

WORLD CLASS COMMERCIAL WATER TANKS



**BRUTE STRENGTH
INSIDE & OUT**

December 2013



DISTRIBUTED BY RHINEX PTY LTD





Company Profile

Rhino Water Tanks is a privately owned and operated business with over 20 years experience in the water storage industry. Rhino Water Tanks manufacture exceptional quality lined modular steel water tanks for domestic, rural and industrial purposes using the latest available membrane technology. These tanks are also well suited to fire prone areas as part of a fire protection plan.

Our corrugated commercial Rhino Water Tanks range in size from 26,000 Litres to 2.3 Million Litres and are available in Zinalume or the full range of Colorbond®.

Rhino Water Tanks also offers Permastore Glass-Fused-to-Steel Industrial tanks for solutions that corrugated lined tanks cannot service. Permastore tanks offer solutions for mass storage in Desalination, Effluent, Municipal and many other areas just to name a few.

All tank components in the Corrugated Lined range, including the INFINITY liner, are fabricated in our own Rhino Tanks factory, which means we can control the quality of every aspect of the tank from manufacturing to installation. INFINITY, our reinforced Food Grade Metallocene coated Liners, are UV treated for applications without a roof and can be used for a range of liquids including high or low pH and recycled water.

Rhino Commercial Water Tanks have a 60 year service life and with a network of Rhino Water Tank Agents and tank installers internationally we are never far away. Enquiries and sales can be taken direct through one of our affiliated distributors.

Quality Assurance

Rhino Water Tanks is a quality endorsed company. Our products are manufactured in our Western Australian factory under a quality management system certified to ISO 9001.

Our quality management system aims to benchmark ourselves against the best in the world and we proudly display the well recognised 'Five-Ticks' Standards Mark to give our customers the confidence that Rhino Water Tanks continually strive to provide cost effective, quality products and services that meet the customer's individual needs and expectations.



Tank Sizes

Corrugated Profile

Rhino Corrugated Commercial Tanks are available in a variety of standard sizes or can be custom designed to meet specific customer or project requirements.

The standard range of commercial tanks are available in 5 height specifications as shown below.

NOTE: Effective capacities vary depending on tank dimensions & quantity, size & position of fittings.

TANK MODEL	TANK DIAMETER	HEIGHT				
		2.2m	2.9m	3.6m	4.3m	5.0m
RCT 25	3.884m	26,062	34,359	42,653	50,947	59,240
RCT 40	4.855m	40,723	53,708	66,673	79,637	92,601
RCT 60	5.826m	58,640	77,309	95,969	114,630	133,291
RCT 80	6.797m	79,816	105,257	130,664	156,070	181,477
RCT 100	7.768m	104,250	137,438	170,612	203,787	236,962
RCT 130	8.793m	131,941	173,984	215,981	257,977	299,973
RCT 160	9.710m	162,890	214,746	266,582	318,417	370,252
RCT 200	10.681m	197,097	259,892	322,624	385,357	448,089
RCT 230	11.652m	234,562	309,235	383,878	458,521	533,164
RCT 275	12.623m	275,284	362,979	450,595	538,210	625,826
RCT 320	13.594m	319,264	420,849	522,433	624,017	725,601
RCT 360	14.565m	366,503	483,246	599,891	716,537	833,182
RCT 420	15.536m	416,998	549,680	682,361	815,042	947,724
RCT 470	16.507m	470,752	620,692	770,515	920,337	1,070,159
RCT 530	17.479m	527,764	695,688	863,613	1,031,538	1,199,463
RCT 590	18.450m	588,033	775,134	962,236	1,149,337	1,336,438
RCT 650	19.421m	651,560	858,875	1,066,189	1,273,504	1,480,818
RCT 720	20.392m	718,345	946,909	1,175,473	1,404,038	1,632,602
RCT 790	21.681m	788,388	1,039,238	1,290,089	1,540,939	1,791,790
RCT 860	22.334m	861,688	1,135,862	1,410,035	1,684,209	1,958,382
RCT 940	23.305m	938,246	1,236,779	1,535,312	1,833,845	2,132,378



Manufacturing to Australian Standards

All components of Rhino Water Tanks comply with and surpass all applicable Australian and Industry Standards. The design of all Rhino Water Tanks is certified by the renowned Van Der Meer engineering consultants.



Colour Range Available for Corrugated Wall Profile Only

Most tank manufacturers only offer limited colours in their standard range. Only Rhino Water Tanks offer the FULL RANGE of genuine Bluescope® Colorbond® colours in their standard range.

BLUESCOPE® COLORBOND® COLOURS							
	MANOR RED	JASPER	COVE	CLASSIC CREAM	EVENING HAZE	DEEP OCEAN	IRONSTONE
							
SURFMIST	PAPERBARK	DUNE	WALLABY	SHALE GREY	GULLY	WINDSPRAY	TERRAIN
							
WOODLAND GREY	BASALT	PALE EUCALYPT	MANGROVE	COTTAGE GREEN	MONUMENT	NIGHT SKY	

Wall Profiles

Rhino Water Tanks offer their traditional Corrugated Profile or the PermaStore Glass-Fused-To-Steel Profile.

Corrugated Profile

The corrugated range of tanks are manufactured from genuine Bluescope® COLORBOND® or Zinalume steel. The wall structure is composed of corrugated Blue-Orb sheeting that is rolled and curved by our custom made rollforming equipment. The corrugated profile provides increased wall strength and durability.

Structure

All Rhino Commercial Tanks can be specifically engineered for cyclonic regions in accordance with Australian Standards for wind loads AS/NZS1170:2007 (Structural Design Action).

Roofing

The roof structures of all Rhino Commercial Tanks carry dead and live loads in accordance with AS/NZS 1170:2007 (Structural Design Actions).

Rhino Water Tanks sources and supplies high tensile corrugated Custom-Orb sheeting used in the roof of all corrugated tanks. The roof truss system uses Square Hollow Section top cord with structural angle and flat bar plate components to complement a tank designed for all climatic conditions. All trusses are Hot Dipped Galvanised.

Certified design is in accordance with AS 4100 (Steel Structures) and AS/NZS 4600 (Cold Formed Steel Structures).

Welding

All welding and other manufacturing involved in the production of Rhino Tanks is in accordance with AS/NZS 1554:2008 (Structural Steel Welding).



Corrosion Protection

All structural components of the Rhino Commercial Tank are hot dipped galvanized to meet AS/NZS 4680:2006 (Hot Dip Galvanized [Zinc] Coatings on Fabricated Ferrous Articles). Every Rhino Water Tank installed uses Sacrificial Magnesium Anodes that are engineered to AS 2239 alloy M3 analysis & performance standard.

The Zinc or Galvanized coating on any steel gives some cathodic protection; however, this protection is limited. The use of Sacrificial Anodes becomes the first defence against corrosion and the Galvanized or Zinc coating on the wall sheets become the second defence. Correct installation and our regular maintenance program are therefore imperative to maximise your tank longevity and design life.



Nozzles

Generally, nozzles used on Rhino Commercial Tanks are manufactured from PE80 HDPE or hot dipped galvanized steel. HDPE fittings are manufactured from PE complying with AS/NZS 4130:2003 and fabricated in accordance with PMBWELD301A.

Nozzles used may be project specific depending on requirements. Larger flanged outlet sizes are available in ANSI, Victaulic, Table E and D.



Platforms & Ladders

All Platforms and caged ladders on or around Rhino Commercial Tanks are manufactured in accordance with AS 1657-1992 (Fixed Platforms, Walkways, Stairways and Ladders).

Ring Beam Preparation

All commercial water storage tanks require construction on a concrete ring beam footing. It is imperative for the client to ensure foundations and civil works for the site are adequate. Ring beam design is dependent on tank size and location. Appropriate design specification drawings are supplied by Rhino at the time of order.



Installation

Rhino Water Tanks has a network of specially trained tank installers around the world. Our installers focus on quality and excellent service to ensure the job is manufactured, supplied and installed to the customer's specific requirements.

All Rhino tanks are transported to site in flat pack form and then assembled on site. This allows us to position the fittings to the customer's individual requirements and gives us the ability to install tanks on sites with reduced accessibility. Larger tanks may be assembled with the use of cranes.



Reinforced Food Grade Tank Liner **INFINITY**

All our tank liners are made in our own Rhino Tanks manufacturing factory and have been for over 20 years. Our qualified liner fabricators use the latest welding techniques and state of the art machinery to produce liners of the highest quality.

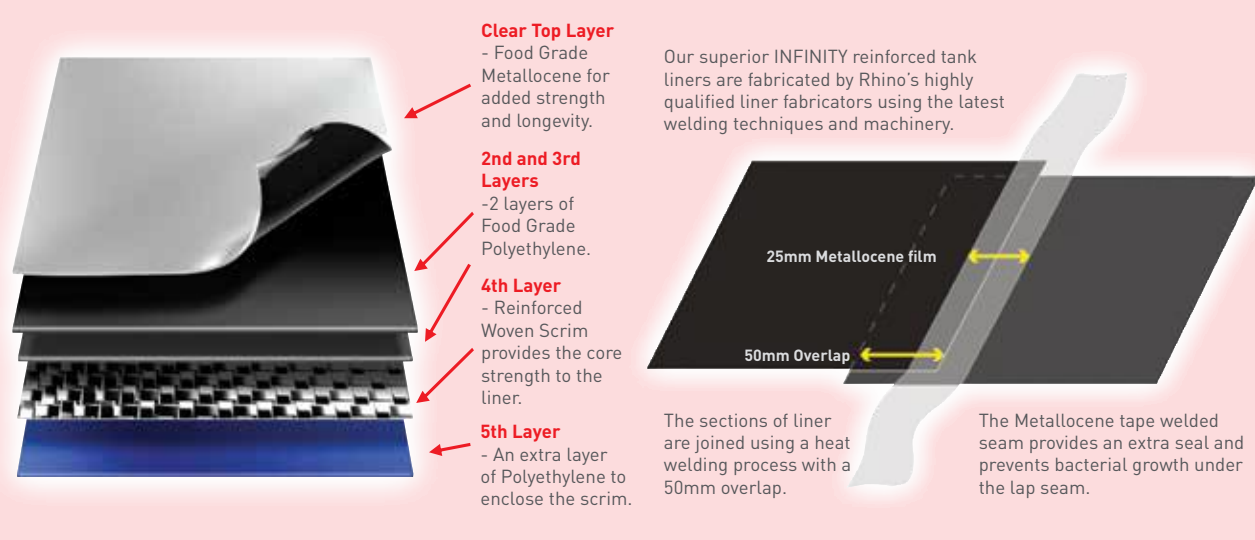
INFINITY is the latest technological advancement in liner fabrics on the world market and is exclusive to Rhino Water Tanks. INFINITY has a state of the art food grade, UV treated, multi layered film called Metallocene, laminated to the existing reinforced polyethylene liner giving extra layers of strength and durability. This gives INFINITY a service life of over 60 years. The development of this new commercial strength liner once again demonstrates Rhino's commitment to consistently improve our product and

reinforces our status as one of the world's leading manufacturers of tank liners.

INFINITY has passed water potable testing at the Australian Water Quality Centre.

AS/NZS 4020:4020 and ANSI/NSF – 61 and has been tested for:

- a) Taste of water extract
- b) Appearance of water extract
- c) Growth of aquatic organisms
- d) Cytotoxic activity water extract
- e) Mutagenic activity water extract



Clear Top Layer
- Food Grade Metallocene for added strength and longevity.

2nd and 3rd Layers
- 2 Layers of Food Grade Polyethylene.

4th Layer
- Reinforced Woven Scrim provides the core strength to the liner.

5th Layer
- An extra layer of Polyethylene to enclose the scrim.

Our superior INFINITY reinforced tank liners are fabricated by Rhino's highly qualified liner fabricators using the latest welding techniques and machinery.

25mm Metallocene film

50mm Overlap

The sections of liner are joined using a heat welding process with a 50mm overlap.

The Metallocene tape welded seam provides an extra seal and prevents bacterial growth under the lap seam.



PROJECTS

Industrial



City Care **Christchurch NZ**

Installed for emergency water supply after the 2011 magnitude 6.3 (ml) earthquakes disrupted the existing water supply.

Cadbury India Limited (Now known as Kraft Foods) **Pune India**

Cadbury India's largest chocolate manufacturing facility near Pune required two 500KL RHINO Tanks (model RCT275-43) to store fresh river water for the company's manufacturing activities and as boiler feed water. The tanks were installed in December, 2011.



Mine **Peru**

Buenaventura Mine asked Albatros Global, our local distributors to provide 1,500m³ for raw water storage with a fire fighting reserve for their Manganese processing plant at Rio Seco Peru. Project completion time was two weeks.

Water Treatment



Puebla State Project **Mexico**

This project was for a water treatment system for 40,000 residents. The primary aim was to help remove pollutants from the residual water. The project was done in Puebla State for the principal constructor and was completed in 2010.

Verve Energy Power Station Desalination Plant **Collie WA**

These recently installed commercial tanks are part of a desalination plant at Muja Power Station in WA capable of processing up to 10ml a day. There are several tanks on site including an elevated 25KL (Rhino also built the stand) while the largest tank in this project is 2.3 Megalitres.



Nuevo Laredo Project **Mexico**

This project was done for an important hospital near the US border with the primary aim of reusing water in green areas. The project was done in Nuevo Laredo, in collaboration with an international construction company and completed in 2012.

"The Capital" - Wadhwa Builders **Mumbai India**

"The Capital" is an ultra-modern, 19 storeyed commercial building in one of the world's costliest business districts – BKC, Mumbai. This premium office building required 5 RHINO Tanks with capacities ranging from 50KL to 160KL for a STP having a capacity of 450 KPD. The tanks were installed about 24 meters below ground level, at the sixth level basement. The installation was completed in February, 2011.



Coahuila Project **Mexico**

This project was done in the state of Coahuila, in the north of Mexico. The area has acute problems with potable water and the aim was to recycle water in plants like beans and corn. The installed system can treat up to 1000 cubic meters in a day and is an important step in tackling the water issues in the area.

Rainwater Harvesting and Storage



Cadbury India Limited (now known as Kraft Foods) Thane India

Cadbury India is one of the leaders in rain water harvesting for manufacturing activities. Looking at the advantages of relocating the RHINO Tanks, Cadbury's installed a 100KL RHINO tank at their Thane Manufacturing facility - in the centre of the populated city of Thane, near Mumbai. The installation was done in June 2011 and the harvested water is used for feeding the boilers.

Sri Kumaran's Children School Bangalore India

One of the most modern Primary & Secondary Education Institutes in South India, this School installed a 100KL RHINO tank for drinking water and various utilities in July 2012. The design of the building was later changed to match the circular shape of the tank, making it one of the most admired structures on the outskirts of Bangalore city.



Chicken Farm Tahiti

Potable water is short in Tahiti in spite of the abundant rainfall. This tank was installed to catch the water from mountain runoff so save precious drinking water being carted to the farm.

Cattle Feedlot Vietnam

4 x 230m³ tanks were installed on this 2,000 head cattle farm in the remote Buon Ma Thuot Province, 355 Kilometres North East of Ho Chi Minh City. The installation was supervised by our Indian Joint Venture partner.



Drinking water supply for an estimated 100,000 residents living in an economically challenged settlement in Thane India.

Irrigation



Irrigation Green Houses **UAE**

This tank was installed for farm irrigation in Al Ain in the Abu Dhabi Emirate to help preserve the dwindling underground water supply by using recycled town water.

Green Point Hill Station Pvt Ltd., Murbad, Dist. **Thane India**

The promoters of The Modern Commercial Farm were looking for a durable, convenient and fast water storage solution for their drip irrigation needs. Their 5000 acre farm houses over 28000 Mango trees and 25000 Coconut trees apart from various other floriculture and cattle. Two 100KL RHINO tanks catered to their needs perfectly and were installed in August 2010.



Tanks on Elevated Platforms

Rhino is regularly called on to replace old tanks on elevated stands such as this project in Darwin. The platform was refurbished and the 100KL tank was assembled on the ground and then entire platform and tank lifted into place for commissioning.

Commercial **Fire Tanks**



BOC Karratha **Karratha WA**

BOC Karratha were required to install a fire ring main system with their ongoing expansion. Rhino installed 2 x 215KL tanks with design criteria including Region D.



Mine site in Peru
Raw water and fire tanks.

rhinotanks.com



A Sample Of Rhino Tanks Proud Industry Partners



servicio@evolucionenergetica.com
www.evolucionenergetica.com
+502 2458-4113

