# **BUTEK** Tanks

A specialist division of Butyl Products Ltd



### Introduction

Butek Tanks is a specialist division of Butyl Products Ltd est. 1965, focusing on the supply and installation of liquid containment steel storage tanks.

Our steel water storage tanks are a versatile storage solution designed for both residential and industrial applications with capacities ranging from 2m³ to 2500m³.

The tanks are modular and consist of interlocking corrugated steel panels (steel kit), an impermeable liner (liner kit), for drinking water (DWI) and wastewater applications with various covering options (roof kit). The modular design allows for ease of transport as well as assembly and disassembly into its constituent parts to be re-erected at a new location. Ideal for temporary storage solutions.

One of the key capabilities of a steel water tank is its scalability. Not only can the tanks diameter and height be altered to suit space constraints whilst maintaining the required capacity, but each tank can be linked to another, enabling larger volumes of water to be stored within a system.

We can offer a comprehensive service in which we supply and install each tank using fully trained and certified staff and technicians to suit site requirements.

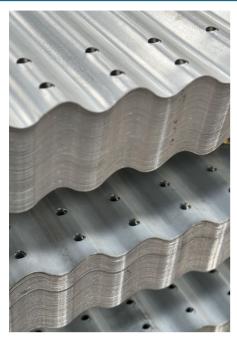


# Size Guide

The below table shows the capacities of our standard size tanks inclusive of a 150mm freeboard to prevent overspilling. More sizes are available upon request, we have supplied and installed tanks up to 40.23m (132ft) in diameter and others up to 12 rings high (9.12m/ 30ft). Via www.butektanks.com you can access the interactive version with options to modify the freeboard.

			Height								
	Dimensions		1 ring	2 rings	3 rings	4 rings	5 rings	6 rings			
	(ft) (m)		2.5ft/ 0.76m	5ft/ 1.52m	7.5ft/ 2.28m	10ft/ 3.05m	12.5ft/ 3.81m	15ft/ 4.57m			
Diameter	6	1.83	2m <sup>3</sup>	4m <sup>3</sup>	6m³	8m <sup>3</sup>	10m <sup>3</sup>	12m <sup>3</sup>			
	9	2.74	4m³	8m <sup>3</sup>	13m <sup>3</sup>	17m³	22m <sup>3</sup>	26m <sup>3</sup>			
	12	3.66	6m <sup>3</sup>	14m <sup>3</sup>	22m³	30m <sup>3</sup>	38m³	47m³			
	15	4.57	10m <sup>3</sup>	23m <sup>3</sup>	35m <sup>3</sup>	48m <sup>3</sup>	60m <sup>3</sup>	73m <sup>3</sup>			
	18	5.49	14m <sup>3</sup>	32m <sup>3</sup>	51m <sup>3</sup>	69 m <sup>3</sup>	87m <sup>3</sup>	105m <sup>3</sup>			
	21	6.40	20m <sup>3</sup>	44m <sup>3</sup>	69m <sup>3</sup>	93 m <sup>3</sup>	118m³	142m <sup>3</sup>			
	24	7.32	26m <sup>3</sup>	58m <sup>3</sup>	90m³	122 m <sup>3</sup>	154m³	186m³			
	27	8.23	32m <sup>3</sup>	73m <sup>3</sup>	114m³	154 m <sup>3</sup>	195m <sup>3</sup>	235m <sup>3</sup>			
	30	9.14	40m <sup>3</sup>	90m <sup>3</sup>	140m <sup>3</sup>	190 m <sup>3</sup>	240m <sup>3</sup>	290m <sup>3</sup>			
	33	10.06	48m³	109m <sup>3</sup>	170m <sup>3</sup>	230 m <sup>3</sup>	291m <sup>3</sup>	351m <sup>3</sup>			
	36	10.97	58m³	130m <sup>3</sup>	202m <sup>3</sup>	274 m <sup>3</sup>	346m <sup>3</sup>	418m³			
	39	11.89	68m <sup>3</sup>	152m <sup>3</sup>	237m <sup>3</sup>	322 m <sup>3</sup>	406m <sup>3</sup>	491m³			
	42	12.80	78m <sup>3</sup>	177m³	275m <sup>3</sup>	373 m <sup>3</sup>	471m <sup>3</sup>	569m <sup>3</sup>			
	45	13.72	90m <sup>3</sup>	203m <sup>3</sup>	315m <sup>3</sup>	428 m <sup>3</sup>	541m <sup>3</sup>	653m <sup>3</sup>			
	48	14.63	103m <sup>3</sup>	231m <sup>3</sup>	359m <sup>3</sup>	487 m <sup>3</sup>	615m <sup>3</sup>	743m <sup>3</sup>			
	51	15.54	116m³	260m <sup>3</sup>	405m <sup>3</sup>	549 m <sup>3</sup>	694m³	838m³			
	54	16.46	130m <sup>3</sup>	292m³	454m³	616 m <sup>3</sup>	778m³	941m³			
	57	17.37	145m <sup>3</sup>	325m <sup>3</sup>	506m <sup>3</sup>	686 m <sup>3</sup>	867m <sup>3</sup>	1047m <sup>3</sup>			
	60	18.29	160m <sup>3</sup>	360m <sup>3</sup>	561m <sup>3</sup>	761 m <sup>3</sup>	961m <sup>3</sup>	1161m³			
	63	19.20	177m³	397m <sup>3</sup>	618m³	838 m <sup>3</sup>	1059m³	1280m³			
	66	20.12	194m³	436m <sup>3</sup>	678m³	921 m <sup>3</sup>	1163m³	1405m <sup>3</sup>			
	69	21.03	212m <sup>3</sup>	477m <sup>3</sup>	741m <sup>3</sup>	1006 m <sup>3</sup>	1271m³	1535m <sup>3</sup>			
	72	21.95	231m <sup>3</sup>	519m³	808m <sup>3</sup>	1096m³	1384m³	1673m³			

# **Steel Kit**



The corrugated steel wall panels are manufactured from Magnelis® Steel which is three times more corrosive resistant than standard galvanised steel and even possesses the ability to self-heal.

#### The steel kit includes:

- Corrugated steel wall panels of varying thicknesses (dependant on tank size).
- ✓ Anchor Brackets to fix the bottom ring to the tank base.
- Arno-shield hardware (nuts, bolts, and washers) to connect each panel.

#### **Customisation**

An architectural grade polyester-based powder coating can be applied to the corrugated steel, increasing corrosion resistance and durability. This is available in a variety of colours, allowing you to customise the tank to your aesthetic preference.



RAL 6031 & RAL 1001



**RAL 2002** 



**RAL 5015** 

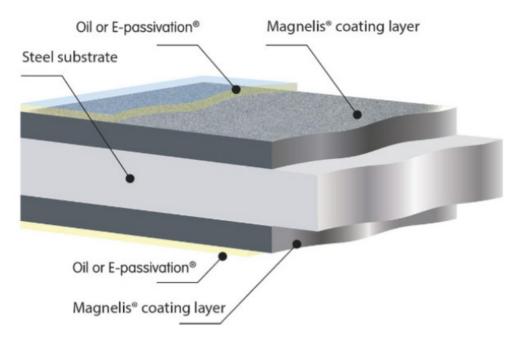


RAL 6007

### Steel Kit

### What is Magnelis®?

This innovative coating comprises a metallic Zinc base infused with 3.5% Aluminium and 3% Magnesium, creating a formidable shield against the harshest of environments, including chloride, ammonia, and highly alkaline conditions.



### Magnelis® Benefits:

### 1. Zinc-Aluminium-Magnesium Coating:

This unique alloy provides unparalleled corrosion resistance, leaving traditional zinc and galvanised coatings in the dust.

### 2. Self-Healing Properties:

Magnelis® possesses a remarkable ability to heal itself. Scratches or damage to the coating triggers the formation of a protective zinc layer, halting corrosion in its tracks and extending the material's lifespan.

### 3. Longer Lifespan:

Thanks to its superior resistance, Magnelis® coated steel can endure up to three times longer than standard galvanised steel when exposed to harsh environments.

### 4. Reduced Maintenance:

The self-healing and enhanced corrosion resistance qualities translate into substantial long-term cost savings. Less maintenance, fewer repairs, and recoating requirements.

### 5. Environmentally Friendly:

Magnelis® uses less Zinc than traditional galvanised steel, longer lasting, less maintenance and is 100% recyclable.

### 6. Technical Approvals:

UK: Steel Construction Institute (SCI) concluded that the coating was appropriate for use when specified in construction.

### **Liner Kits**

The liner kits can adapt the steel tanks to store more than just water. We can manufacture flexible tank liners from rubber and plastic based materials.

### Rubber Liners: Butyl or EPDM

Rubber liners are predominately used for tank liners due to their flexibility/ elasticity making them easy to install. Butyl rubber has a higher UV resistance, longevity and temperature range than EPDM. EPDM, on the other hand, is a more cost-effective option. (We offer a 15-year warranty on all Butyl tank liners, 10-years for EPDM.)



We offer two options for flexible plastic liners, Landflex™ AS or Landflex™ ES. Landflex™ AS is a low-cost PVC based material with good chemical resistance. Landflex™ ES is a highly chemical resistant material designed to contain hydrocarbons and petrochemicals.



We offer 2 options for DWI (Reg 31) clean drinking water applications.

### Rigid HDPE Liners

HDPE rigid liners, primarily used in aquaculture, are perfect for tanks that require regular cleaning.

### What's Included

Our liner kits include:

- **⋘** Impermeable Liner
- Securing capping and clips.
- **Tensioning** wire

Optional: Landflex™ G3000 protective fleece. (recommended) as base layer.



Rubber Liner



Landflex™ AS



Landflex™ G3000



Landflex™ HDPE



Landflex™ ES



Landflex™ PE DWI



Landflex™ PP DWI

# **Liner Kits**

Cleanwater Dirty water linings	Lining solutions									
Sector /application	Landflex EP	Landflex BR	Landflex ES	Landflex PE- DWI	Landflex PP-DWI - 1.2mm	Landflex PP-DWI - 1.5mm	Landflex FT (4mm)			
Water tanks non potable	<b>✓</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>			
Water tanks potable (DWI) (high abrasion)	Х	Х	X	<b>✓</b>	<b>✓</b>	<b>~</b>	X			
Water tanks (Jet wash cleaning)	X	X	<b>~</b>	<b>✓</b>	X	<b>~</b>	✓			
Water tanks (high abrasion)	Х	X	X	<b>~</b>	X	X	<b>✓</b>			
Stormwater tanks (no Petrochem's)	<b>~</b>	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	<b>~</b>	<b>✓</b>			
Stormwater tanks (Petrochem's)	Х	X	<b>~</b>	X	<b>✓</b>	<b>~</b>	<b>~</b>			
Lagoons and ponds non potable	<b>~</b>	<b>~</b>	<b>~</b>	<b>✓</b>	X	X	X			
Reservoir roofs (DWI)	Х	X	X	<b>✓</b>	✓	<b>~</b>	X			
Baffle curtains (DWI)	Х	X	X	<b>✓</b>	✓	<b>~</b>	X			
Surge vessel bladders (DWI and WRAS)	X	X	X	X	✓	X	X			
Wastewater treatment tanks	<b>~</b>	<b>~</b>	<b>~</b>	X	X	X	<b>~</b>			
Slurry tanks	<b>V</b>	<b>~</b>	<b>~</b>	<b>✓</b>	X	X	<b>~</b>			
Slurry lagoons	✓	<b>~</b>	<b>~</b>	<b>~</b>	X	X	X			

For further information, regarding chemical resistance and specifications please contact our engineering department.

# **Roof Kits**



### **G600 Steel Roof**

The G600 Steel roof covers are available for tank sizes up to 14.63m (48ft) and are designed to withstand UK wind and snow loadings. Available at a 10° or 30° pitch. Supplied with central support and an access hatch.



### <u>Anti-Algae Cover</u>

Water permeable lightweight polypropylene mesh for restricting daylight/ Algae growth within tanks.

Supplied with a centre pole, tensioning ropes and hood for inlet.



### Aqua-float

A lightweight cover incorporating air cells into the material that deliver in-built buoyancy. The white topside reflects UV rays, preventing 98% of evaporation as well as prohibiting algae growth.



### Aqua-Shield

A fully encapsulated lightweight water and wastewater impermeable floating cover made from either our Landflex™ AS or ES material. Prevents contents from being diluted with rainwater whilst rising with the level of water, and provides an odour control solution.

### Accessories



Reinforcing Ring

Adds strength and rigidity to the tank and acts as extra tether point. Strongly recommended for open top tanks and highly exposed areas.



Inlets/ Outlets

Ranging from 2" to 12" we can provide connections to Camlock, BSP, Bauer and more. Available in a variety of materials including Galvanised Steel and PVC.



**Valves** 

Available in all outlet sizes and a variety of materials.

- Gate Valves
- Ball Valves
- Butterfly Valves



External Ladders

Available with safety hoops for any tank over 3 rings (2.28m) high. Option for rest and maintenance platforms with steel roofs.



**Rainwater Harvesting Kits** 

2 stage filters to collect water from roof areas up to 1200m<sup>2</sup> and prevent debris entering the tank. UV filters also available.



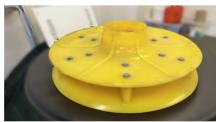
**Level Indicators** 

Available as either sight glass kits as shown in the photo to the left or a float and weight system.



**Pipe Enclosures** 

Galvanised Steel pipe enclosures to protect inlets pipes from damage. Recommended if using MDPE pipework or similar.



**Vortex Inhibitors** 

Prevent air entrainment and its resulting choking effect on the flow rate, safeguarding pump equipment.



Copper Float, Ball Valve & Bracket Set

Prevent overfilling the tank by attaching a pressure ball valve with a copper float to the inlet. Sizes range from 2" to 12".

# Installation

A full turnkey solution can be offered whereby we attend site and install the supplied materials using our directly employed site staff, plant and equipment.

Installing water tanks can pose a danger to workers and others working in and around the site. We only send fully qualified technicians to undertake this work to ensure that the project is delivered safely and to the highest quality.

Our staff are CITB registered. The company complies in full to Construction and Design Management Regulations (CDM).

We offer free site surveys in which we will measure the proposed area of installation, check the tank base is suitably level and discuss design options. Site surveys also allow us to plan our installations and produce a Risk Assessment and Method Statement (RAMS) for each project. Meaning we can select an appropriate method to safely install each tank in accordance with site regulations.

For example, as per the Work at Height Regulations 2005 (WAHR), we avoid working at height where possible and have developed our own hydraulic jacking system in which we can erect our steel tanks from ground level. In instances where we must work from height, each site team includes staff which are PASMA trained for assembling scaffold towers/ mobile platforms and IPAF trained operating scissor lift platforms and cherry pickers.

All operational staff are CSCS card holders, confined space trained and certified TWI geomembrane welders.



# Industries

Butek Tanks offer bespoke water storage solutions to the following industries. Tailoring to the unique requirements of each industry to provide efficient, high-quality systems.

Helping improve water management, sustainability and emergency preparedness as well as reducing the strain on traditional water supplies.



### Stormwater / Spill Management

We work closely with water authorities across the UK, integrating auxiliary influent water tanks at overspill stations to offer additional storage capacity during excessive storm periods.



#### **Emergency Water Supply**

Our tanks can be tailored to local and national standards to offer additional water to emergency services in case of a fire. Supplied with quick release couplings and vortex inhibitors.



### <u>Industrial</u>

Due to our extensive range of lining options, we can offer tanks for a wide range of industrial applications. From storing water used for dust suppression and plant requirements to chemicals such as acids, alkalis, hydrocarbons and petrochemicals.



### **Aquaculture**

From small individual units to large commercial fish breeding tanks, we provide onshore Fish farming tanks. Manufactured to the highest standards and the ability to integrate with any RAS system, our tanks are used across the industry to farm Salmon, Tuna, Trout, Cod, Halibut and more.

# Industries



### <u>Agriculture</u>

Our extensive range of tanks is specifically designed for agricultural applications, making them ideal for storing essential resources such as drinking water for livestock, irrigation water, slurry, and fertilizer. We understand that every farm has unique requirements, which is why we create bespoke tanks tailored to fit your available space perfectly and comply with the Farming Equipment and Technology Fund (FETF).



#### Horticulture

Helping nurseries, landscapers and many other horticulturists to integrate efficient water storage as part of an irrigation system. Whether it be water collected from rivers, reservoirs, mains or boreholes as well as rainwater harvesting systems.



### Sports & Leisure

Butek Tanks have supplied and installed irrigation tanks at many UK golf courses and sports facilities including premiership football clubs. We understand irrigation water is key to the success of any sports turf and work closely with irrigation specialists to provide a system bespoke to meet any unique requirements.

# Modular Wastewater System (MWS)













The MWS is a bespoke modular wastewater system designed to be deployed in emergency or planned maintenance projects where an existing WWT needs to be taken offline and be repaired.

The waste stream is treated with efficient, low-energy processes that will remove all dangerous pathogens.

The effluent water can be discharged directly into an existing drainage system.

Data based on an 800-person facility:

**Daily Input of Waste** 80,000-120,000 litres

System Volume 300,000 litres (4 x 02 T75 Tanks)

Operational in 11 Days
Each MWS can be installed in
around 7-20 days (depending on
facility size) using supplied
technical support and local labour.

Flexible Deployment
System layout and tank
size can be tailored to
suit the location and
condition.

Pathogen Reduction 99.99%

Site based lab facilities for testing faecal sludge, ammonia and nitrogen (training provided for local staff)



# **Associated products**





#### **Reservoir Roof Linings**

We work closely with Water Companies and provide reservoir roof waterproofing solutions to both existing and new build constructions. The waterproof integrity of a reservoir is vital in protecting the treated water resource, and contamination of a reservoir can have serious implications.

#### **Baffle Curtains**

Baffle curtains increase reservoir retention time, assist flow segregation, enhance sediment drop-out, and eliminate surface water skimming and stagnation.

Baffle curtains in drinking water applications must be manufactured from membranes that are approved by the Drinking Water Inspectorate (DWI). We offer DWI approved geomembranes for such applications.





We design, manufacture and install sewage treatment linings to provide liquid containment for wastewater.

Our lining solutions work by allowing bacteria, fungi and micro-organisms to breakdown, digest and clean the wastewater to the point where it can be safely discharged.



#### **Surface Water and Sewage Pumps**

We carry a range of stage 5 compliant diesel engine driven pumps in stock. Our pumps are manufactured by our subsidiary company in the UK.

It is also possible for us to supply a full range of petrol, diesel and electric engine driven pumps from 1.5" to 8" with the ability to handle fresh, potable(drinking) water, saltwater, and other liquids as well as solids, sewage, and sludge.

# **Accreditations**

#### Accreditations

The company has Safe Contractor status, are full members of the British Safety Council, ConstructionLine Gold, Alcumus, Achilles, SMAS and the British Geomembrane Association. We have Public and Product Liability Insurance up to £10m.





















Our divisions



A specialist division of Butyl Products Ltd



Containment Solutions



Bespoke Pond Liner Manufacturer





A specialist division of Butyl Products Ltd

Butek Tanks a specialist division of Butyl Products Ltd

### Address:

Lingfield House, 11 Radford Crescent, Billericay, Essex, CM12 ODW

# Telephone:

01277 653 281

### **Email:**

enquiries@butektanks.co.uk

### Website:

www.butektanks.com