Contents

INTRODUCTION 2
DESCRIPTION 3
SIGN-OFF FORM 4
IDENTIFICATION MARKS 5
UNIT SPECIFICATION 6
SAFETY 6
GENERAL SAFETY 7
LIMITATIONS OF USE 8
SAFE PRACTICE 8
VENTING 9
ACCESS AND SECURITY 10
CABINET OVERVIEW 11
Centre of Gravity 12
LIFTING & HANDLING 16
POSITIONING 18
FILLING AND DISPENSING THE BROVEK TANK 19
TRANSPORTING 20
STACKING 20
RECOMMENDED INSPECTION & MAINTENANCE 21
INNER TANK REMOVAL 22
HYDRAULIC FITTINGS TORQUE SETTINGS 25
ENVIRONMENTAL RESPONSIBILITY 26
TROUBLE-SHOOTING 27
WARRANTY 28

INTRODUCTION

Thank you for selecting Brovek.

IMPORTANT

Please read this manual carefully before using the unit.

- Ensure all operators are **thoroughly familiar with the procedures** for lifting, loading, positioning, filling, maintaining, and operating the tank.
- Proper understanding and adherence to the guidance in this manual will help ensure **many years of safe and effective use**.
- Some content in this manual is based on legal or regulatory requirements and may change without notice. While every effort has been made to ensure accuracy at time of publication, changes in regulations may occur.
- It is the **sole responsibility of the owner/operator** to ensure that they and the unit are in full compliance with all applicable laws and standards. Intec Steelworx Ltd. cannot accept responsibility for any inaccuracies or misinterpretations of legal requirements.
- Intec Steelworx Ltd. reserves the right to alter product specifications without prior notice.

Brovek Tanks are designed and approved to various global, international, and regional safety standards.

DESCRIPTION

BROVEK – IBC

The Brovek series of aboveground fuel tanks is purpose-built to provide **safe and secure storage** of flammable and combustible liquids.

Key features include:

- Designed for use as an **auxiliary fuel source**—ideal for supplying generators or refueling other equipment via an integrated pump system.
- All fuel transfer components, including pipework and pump assemblies, are **enclosed beneath a lockable, weather-resistant access lid** to enhance security and safety.
- For ease of relocation and positioning, each unit is equipped with **forklift-access pockets**
- **Secondary containment** is built into the unit, offering capacity equal to 110% of the primary tank volume to mitigate spill risks.
- The containment area is designed for **easy maintenance access**, without the need for specialized tools.
- A wide array of **connection points** allows for integration with various fittings and system configurations.
- The Brovek tank can feed **multiple fuel lines simultaneously**, as well as supply fuel to standalone equipment.
- Certified to the **UL 142 Standard** for Steel Aboveground Tanks for Flammable and Combustible Liquids.

SIGN-OFF FORM

- The equipment supplier must adhere to **recognized safety standards** at all times.
- All personnel involved in the **operation, servicing, or maintenance** of this unit are required to read and fully understand the safety protocols and operational procedures outlined in this manual.
- Regular reviews and refresher sessions on **SAFETY** and **OPERATION** should form part of your organization's best practices.
- This sign-off sheet serves as a **record of acknowledgment** from all individuals authorized to work with the equipment.

By signing below, I confirm that I have received instruction in the operation of the equipment and have read and understood the Operator's Manual in full.

DATE	EMPLOYEE SIGNATURE	EMPLOYER SIGNATURE

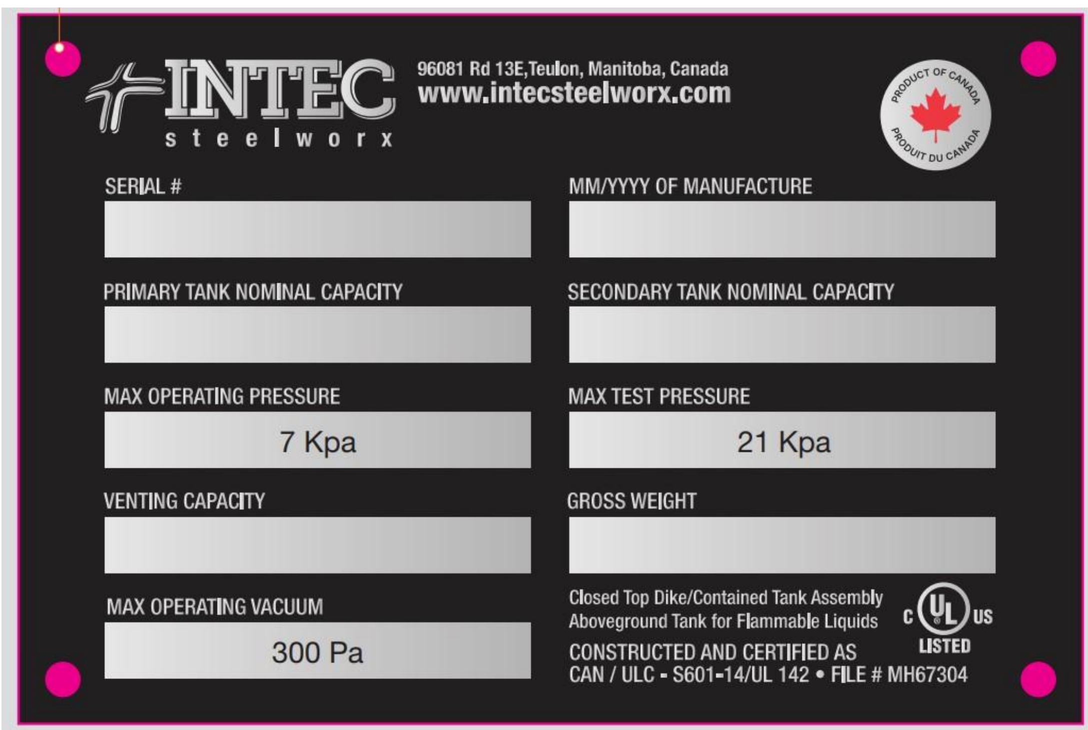
IDENTIFICATION MARKS

Each Brovek tank is assigned **a distinct serial number** for traceability, compliance, and regulatory certification:

1. **UL/ULC Serial Number** The UL/ULC certification plate is also mounted on the **outside of the tank**—usually on the front or side near the cabinet—indicating compliance with relevant North American safety standards.

Picture of Label

1, UL/ULC Serial Number



The UL Plate on the exterior of the tank (front or side near the cabinet area)

RECORD YOUR TANK'S SERIAL NUMBERS HERE

UL/ULC Data plate Serial Number	

UNIT SPECIFICATION

Capacities / Dimensions

MODEL	STARTA 60	FORGE 90	STRIDE 180	MATRIX 270	TITAN 480
Dry Weight	850 LBS	1,310 LBS	1,850 LBS	2,725 LBS	3,900 LBS
Length	50.25"	50.25"	95.5"	95.5"	95.5"
Width	50.25"	50.25"	45.25"	62.6"	95.5"
Height	42.6"	53.6"	53.6"	53.6"	53.6"
Working Volume	600 L	850 L	1800 L	2630 L	4700 L
Fuel Containment	110%	110%	110%	110%	110%

SAFETY

SAFETY FIRST

IMPORTANT

To ensure personal safety, read and fully understand these instructions before operating this equipment.

GENERAL SAFETY

- If any part of this manual is unclear, **contact your equipment supplier** for clarification before proceeding.
- Only **authorized and properly trained personnel** are permitted to operate this equipment.
- **Do not move, fill, service, or operate** the unit if you are under the influence of alcohol, drugs, fatigue, or illness.
- A thorough **risk assessment must be conducted** prior to using the equipment to ensure the safety of all personnel and bystanders.
- Always wear the **appropriate Personal Protective Equipment (PPE)** for the specific task being performed.
- Avoid wearing **loose clothing or jewelry** that may become entangled in moving parts.
- **Inspect the tank before each use**. If you have any concerns about its condition, **do not operate** the unit.
- Strictly **no smoking or open flames** near the tank.
- Follow all applicable **national and regional fire safety and installation codes** relevant to your location.

Mandatory Safety Measures and PPE:

No Smoking	No Open Flames	Authorized Personnel Only
Wear Safety Vest	Wear Safety Glasses	Wear Safety Goggles
Wear Safety Helmet	Wear Protective Gloves	Wear Safety Footwear
Wear Protective Coveralls		

Note: Please consult your local authority for any additional site-specific regulations. A full risk assessment may be required.

LIMITATIONS OF USE

- The Brovek tanks are intended for the **aboveground storage of stable, non-corrosive flammable and combustible liquids** with a specific gravity of **1.0 or less**.
- These tanks are **UL 142 listed** and must be installed in accordance with applicable installation codes, including but not limited to: *NFPA 30, NFPA 30A, NFPA 31, NFPA 37, NFPA 1, and the International Fire Code*.
- **Underground installation is strictly prohibited.** The Brovek Tank is not designed or certified for subsurface applications.

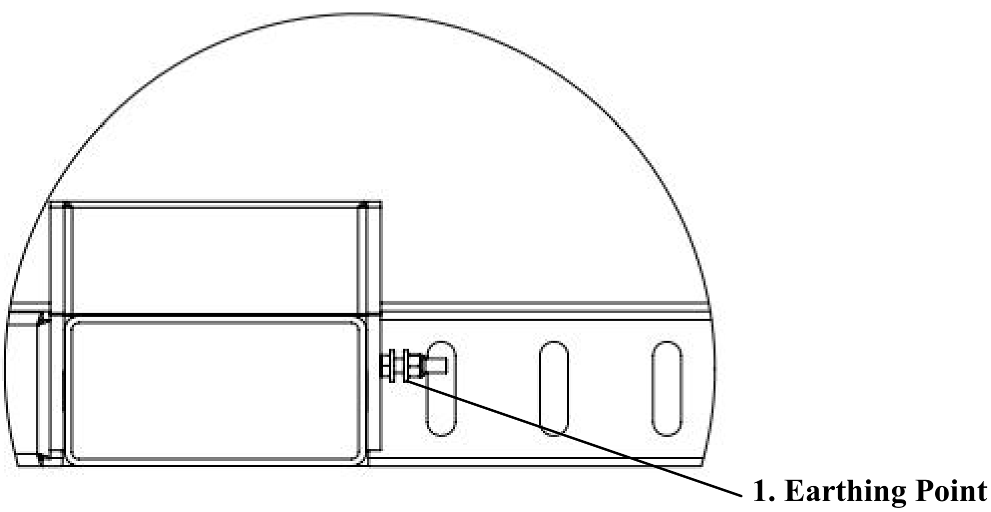
SAFE PRACTICE

The storage, transport, and dispensing of flammable and combustible liquids are **regulated activities**. It is the **sole responsibility of the user or operator** to ensure that all local, regional, and national laws and safety regulations are strictly followed.

EARTHING POINT

- The unit is equipped with a designated **Earthing (grounding) Point**, located on the **bottom frame** of the tank.
- To mitigate the risk of **static electricity accumulation**, this earthing point must be **connected to a suitable grounding source** by a **qualified electrician** whenever the unit is in operation.

Earthing point Location



VENTING

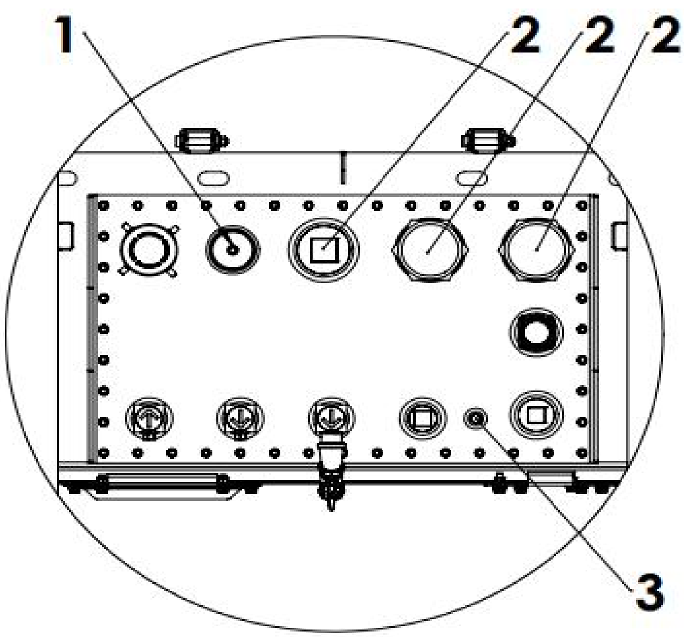
Each unit is equipped with **two primary vents**, located within the cabinet area of the tank.

IMPORTANT: Do not operate the unit if either vent is damaged or missing.

Vent Types and Functions:

- **2” Pressure/Vacuum Vent** Designed to regulate internal air pressure, this vent allows air **into the tank during fluid withdrawal**. It releases excess pressure **during filling**, preventing over-pressurisation of the inner tank.
- **¼” Roll-Over Vent** This low-volume vent provides continuous airflow into and out of the tank under normal conditions. In the event of a rollover or if the tank is tipped on its side, the vent is engineered to close automatically, preventing spillage.

For **static installations**, ensure compliance with all applicable **local, regional, and national fire safety and installation codes**, including requirements for both **normal and emergency venting systems**.



1. 2” NPT Pressure / Vacuum Vent

2. 3” NPT for Emergency Vent

3. ¼” Working Vent

ACCESS AND SECURITY

Cabinet Access

- **The cabinet hatch is constructed from durable, heavy-gauge steel. Use caution when opening or closing to avoid injury or damage.**
- When the unit is not in use, always ensure the cabinet hatch remains **securely closed** to protect internal components from weather exposure and debris.

Containment Access

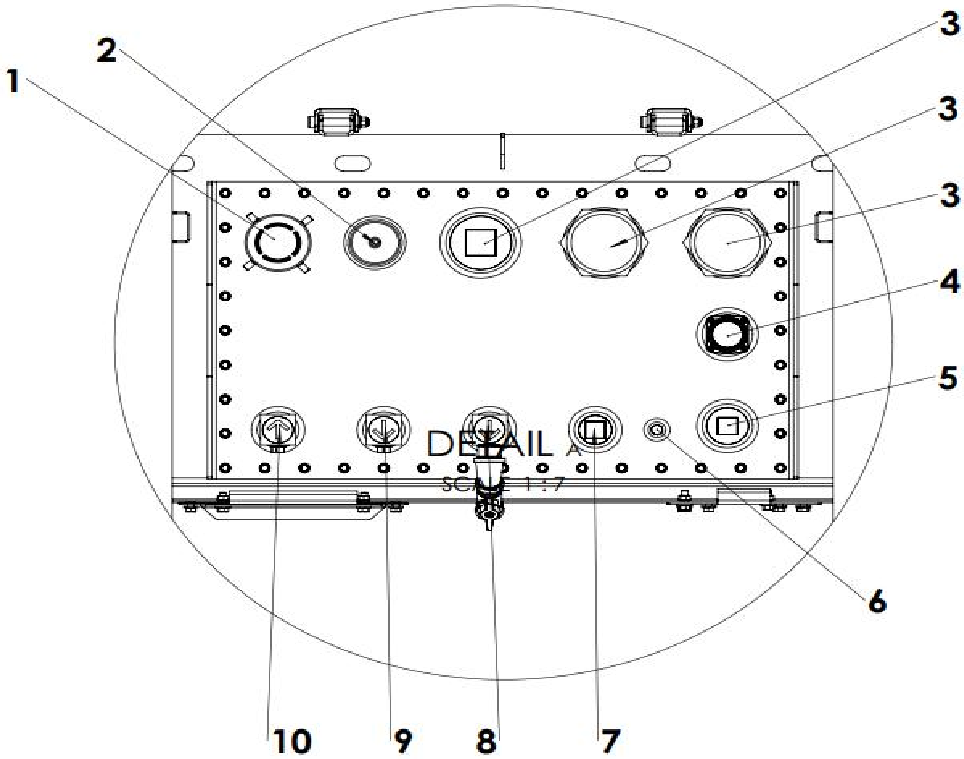
- The **inner tank is removable**, allowing for easier inspection and access to the containment area when required.

Security Features

- The Brovek tank is equipped with multiple connection points designed for the **safe transfer of flammable and combustible liquids**.
- All connections are located **inside the lockable cabinet compartment**, which should be secured using an appropriate **safety-grade padlock** when not in operation.

CABINET OVERVIEW

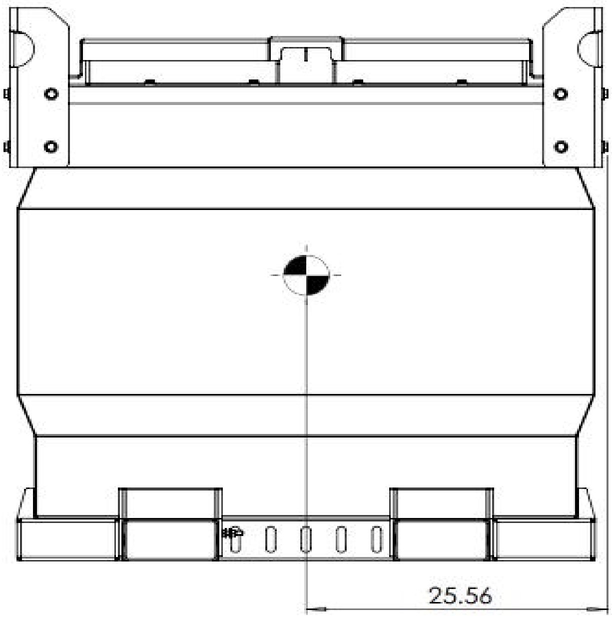
Standard Unit

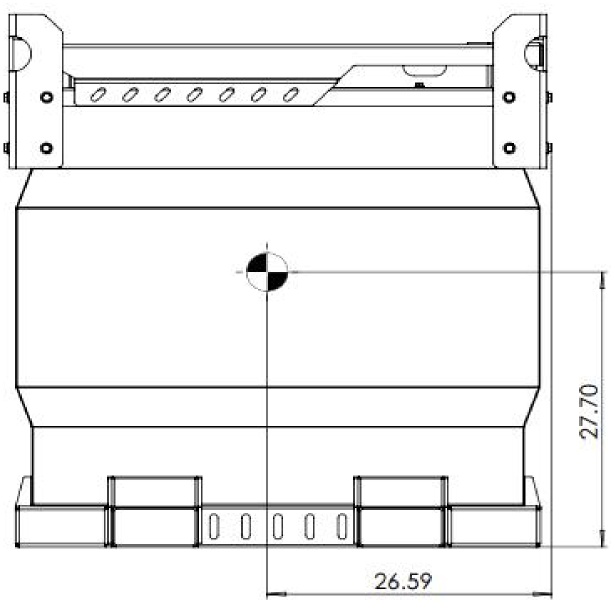


1. **3” Fill Point**
2. **2” NPT Pressure / Vacuum Vent**
3. **3” NPT for Emergency Vent**
4. **Fuel Level Indicator Gauge**
5. **2” NPT Spare**
6. **¼ Working Vent**
7. **1.5” NPT Spare**
8. **1” Pump Feed**
9. **½” NPT Feed**
10. **½” NPT Return**

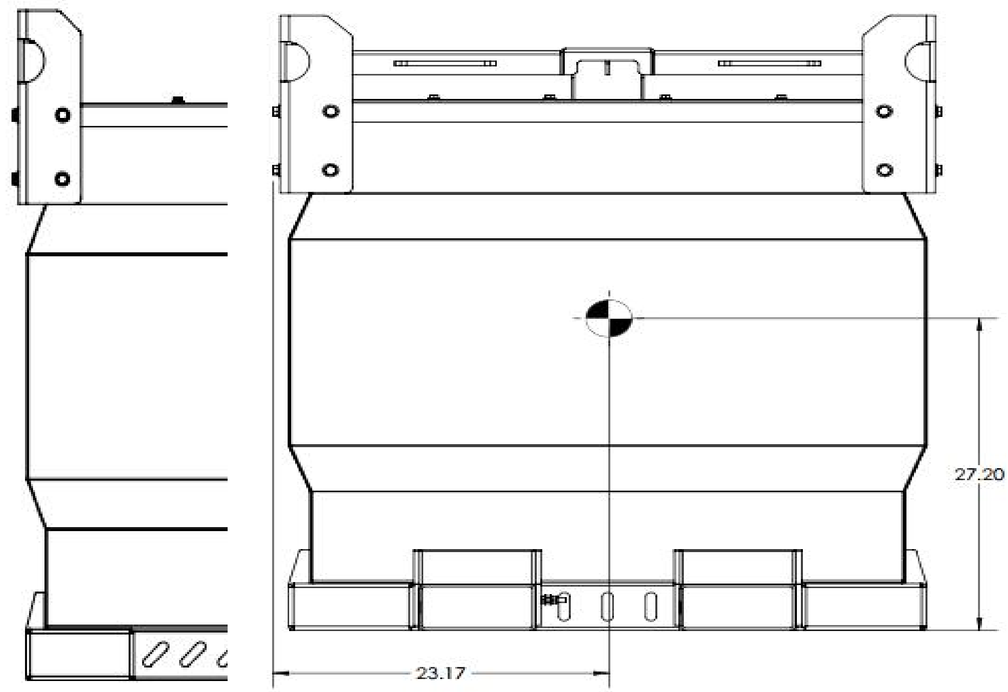
Centre of Gravity

FORGE 90 Centre of Gravity (Based on an empty tank.)

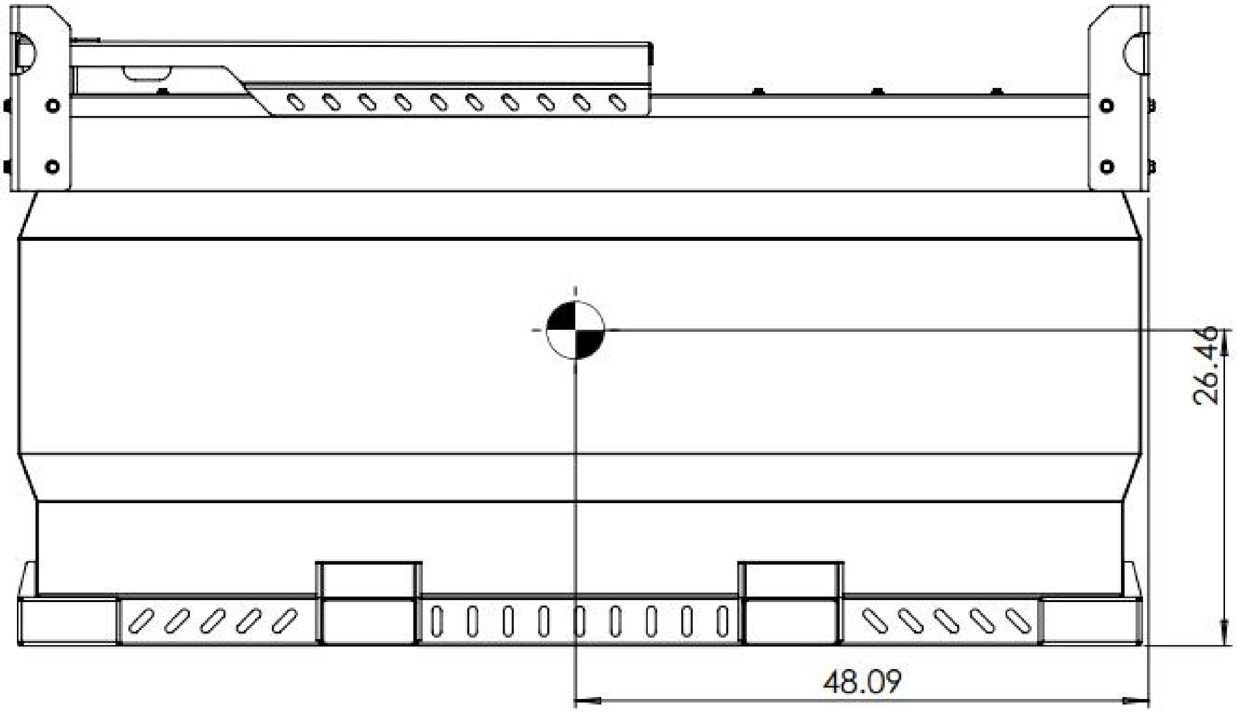


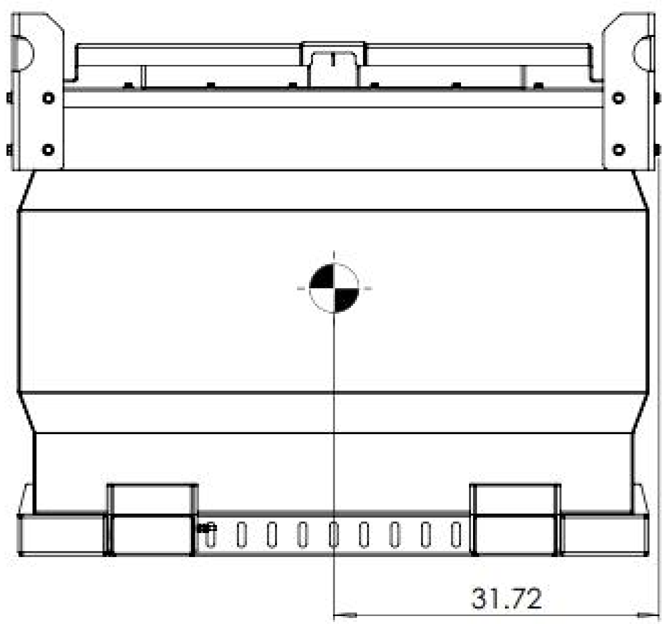


STRIDE Centre of Gravity (Based on an empty tank.)

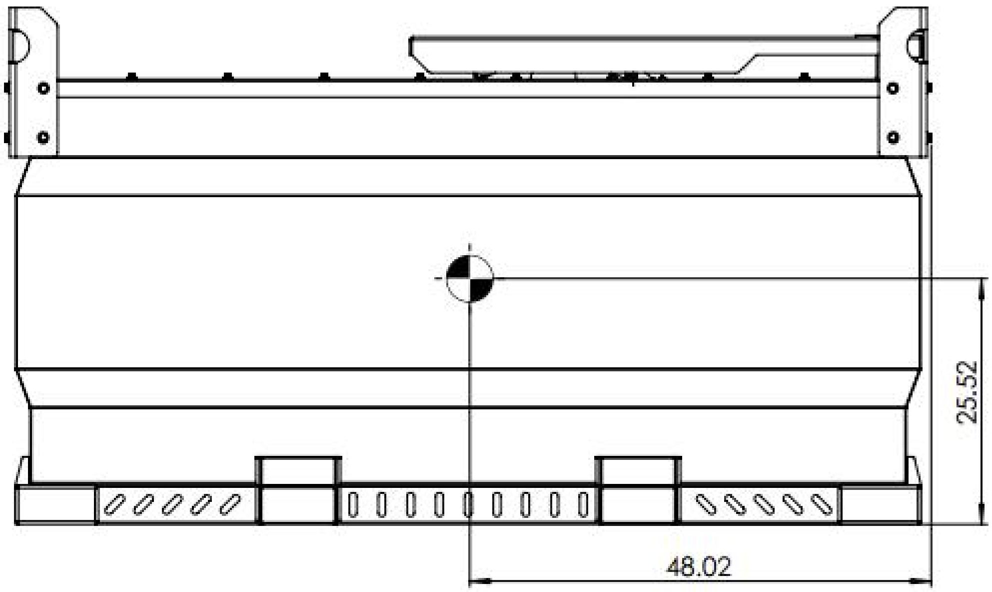


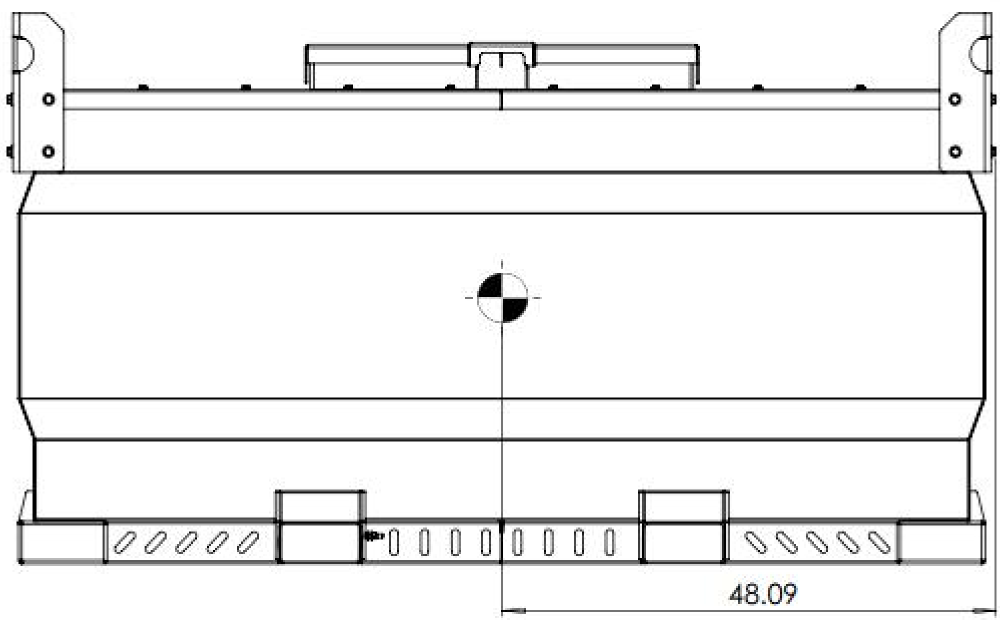
MATRIX Centre of Gravity (Based on an empty tank.)





TITAN Centre of Gravity (Based on an empty tank.)





LIFTING & HANDLING

NOTE: A lifting plan and risk assessment must always be prepared prior to any lifting operation.

Forklift or Tele-handler Use

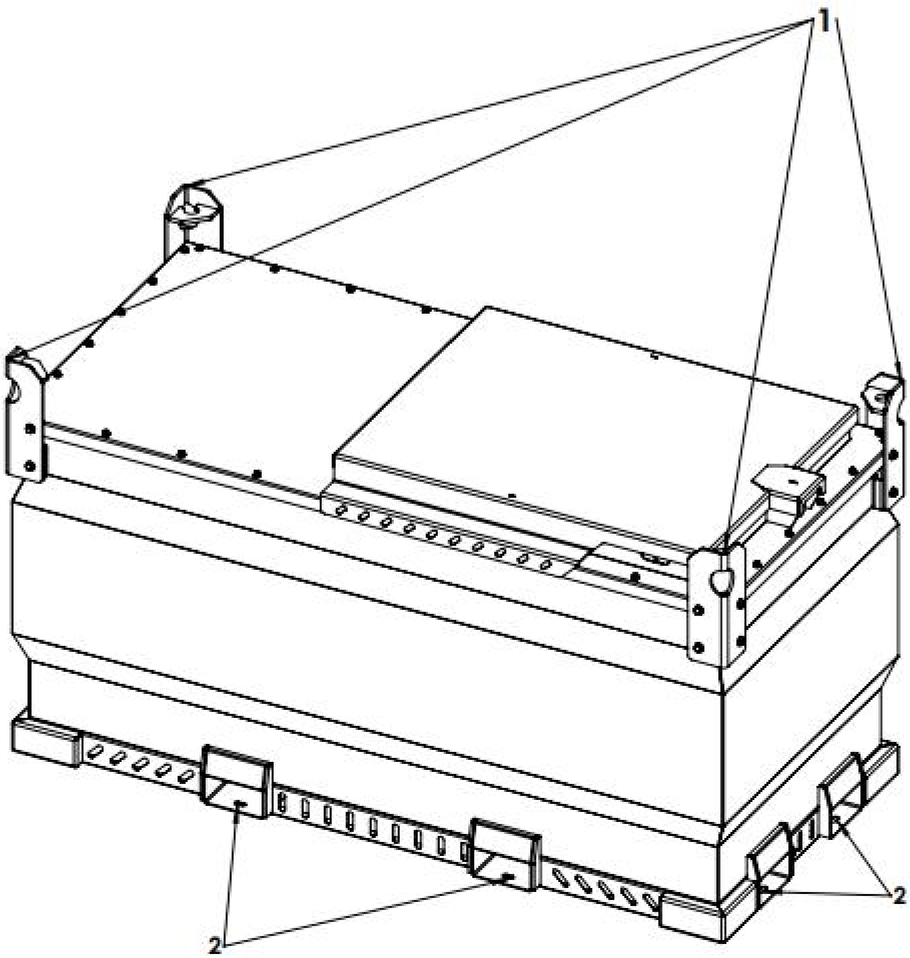
- Each Brovek tank includes designated forklift pockets on all four sides, allowing lifting access from any direction. This flexibility should be reflected in your lifting plan.
- Ensure the combined weight of the Brovek tank does **not exceed 50%** of the forklift's maximum Safe Working Load (SWL).
- Fork tines must be adjusted to match the spacing of the Brovek tank forklift pockets for secure handling.

Crane Lifting

- Tank lifting must only be performed by personnel who are appropriately trained and certified.
- Use a crane and a compatible four-leg chain sling fitted with hooks and safety catches.
- Confirm the chain sling's SWL rating and length are suitable—consult the supplier for written verification.
- With chain slings attached to the crane, securely connect each hook to the designated lifting points. Make sure all safety catches are engaged and closed.
- Tag lines must be attached to the base of the tank to manage rotation during lifting.
- Take up slack in the chains gradually and verify all hooks are properly seated with catches closed and chains untwisted. If any issue is found, lower the load and correct it before proceeding.
- Raise the tank slightly off the ground to check for balance and stability. Only continue if the lift setup is confirmed safe.

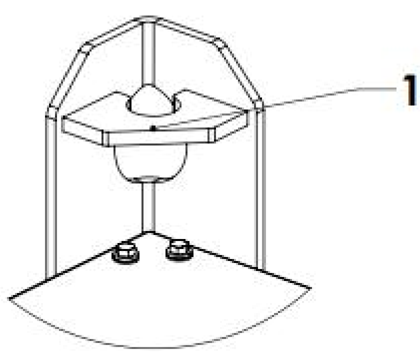
Important: Only lift the Brovek tank using the specified lifting points located at each corner of the unit.

- All designated lifting points must be engaged during the lift.
- Lifting points should be visually inspected for wear, damage, and general integrity before use.
- **Never** lift the tank from the base using polyester slings.



1. Lifting Points

2. Fork Pockets **LIFT HERE ONLY**



1. Lifting Point

WARNING

Never permit anyone to stand or pass beneath a suspended load—under no circumstances.

Attach appropriate tag lines to maintain control over the unit's movement during lifting operations. Maintain constant, clear communication with the crane operator throughout the process.

Operate the crane with deliberate, smooth motions to ensure precise control over the unit's positioning.

Lower the unit gently into its designated location, taking extra care to avoid sudden movements or impact.

POSITIONING

When selecting a site for the **temporary or permanent installation** of the Brovek tank, several key factors must be taken into account to ensure safety, accessibility, and long-term stability:

- Ensure that both **supply and receiving vehicles** have clear and safe access routes to the unit.
- Choose a location that offers **protection from accidental impact**, such as away from high-traffic zones or vulnerable areas.
- Check for overhead hazards, including **power lines, communication cables, and other obstructions**. Also, assess the area for underground utilities such as **drainage systems or manhole covers**.
- The Brovek tank must be placed on a **level, stable surface** that can support the **combined weight of the tank, its contents, and any accessories** (e.g., pumps or dispensing equipment) without risk of settling or subsidence.
- Position the unit with **adequate space at the rear and sides** to allow for routine servicing and operational access.
- Always account for potential **emergency service access** in case of a fire or other incident.

FILLING AND DISPENSING **THE BROVEK TANK**

Filling Fuel

- **Do not attempt to fill the tank while dispensing operations are underway.**
- The Brovek tank should be filled to a **maximum of 95%** of its nominal capacity. Refer to the Unit Specification section for details.
- **Only trained and authorized personnel** should perform the filling process—and only after completing a **comprehensive risk assessment**.
- Ensure the tank is placed on a **flat, stable surface** before beginning any filling operation.
- Prior to filling, confirm that a **spill containment kit** is readily available and that **all required Personal Protective Equipment (PPE)** is worn.
- **Nozzle Fill Procedure:** Unlock and open the access lid. Remove the 3" filler cap by unscrewing it, and insert the filling nozzle securely into the 3" fill port.
- **Do not leave the nozzle unattended** at any time during the fill.
- Monitor the fuel level throughout the process to avoid overfilling. Once complete, securely replace the filler cap and **clean up any spills immediately**.

Dispensing Fuel

Fuel can be supplied from the Brovek tank using one of the following methods, depending on your operational needs:

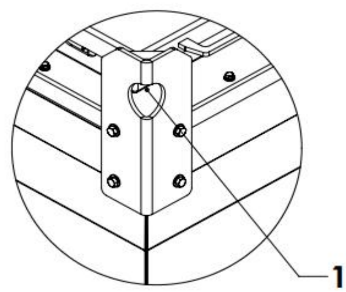
- **Manual Dispensing via Fuel Pump.** Fuel can be delivered through a **pump and nozzle system**, allowing for manual control. For specific details regarding the pump configuration installed on your unit, refer to the **manufacturer's documentation** provided with the system.

- **Direct Coupling to Equipment** This method allows for a **continuous fuel supply** directly to equipment such as generators, where uninterrupted fuel delivery is essential.

TRANSPORTING

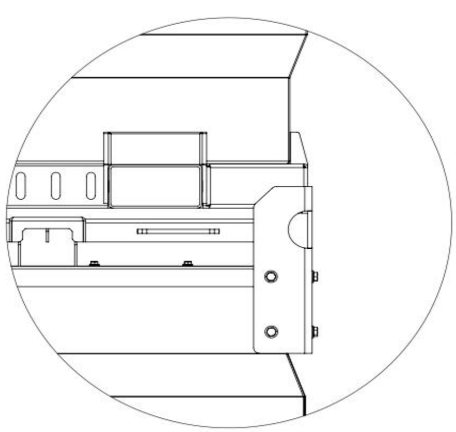
- Before transport, ensure that **all ports, valves, and vents are securely closed**.
- Verify that the **pump system is powered off** and all connections are disengaged.
- The **access lid must be closed and locked** to prevent tampering and protect internal components.
- The tank must be **firmly secured** to its transport vehicle or platform to prevent movement during transit.
- The Brovek Tank design allows for **safe stacking up to two units high**, but **only when empty**.
- When stacking, be sure to **align and interlock the corner brackets** to maintain stability.
- Use only lifting equipment—**such as a hoist or forklift**—that has the appropriate capacity to raise, lower, or stack the unit safely

1. TIE DOWN POINT



STACKING

- The Brovek tank unit is engineered to support **stacking up to two units high**, but **only when both tanks are completely empty**.
- Always ensure that the **corner brackets are correctly aligned and interlocked** to maintain stack stability.
- Use **only appropriately rated lifting equipment**, such as a hoist or forklift, to safely lift, lower, or stack the units.



RECOMMENDED INSPECTION & MAINTENANCE

Intec Steelworx Ltd. recommends that owners of the Brovek tank conduct **routine inspections** as part of a preventive maintenance strategy. The guidance below is provided for reference only.

Important: Always adhere to local regulations and any applicable preventive maintenance schedules.

Inspection Intervals:

Every 2½ Years – External Inspection

- Check the operation of all service equipment.
- Perform a leak test.

Every 5 Years – Comprehensive Inspection

- Conduct both internal and external inspections.
- Test the functionality of all service equipment.
- Perform a full leak test.

Record Keeping: It is recommended that a detailed report of each inspection and pressure test be maintained for every tank. Below is a simple example of an inspection record sheet.

<table>
<tr><td>Owner</td><td colspan="2"></td><td rowspan="2">Date of
Manufacture</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Model</td><td colspan="2"></td></tr>
<tr><td>Serial Number</td><td colspan="2"></td><td rowspan="2">Manufacture
Location</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>Capacity</td><td colspan="2"></td></tr>
<tr><td>Date</td><td>2.5 or
5 Year</td><td>Pass or
Fail</td><td>Comments</td><td>Inspectors Name</td><td>Signature</td></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

INNER TANK REMOVAL

For routine inspection and maintenance purposes, it may be necessary to remove the inner tank from the outer housing. This procedure must always comply with local Health and Safety regulations.

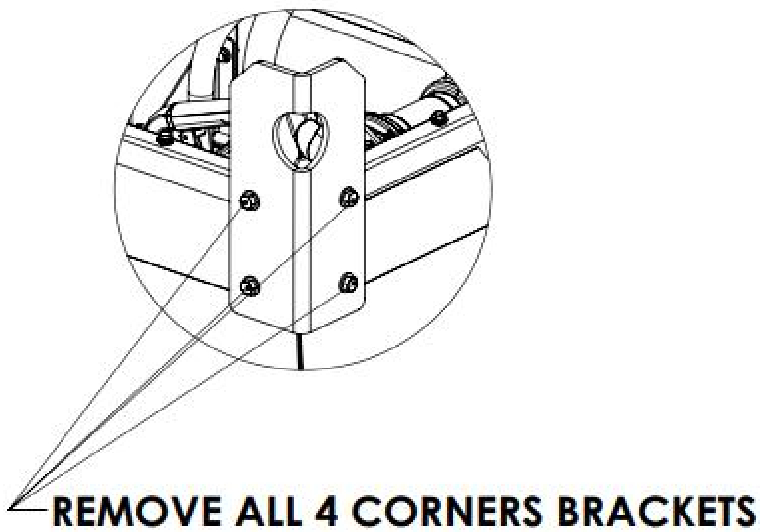
Important: Before lifting, ensure the tank is completely empty and properly vented.

Step-by-Step Instructions:

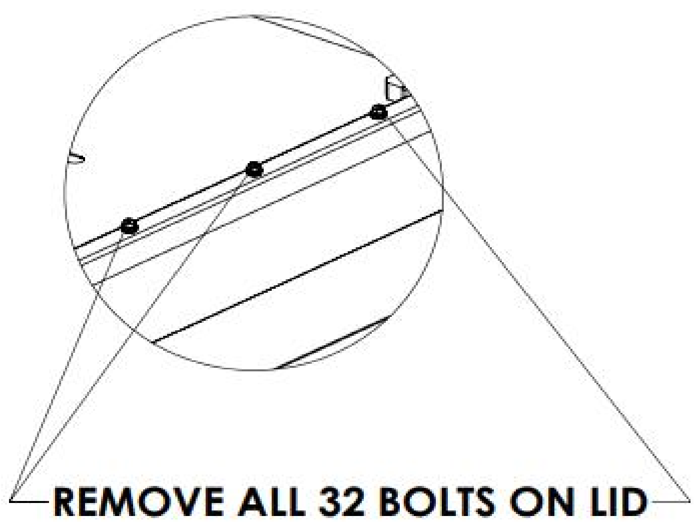
Detach the two side rails and two end rails. Store the rails and fasteners in a secure location to prevent loss or damage.

Install four lifting eyes—one at each corner of the inner tank—to prepare for safe hoisting.

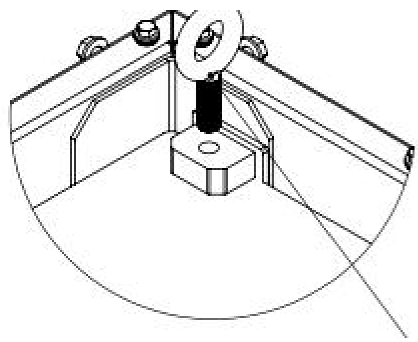
1. **Remove all four corner brackets. Set aside the brackets along with the corresponding nuts and bolts.**



2. Detach the two side rails and the two end rails. Store the rails and fasteners in a secure location to prevent loss or damage.



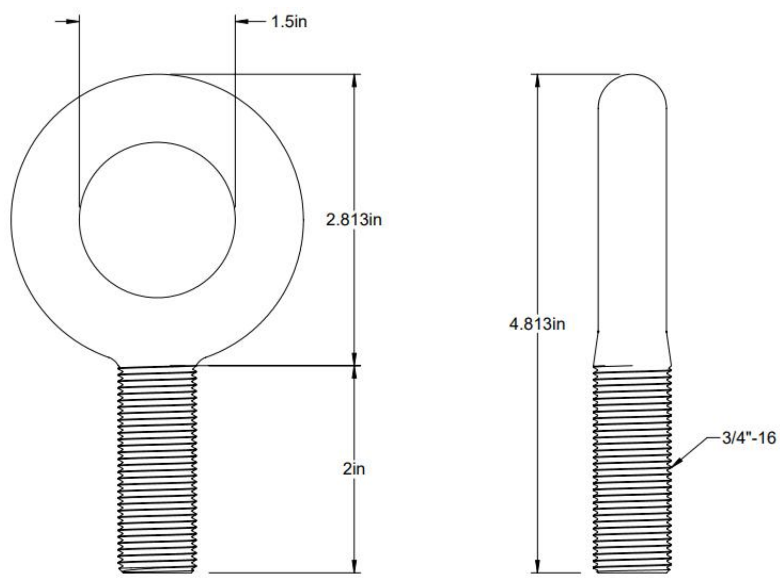
3. Install four lifting eyes, one at each corner of the Inner tank, to prepare for safe hoisting.



INSERT 4 ¾ LIFTING EYES IN EACH CORNER OF THE INNER TANK

4. Attach a 4-leg certified lifting chain to each corner and carefully hoist the tank.

Typical lifting eye ¾ ''-16



To reinstall the inner tank into the containment, reverse steps 1 through 4 of the removal procedure. Ensure all bolts are securely torqued to the specified values during reassembly.

HYDRAULIC FITTINGS TORQUE SETTINGS

– Tightening Taper Type Connections

1. **Inspect the flare and mating seat** for any damage or irregularities that could result in leaks.
2. **Ensure proper alignment** of the tubing and fitting before beginning the tightening process.
3. **Apply lubricant** as needed, and hand-tighten the swivel nut until it is firmly seated.
4. **Use two wrenches to avoid tube deformation**—position one wrench on the connector body and use the other to tighten the swivel nut to the specified torque setting.

Tube Size OD	Nut Size Across Flats	Torque Value*		Recommended Turns to Tighten (After Finger Tightening)	
(in.)	(in.)	(N.m)	(lb-ft)	(Flats)	(Turn)
3/16	7/16	8	6	1	1/6
1/4	9/16	12	9	1	1/6
5/16	5/8	16	12	1	1/6
3/8	11/16	24	18	1	1/6
1/2	7/8	46	34	1	1/6
5/8	1	62	46	1	1/6
3/4	1-1/4	102	75	3/4	1/8
7/8	1-3/8	122	90	3/4	1/8

* The torque values shown are based on lubricated connections, as in reassembly.

ENVIRONMENTAL RESPONSIBILITY

Everyone involved in the operation or maintenance of this equipment shares a duty to manage fluids responsibly, ensuring proper storage and handling at all times. All appropriate measures must be taken to avoid spills and protect the surrounding environment from contamination.

It is essential to have a clearly defined spill response plan in place, regardless of the incident's size. A spill containment kit should always be readily accessible, and personnel must be familiar with its proper use.

SPILLS

In the event of a spill during containment, emptying, refueling, or fuel transfer, act promptly to control and clean the affected area using absorbent materials. Whenever possible, utilize a designated spill kit equipped with the necessary tools to contain and remove the spill effectively.

- **Do not** wash down the spill with water or apply cleaning detergents.
- **Do not** permit fuel to enter drainage systems or natural waterways.
- All spills must be reported to the appropriate local authority.
- All materials used for containment and cleanup must be properly bagged and disposed of by a licensed waste carrier.

CONTAINMENT

The containment area of the Brovek tank is engineered to prevent any spilled material from escaping the unit and contaminating the surrounding environment. It is designed to hold up to **110% of the primary tank's maximum capacity**, providing an added layer of environmental protection.

- **Inspect the containment area frequently** for the presence of liquid.
- **Remove any accumulated water** promptly to maintain adequate capacity.
- **If fuel or other product is detected**, take immediate corrective action in accordance with your site's spill response protocol.

Important: Waste may only be collected by a registered carrier.

DISPOSAL

When performing maintenance, servicing, or disposing of the Brovek tank unit or its consumable components, **do not discard contaminated parts with general waste.** All materials must be handled in accordance with applicable local regulations and environmental guidelines. Always consult your local authority for proper disposal procedures.

TROUBLE-SHOOTING

The Brovek tank is designed as a dependable and user-friendly system. However, should any operational issues arise, refer to the table below for common problems, their causes, and suggested solutions.

If the issue persists after reviewing this guide, please contact Intec Steelworx Ltd. Be prepared to have the tank's **serial number** and **model details** ready when calling.

PROBLEM	CAUSE	SOLUTION
The pump will not run	No Power	Check and connect the power
	Pump Switched Off	Supply correctly
Fuel in Containment	Loose Fitting	Tighten all fittings securely
	Leaking Coupler	Replace the coupler
	Overfilling	Monitor gauge during filling-do not exceed 95% capacity
Water in containment	Lid left open to the weather	Remove water. Keep the lid closed

WARRANTY

The Company agrees to **repair or replace**, at no cost, any component found to be defective in workmanship or materials within 36 months from the date of sale (unless otherwise stated). This warranty is subject to the following exclusions:

- Alterations, repairs, or additions performed by anyone other than the manufacturer or an authorized distributor.
- Failures or damage resulting from the use of non-standard or aftermarket components, including any consequential effects.
- Any defects resulting from improper use, negligence, or unauthorized modifications.
- Replacement of parts due to regular wear and tear, including associated labor and materials.
- Damage caused by abuse, mishandling, impact, or failure to follow transportation, storage, or operational instructions.
- Costs associated with the shipment or transport of equipment to and from the manufacturer or approved agents for warranty assessment or repair.

IMPORTANT

The warranty may be considered void if **scheduled maintenance or inspections** are not conducted in accordance with the logbook requirements. The manufacturer, its authorized agents, employees, or insurers are not liable for any **indirect damages, losses, or costs** arising from the use or inability to use the equipment.