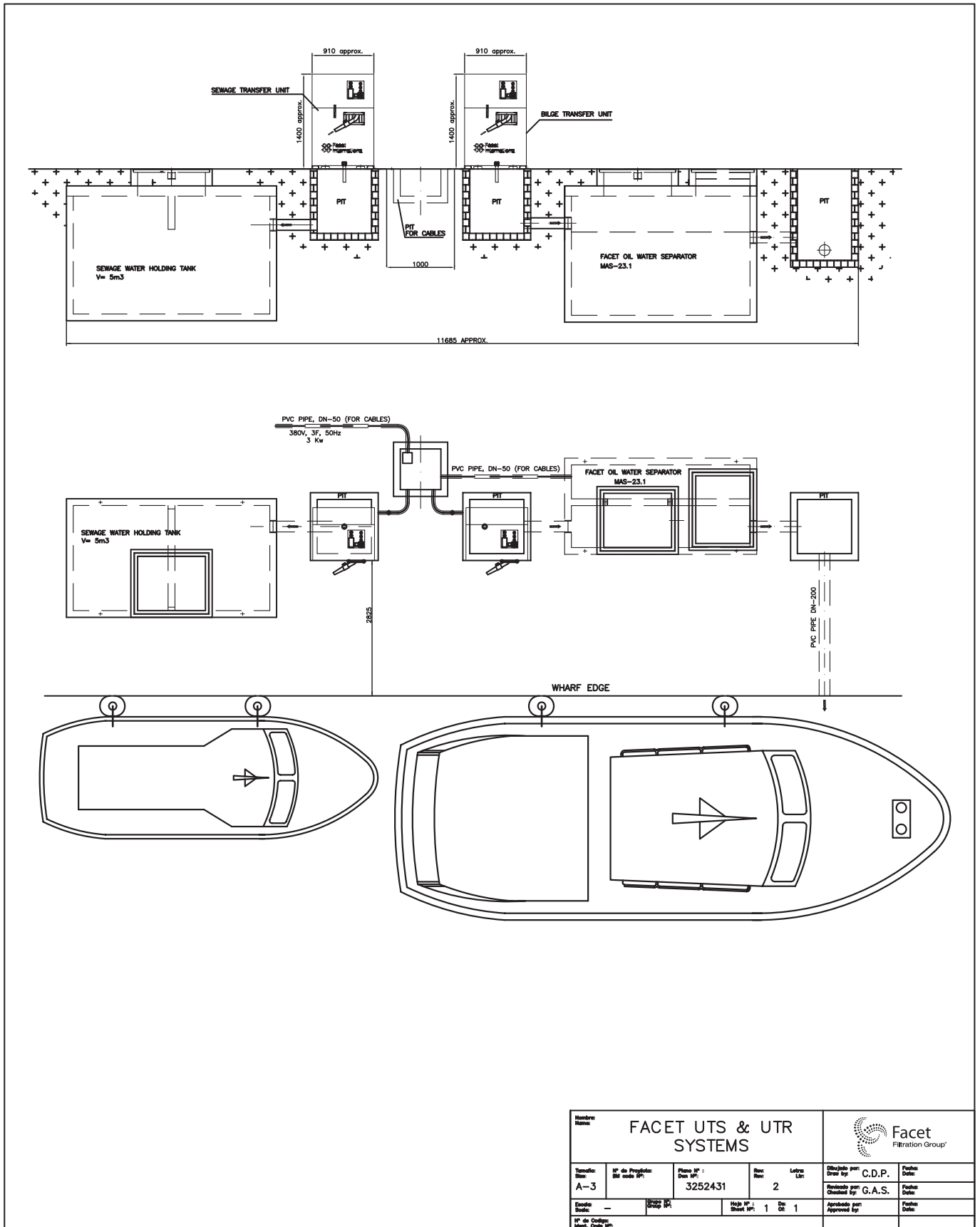| MODEL	CONNECTIONS		POWER (kW)	FLOW (m³/h)
	Inlet	Outlet		
UTR-1800	Flexible 1½" PE	DN50 HDPE	1	1.8
UTR-4500	Flexible 2" PE	DN65 HDPE	2	4.5

Options

- Hose reel for suction hose (15 m x 1 ½") with automatic hose stop and withdrawal
- Card reader to allow access to the unit only to authorized staff as well as to have a register to know who and when has entered the system
- Discharge hose

Operation

Water coming from sewage tanks of the ships goes through the Sewage Transfer Units to the sanitary collector in the port or to the Facet 5000 l storage tank.

Sewage stored in the tank, once max. storage capacity has been reached, must be delivered to an authorized dealer for appropriate treatment.

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Plan / section drawing labels:

- 910 approx.
- 910 approx.
- SEWAGE TRANSFER UNIT
- BILGE TRANSFER UNIT
- 1400 approx.
- 1400 approx.
- Facet International
- PIT
- PIT
- PIT FOR CABLES
- PIT
- SEWAGE WATER HOLDING TANK V= 5m3
- FACET OIL WATER SEPARATOR MAS−23.1
- 1000
- 11685 APPROX.

- PVC PIPE, DN−50 (FOR CABLES)
- 380V, 3F, 50Hz 3 Kw
- PVC PIPE, DN−50 (FOR CABLES)
- FACET OIL WATER SEPARATOR MAS−23.1
- SEWAGE WATER HOLDING TANK V= 5m3
- PIT
- PIT
- PIT
- 2825
- PVC PIPE DN−200
- WHARF EDGE

Title block:

Nombre: Name:	FACET UTS & UTR SYSTEMS	Facet Filtration Group
Tamaño: Size: A−3	Nº de Proyecto: Bid code Nº:	Plano Nº: Dwn Nº: 3252431	Rev: Rev: 2	Letra: Ltr:	Dibujado por: Drwn by: C.D.P.	Fecha: Date:
					Revisado por: Checked by: G.A.S.	Fecha: Date:
Escala: Scale: —	Grupo Nº: Group Nº:	Hoja Nº: Sheet Nº: 1	De: Of: 1		Aprobado por: Approved by:	Fecha: Date:
Nº de Código: Ident. Code Nº:			

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Bilges collect all the liquids spilt and/or fallen onboard ships, therefore they get together small quantities of hydrocarbons and oils mixed with seawater, rainwater and/or cleaning/ washing water. If this mixture goes to the sea it is like pouring directly hydrocarbons and/or oils.

This kind of spills can be completely avoided using these Oils and Bilge Water Transfer Units together with a Coalescent Oil Water Separator Class I (effluent < 5 ppm).

Features

Facet Series UTS Transfer Units for Bilge Water and Oils are self-priming, designed to avoid emulsion of bilge hydrocarbons, noiseless, and able to handle small solids.

They can suction bilge water and/or oils of up to 7.5 m.w.c. and discharge them at a pressure of 15 m.w.c.

Electrical supply: 3ph/380V/50Hz. Connections: Universal conic coupling for any kind of mouths. Provided with an isolation valve at the end.

Facet Series UTS Units comprise:
- Universal conic suction connection
- 15 m of 1 ½" non collapsible, hydrocarbons proof, suction hose
- Isolation valves at both suction and discharge
- Vandal proof cabin in stainless steel which assures no corrosion
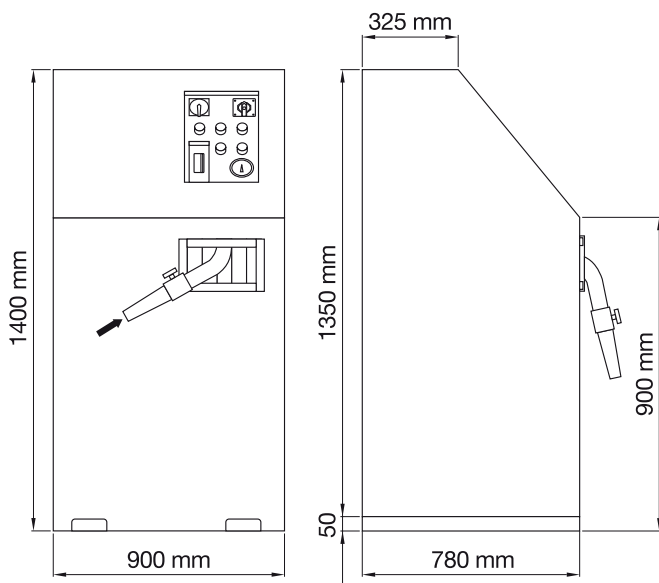- Electrical control panel with start/stop leds, switches and vacuostat

Results

To give an example, in a ship with a bilge of 80 liters, there is approx. a max. of 1% of oils (10000 ppm), that is: 0.8 liters of oils. If bilge waters go through the Oil Water Separator, only a 1% (the 0.8 liters of oil) will have to be treated by an authorized dealer.

If bilge waters do not go through the Oil Water Separator, for previous treatment, the whole 80 liters will have to be stored and then treated by an authorized dealer.

Therefore, the use of an Oil Water Separator Class I, will suppose savings of approx the 99 % on the cost of dealing with these oily water.

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UTS Series
For Marinas and/or Fishing Ports

MODEL	CONNECTIONS		POWER (kW)	FLOW (m³/h)
	Inlet	Outlet		
UTS-1800	Flexible 1½" PE	DN50 HDPE	1	1.8
UTS-4500	Flexible 2" PE	DN65 HDPE	2	4.5

Options

- Hose reel for suction hose (15 m x 1 ½") with automatic stop and withdrawal
- Card reader to allow access to the unit only to authorized staff as well as to have a register to know who and when has entered the system
- Discharge hose
- Kit of absorbent material for accidental spills
- Floating skimmer for suction of accidental spills

Operation

Water coming from bilges and oil chambers aboard ships go through the Oil and Bilge Water Transfer Unit towards the inlet of the Class I Coalescent Hydrocarbons Separator. In the oily water Separator the oils and hydrocarbons are separated from water and stored into the oil chamber.

Water already free of oils/hydrocarbons is discharged by gravity with a content of less than 5 mg/l, therefore can be discharged directly into the sea or into the sanitary collector in the port.

The oils/hydrocarbons stored in the oil chamber, once max. storage capacity has been reached, must be delivered to an authorized dealer for appropriate treatment.

With this process there are very important savings on the cost of dealing with these wastewaters since the authorized dealer only will have to take away the separated oils but not all the water coming from bilge. If there were no Oil Water Separator, all untreated bilge water would have to be stored and then delivered to an authorized dealer for appropriate treatment.

Suction and Treatment Operations carried out this way by these Units allow achieving a 99% saving on the cost of treatment of these wastewaters, as well as decrease to the minimum the space necessary for storage.

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Top view / cross-section drawing labels:

910 approx.

910 approx.

SEWAGE TRANSFER UNIT

1400 approx.

BILGE TRANSFER UNIT

1400 approx.

PIT

PIT FOR CABLES

PIT

PIT

1000

SEWAGE WATER HOLDING TANK
V= 5m3

FACET OIL WATER SEPARATOR
MAS-23.1

11685 APPROX.

PVC PIPE, DN-50 (FOR CABLES)
380V, 3F, 50Hz
3 Kw

PVC PIPE, DN-50 (FOR CABLES)

FACET OIL WATER SEPARATOR
MAS-23.1

PIT

PIT

PIT

SEWAGE WATER HOLDING TANK
V= 5m3

2825

PVC PIPE DN-200

WHARF EDGE

Nombre: Name:	FACET UTS & UTR SYSTEMS		Facet Filtration Group®	
Tamaño: Size: A-3	Nº de Proyecto: Bid code Nº:	Plano Nº: Dwn Nº: 3252431	Rev: Rev: 2	Letra List	Dibujado por: Draw by: C.D.P.	Fecha: Date:
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Nº de Código: Ident. Code Nº:						

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