



Intelligent Integration in the overall Biogas Plant Concept

- Safety vent pipe for emergency overpressure
- Gas outlet to connect the gas lines with other fermenters or to biogas consumer
- Diagonally arranged viewing window to guarantee the best possible view into the fermenter
- Easy access to all components at one single location

Advantages

- Easy planning, simple installation and safe, efficient operation
- Proven concept with matching components in high-quality stainless steel design
- Visual monitoring of the fermenter content and excellent accessibility



Further Options:

You can obtain the following extras to the UTS Service-Box Pro:

- Additional lifting device to transport the mixer outside of the fermenter onto the Service-Box
- Installation of a motorized mixer height adjustment system
- Small working platform to connect walkways (on site)
- Large working platform to install a safety ladder / stairway



UTS Service-Box Pro

High Plant Availability! Safe, Efficient Operation! Fast & Easy Maintenance!

The Continual Evolution of the famous UTS Patent

Biogas is produced from liquid biomass in air-tight tanks (fermenters) that must be efficiently mixed for optimum performance. The mixers placed inside the fermenters should be easily and safely re-positioned, inspected and maintained by the plant operator, without interrupting the biological process or causing other negative impacts (e.g. biogas escape.) Depending on the dosing of substrates, gas pressure peaks may occur that have to be safely buffered.

These are the main reasons why UTS developed the original UTS Service-Box Classic as a patented solution to these challenges, and have now further improved the design with UTS Service-Box Pro.

Hundreds of the UTS Service-Box Classic units have already been installed in biogas plants all over Europe and this system has become the unique symbol of UTS's biogas expertise.

Methane emissions are almost eliminated, maintenance times are shortened, maintainance is made more comfortable and safe – the biogas plant owner saves time, money, increases operator safety and protects the environment with the new technical innovations of the UTS Service Box Pro!

Main Advantages for Biogas Plants:

- Safe maintenance / repair of mixers on a strong operator working platform with safety gate to prevent entry to fermenter
- Minimum gas loss, due to gas isolating curtain / "skirt"
- Simple position adjustment of mixers (lifting, turning, lowering) by external controls
- High/low pressure protection of fermenter
- Integrated gas outlet to connect to biogas pipeline
- Integrated visual inspection of fermenter contents



You build your biogas plant only once!
High Availability, Safe Operation and Fast, Easy Maintenance
are required for the entire working life -
That is why you need the UTS Service Box Pro!

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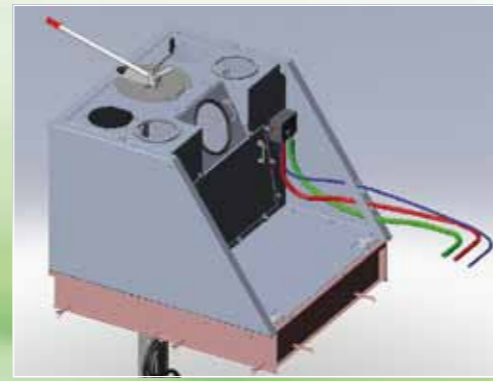
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Stamp of Supplier:

The new UTS Service-Box Pro is available for Fermenters with:

- Tent roofs with angles between 20° and 45°
- Spherical roofs with angles between 20°, 40° up to ¼ ball roof
- Concrete roofs

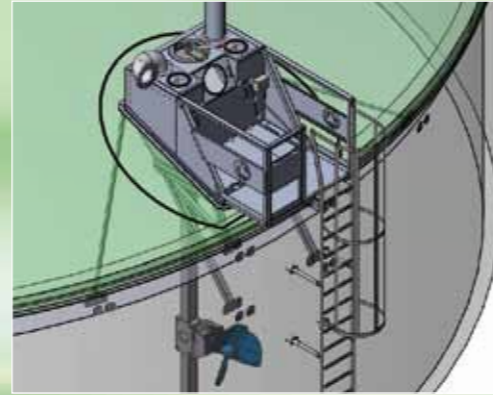
To allow for maximum gas storage, the UTS Service-Box Pro fits exactly into the respective membrane roof, without imposing any stresses, providing maximum durability of the roof structure.



The UTS Service-Box Pro - Modular System

The UTS Service-Box Pro consists of the following parts:

- Basic body made of stainless steel 1.4301
- Connection frame for all types and angles of membrane roofs
- External controls for adjusting positions of mixing technology
- Integration of over/under pressure protection valves and vent pipe
- Biogas delivery pipe installed on top of the Service-Box, ready to accept isolating valve
- Two maintenance openings at the front - one with a viewing window
- Strong operator platform with safety gate



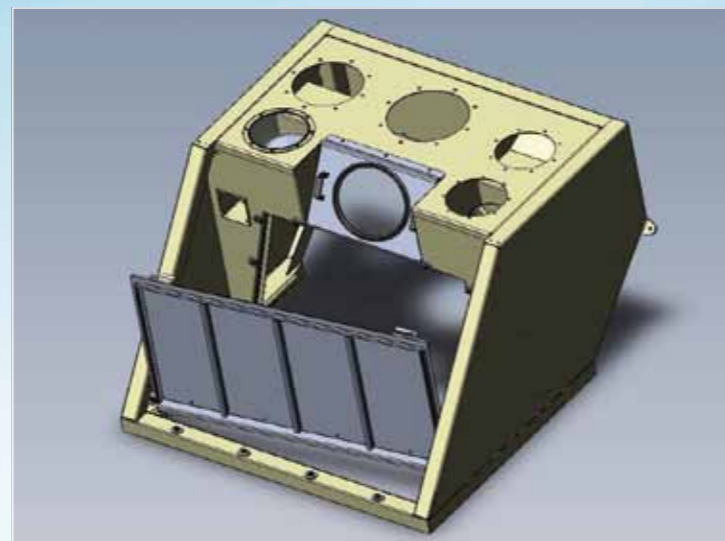
Characteristics

Patented Concept for safe and easy Maintenance of the mixing Technology

- Operating, maintenance and control platform is included
- Two access openings for maintenance work
- Detachable base plate when raising / lowering of mixers - placed underneath mixer during maintenance for further fall protection

Advantages

- In case of maintenance, the mixers can be removed from fermenters in one piece - without opening of the membrane roof, without lowering the liquid level inside the tank, and without needing to de-commission the fermenter i.e. without interrupting the process!
- This also avoids gas losses, providing a perfect combination of protecting the environment, ensuring safe operation and increasing efficiency
- Quick access and easy maintenance while complying with health & safety standards
- Larger maintenance openings allow for the installation and removal of mixers with 3 and more blades up to diameters of 1,500 mm



Technical Innovations

Robust Over/Underpressure Valves

- Underpressure 1 to 3 mbar (100 - 300 Pa)
- Overpressure 1 to 8 mbar (100 - 800 Pa)

Advantages

- Frost-proof pressure valve in the Service-Box
- Easy maintenance / cleaning by a large opening with window
- Weight-adjustable pressure setting
- Better gas collection and prevention of gas losses due to reliable and robust design



NEW: Gas Curtain or „Skirt“ (Option)

- Gas curtain made from flexible material, installed on the underside of the UTS Service-Box Pro
- External lifting /lowering of the gas curtain
- Gas curtain isolates the gas area from the maintenance area
- Avoids gas emissions during maintenance

Advantages

- Air entry into the fermenter is reduced, resulting in negligible dilution of the biogas with air in the gas storage
- Further reduction of methane emissions
- Increase of health & safety, environmental protection and increase of process availability and efficiency

