



The name that really holds water



# **ABECO TANKS.**

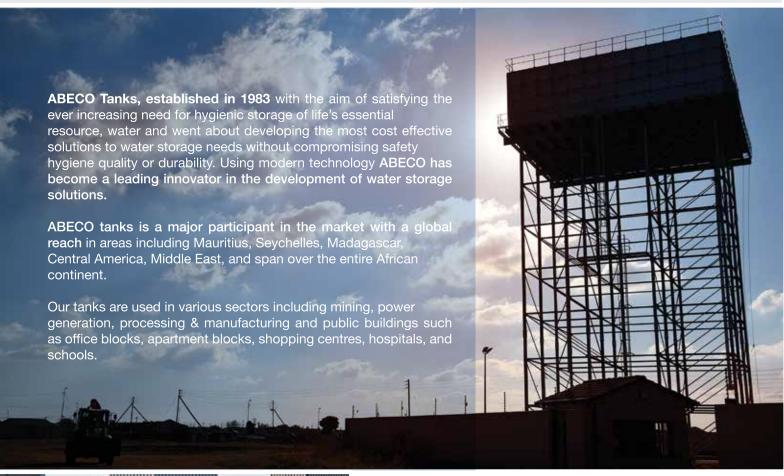
A leading innovator in commercial water storage solutions.





#### **MISSION STATEMENT**

To work together with water storage users and their service providers to satisfy their needs effectively, in so doing to establish lasting relationships. To strive through innovation and modern technology in design manufacture and installation to continually improve the quality of our end product in the most cost effective manner.







## **RECTANGULAR TANKS**

Our tanks can be easily transported due to their modular design and installed using basic equipment. We provide storage for hygienic water, and our tanks are unaffected by ultra violet or light penetration. Transportable to remote locations & can be installed in restricted areas. No welding required.

This design also allows us greater versatility to customise tank sizes according to our client requirement and site specifications. Out tank sizes range from 1800 litres to as much as 10 million litres in terms of capacity.

Our panels are cold pressed using high yield stress drawing quality steel. Each panel is individually pressed and punched to ensure dimensional accuracy.

Panel Size: 1220 x 1220mm

Three standard thicknesses are manufactured: 3mm, 4.5mm

and 6mm

ABECO tanks will recommend the correct panel thickness to ensure maximum water pressure is maintained and optimising cost benefits for our clients.

#### Roof / Tank cover

Individual roof sheets span over 1, 2 or 3 tank panels – depending on the width of the tank. Edges of the roof sheets are bent to provide an overlap designed for optimum sealing.

#### **Internal Members**

Standard tanks have internal bracing consisting of angle iron welded to base plates. Base plates are bolted to the tank panels. These items are jig assembled to ensure dimensional accuracy. Roofs are fixed to cold rolled lipped channel purlins supported by tubular posts.

#### **Fasteners**

All nuts & bolts are of high tensile grade.

#### **Sealants**

All sealants and rubber components used in our products are non-toxic and non-tainting. EPDM grade rubber gasket extruded with a profile specifically developed to achieve optimum sealing, ease and quick installation is used between tank panel flanges. Rubber bungs are used at specific points. Silicone and mastic are used in conjunction with rubber bungs and to seal bolts protruding through the tank.

#### **Corrosion Protection**

All steel components including bolts, nuts and washers are hot dip galvanised. For storage of potable water at ambient temperature the durable life of a hot dip galvanized tank can be expected to exceed its usage requirements.







## **CIRCULAR TANKS**

ABECO tanks has paid particular attention to the design of its circular tanks to ensure that they are easy to install and suitable for most remote and inaccessible places where resources are limited. All components are also lightweight and easy to handle.

It is important to note that our circular tanks do not require concrete foundations and can be installed on a flat, level and stable site covered by a bed of sand. If a concrete base is required – a standard mesh reinforcing will suffice. Slender tanks may require fastening down due to wind forces.

In developing sectional steel tanks ABECO recognised a need for tanks that have the following features:

- Low cost hygienic water storage
- Rugged and easily transportable
- Requires minimal site preparations and foundations
- Quick and easy to install
- Can be installed using basic equipment
- Durable and long lasting
- Can be dismantled and re-installed at a new site

#### Easy to install

Particular care and attention has been paid to the design of the tanks to ensure that the tanks are easy to install being suitable for the most remote and inaccessible places where facilities are limited.

- ABECO circular tanks do not need concrete foundations.
- Tanks can be installed on a flat, level and stable site covered by a bed of sand
- If a concrete base is desired, a simple slab with standard mesh reinforcing will suffice. The base diameter should be 1m larger than the tank diameter
- Slender tanks may need to be fastened down due to wind forces
- All components are light weight, easy to transport and easy to manoeuvre
- Standard tools are used for installation
- All parts and sealants needed to fully install the tanks are supplied
- Pipe connection fittings are welded to shell side plates during manufacture before galvanising
- All tanks are supplied with access ladders, an access manhole and water level indicators





## **Roof / Tank cover**

The tank roofs are cambered for water and dust run off.

## **Corrosion Protection**

All bolts and nuts used are hot dip galvanised at high tensile grade.

# **Design & Materials**

- Tanks are all of bolted construction
- Shell panels are hot dip galvanised after manufacture
- The side panel thickness is determined by the tank diameter and depth
- The minimum thickness recommended for sidewall panels is 2.5mm
- Specially designed extruded rubber strips seal the sidewall panel seams
- Tank roofs are made from galvanised steel roof sheeting, and cambered for water and dust run off
- The floor of the tank is made from a durable vinyl sheet
- A bed of sand or other suitable backing material protects the floor
- Bolts & nuts are galvanised at high tensile grade for drinking water

#### **ELEVATED TANKS**

ABECO offers a design manufacture and installation service for support tower steelwork. Basic towers consisting of the support steelwork with a caged access ladder to the roof of the tank will be offered in the absence of further specification. Orders should request walkways around the base of the tank or rest platforms on access ladders if required. Support Towers: Hot dip galvanising is recommended for optimum cost effectiveness

Elevated tanks are commonly founded on reinforced concrete basis with stub columns cast into excavations, which are back filled after construction. The determining loads in elevated tank foundation design are dependent on the height of the tower.

ABECO supplies full foundation load information for each elevated tank purchased to its design.

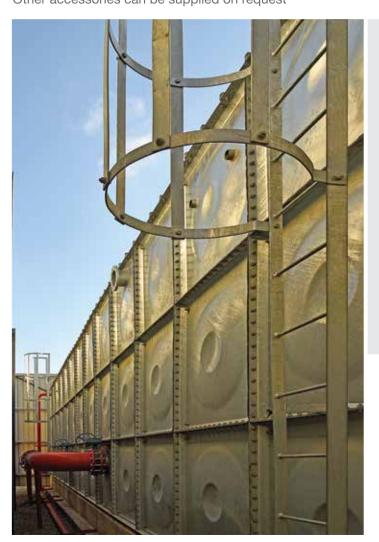
## **Support Towers**

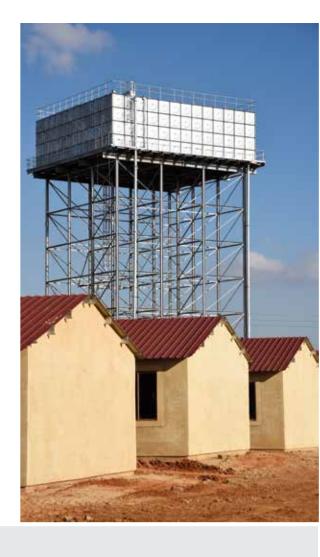
Hot dip galvanizing is recommended for optimum cost effectiveness

#### Standard Accessories\*

Caged external access ladder
Internal access ladder
Hinged lockable manhole
Float and pointer type water level indicator
Screened ventilator

\*Other accessories can be supplied on request





## **CUSTOM TANKS**

Many requirements for special tanks can be accommodated, whether the client has a space restriction or obstructions.

Abeco Tanks can supply half panels, U-shaped, L-shaped and other odd shapes.

Partitions to divide our tanks into two compartments can be provided and are commonly supplied for fire tanks.

## Foundations & Dwarf walls

The design and construction of the tank supports, foundations and dwarf walls are critical and should only be undertaken and supervised by competent professionals, such as contractors and civil engineers.

# **RECTANGULAR TANK CAPACITY**

	Width	Depth						Depth			
Length					4Panels	4Panels Length	Width	1Panel 2Panels 3Panels 4Panels			
m	m	1.22m	2.44m	3.66m	4.88m	m	m	1.22m	2.44m	3.66m	4,88m
1.22	1.22	1.816	3.632	5.448	7.263	8.54	8.54	88.977	177.953	266.930	355.906
2.44	1.22	3.632	7.263	10.895	14.527	9.76	8.54	101.687	203.375	305.062	406.750
3.66	1.22	5.448	10.895	16.343	21,790	10.98	8.54	114.398	228.797	343.195	457.59
4.88	1.22	7.263	14.527	21,790	29.054	12.20	8.54	127,109	254.219	381.328	508.43
6.10	1.22	9.079	18.158	27.238	36.317	13.42	8.54	139.820	279.820	419,641	559.28
2.44	2.44	7.263	14.527	21.790	29.054	9.76	9.76	116.214	232.429	348.643	484.85
3.66	2.44	10.895	21.790	32.685	43.580	10.98	9.76	130.741	261.482	392,223	522.96
4.88	2.44	14.527	29.054	43.580	58.107	12.20	9.76	145.268	290.536	435.804	581.07
6.10	2.44	18.158	36.317	54.475	72.634	13.42	9.76	159.795	319.589	479.384	639.17
7.32	2.44	21.790	43.580	65.371	87.161	14.64	9.76	174.321	348.643	522.964	697.28
3.66	3.66	16.343	32.685	49.028	65.371	10.98	10.98	147.084	294.167	441.251	586.33
4.88	3.66	21.790	43.580	65.371	87,161	12.20	10.98	163.426	326.853	490.279	653.70
6.10	3.66	27.238	54.475	81.713	108.951	13.42	10.98	179.769	359.538	539.307	719.07
7.32	3.66	32.685	65.371	98.056	130.741	14.64	10.98	196.112	392.223	588.335	784.446
8.54	3.66	38.133	76.266	114,398	152.531	15.86	10.98	212.454	424.908	637.363	849.817
4.88	4.88	29.054	58.107	87.161	116.214	12.20	12.20	181.585	363.170	544.754	726.33
6.10	4.88	36.317	72.634	108.951	145.268	13.42	12.20	199.743	399.487	599.230	798.97
7.32	4.88	43.580	87.161	130.741	174.321	14.64	12.20	217.902	435.804	653,705	871.60
8.54	4.88	50.844	101.687	152.531	203.375	15.86	12.20	236.060	472.120	708.181	944.24
9.76	4.88	58.107	116.214	174.321	232.429	17.08	12.20	254.219	508.437	762.656	1.016.87
6.10	6.10	45.396	90.792	136.189	181.585	13.42	13.42	219.718	439.435	659.153	878.870
7.32	6.10	54.475	108.951	163,426	217.902	14.64	13.42	239.692	479.384	719.076	958.768
8.54	6.10	63.555	127.109	190.664	254.219	15.86	13.42	259.666	159.333	778.999	1.038.66
9.76	6.10	72.634	145.268	217.902	290.536	17.08	13.42	279.641	559.281	838.922	1.118.56
10.98	6.10	81.713	163.426	245.139	326.853	18.30	13.42	299.615	599.230	898.845	1.198.46
7.32	7.32	65.371	130.741	196.112	261.482	14.64	14.64	261.482	522.964	784.446	1.045.92
8.54	7.32	76.266	152.531	228.797	305.062	15.86	14,64	283.272	566.545	849.817	1.133.08
9.76	7.32	87.161	174.321	261.482	348.643	17.08	14.64	305.062	610.125	915.187	1.220.25
10.98	7.32	98.056	196.112	294,167	392.223	18.30	14.65	326.853	653.705	960.558	1.307.41
	7.99	****	247.002	220 002	495 904	10.00	44.00	2000000000	007 200	1 045 000	1 20/ E



Proudly manufactured in South Africa since 1983

# **CIRCULAR TANK CAPACITY**

Larger capacities available on request.

Shell	Tank Depth										
Panels per	1 Pa 2.35		2 Pa 4.77	anels '5m	3 Panels 7.175m						
circle	Dia m	Capacity m <sup>3</sup>	Dia m	Capacity m <sup>3</sup>	Dia m	Capacity m <sup>3</sup>					
6	2.196	8.9	2.196	18.1	2.196	27.2					
8	2.928	15.8	2.928	32.2	2.928	48.3					
10	3.661	24.7	3.661	50.3	3.661	75.5					
12	4.393	35.6	4.393	72.4	4.393	108.7					
14	5.125	48.5	5.125	98.5	5.125	148.0					
16	5.857	63.3	5.857	128.6	5.857	193.3					
18	6.589	80.1	6.589	162.8	6.589	244.7					
20	7.321	98.9	7.321	201.0	7.321	302.0					
22	8.053	119.7	8.053	243.2	8.053	365.5					
24	8.785	142.5	8.785	289.5	8.785	434.9					
26	9.517	167.2	9.517	339.7	9.517	510.5					
28	10.250	193.9	10.250	394.0	10.25	593.8					
30	10.982	222.6	10.982	452.3	10.98	681.7					
32	11.714	253.3	11.714	514.6	11.714	775.7					
34	12.446	285.9	12.446	583.8	12.446	875.7					
36	13.178	320.5	13.178	654.5	13.178	981.7					
38	13.910	357.1	13.910	729.2	13.910	1093.8					
40	14.642	395.7	14.642	808.0	14.642	1212.0					



For more info SCAN HERE

#### **Affiliations & Accreditations**













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