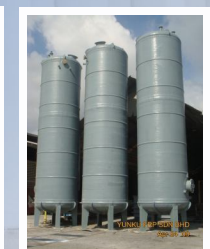




ARGOS FRP

CHEMICAL & WATER TANKS
SCRUBBERS
DUCTS & PIPES
CHIMNEYS & STACKS
FOOD GRADE TANKS
CUSTOM DESIGN PRODUCTS
LINING ON M.S or CONCRETE TANKS



ARGOS FRP

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DC, WA Australia 6916



Specialist in FIBERGLASS PRODUCTS

Content

P.1	Content
P.2	Company Introduction
P.3	Corrosion Resistant
P.4	Corrosion Resistant
P.5	Round Tank
P.6	Round Tank
P.7	Rectangular Tank
P.8	Clarifier
P.9	Scrubber
P.10	Pipe & Ducting
P.11	PVDF/PP/PVC & Lining
P.12	Custom Made Product & Accessories, Fittings

Company Introduction

YUNKU FRP SDN BHD (Previously named as Yunku Fibreglass Industries Sdn Bhd) is a manufacturing partner of Agros FRP. Yunku FRP was established and incorporated in Malaysia since 1985 to present. Yunku FRP are proudly to be an ISO 9001:2008 certified Fiberglass reinforced plastic products manufacturer.

Yunku FRP have more than 25 years of experience in manufacturing Fiberglass reinforced plastic or FRP tanks and other FRP products such as FRP pipes, FRP covers, FRP fittings and other custom made products to customers from various fields such as Chemical plant, Sewage treatment, Waste water and air treatment, Soy sauce production, Oleo-chemical plant, etc. Besides the local market, Yunku FRP also supply our FRP products to a number of overseas customers from Japan, Australia, Italy, Macau, Thailand, Singapore, Indonesia, etc.

With the advanced technique of filament winding sourcing from Fuji Resin Industry Co Ltd., Japan and experienced skills on installation and assembly, Yunku FRP have been providing excellent solution and quality products to their valued customers. It is not the end yet, Yunku FRP never stop improving their skills and keep up to date with the latest technologies in this FRP field.

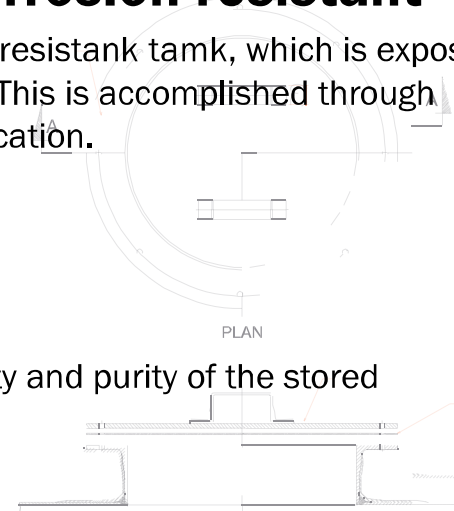
Yunku FRP office and factory are both located in Chembong industrial area in N.Sembilan, Malaysia.



BENEFITS OF EVERSTRONG FRP PRODUCTS

Chemical corrosion resistant

The inner surface of Everstrong Filament Winding chemical corrosion resistant tank, which is exposed to process fluids, is fabricated with chemical corrosion resistant FRP. This is accomplished through our experience by selecting the correct resin for the appropriate application.



Durability

Without the presence of rust, the on-going maintenance costs are reduced considerably thus, there will be no loss of stored materials due to leakage and contamination.

Lightweight & Strength

With high glass content and reinforcement, FW FRP gives extremely high strength and is obviously superior when compared to other materials. The specific gravity of ES FW FRP tanks to iron is 1/5.

Thermal Resistant

The EVERSTRONG Filament Winding FRP Tank is able to withstand high temperatures up to heat up to 120°C.



The comparison in weight with iron tanks

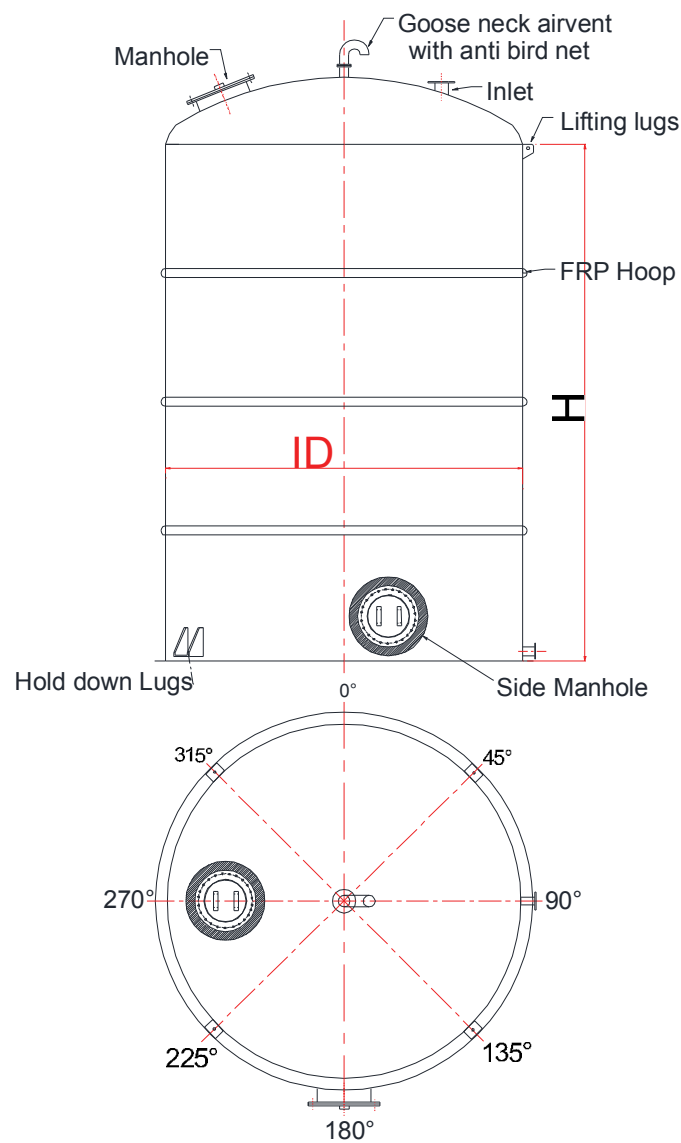
Volume Ton (m3)	1	2	3	4	5	10
FRP	90-110	90-110	110-130	145-165	210-230	370-390
Stainless Steel	300-350	400-500	500-650	600-850	900-1100	1600-1800

Chemical Resistance Table

Chemical	Conc.(%)	Recommended Temperature (°C)
Ammonium sulfate	Sat'd	120°C
Aluminium Sulfate		80°C
Calcium Hypochlorite	All	80°C
Hydrochloric Acid	1-15	110°C
Sulfuric Acid	50-70	100°C
Phosphoric Acid		100°C
Poly Aluminium Chloride	All	100°C
Sodium Chloride	>0.5	100°C
Sodium Hydroxide	All	80°C
Sodium Hypochlorite	0-18	80°C

Comparison of physical properties of different materials

Item	Unit	FRP	Stainless Steel	PE	PVC
Specific Gravity		1.4 ~ 1.7	7.8	0.96	1.32 ~ 1.44
Tensile Strength	kg/mm	8 ~ 18	20 ~ 30	2.0 ~ 3.1	3.9 ~ 6.3
Tensile Flexural Modulus	kg/mm ²	750 ~ 1,500	21,100	56 ~ 105	140 ~ 420
Elongation	%	1.0 ~ 1.8	38 ~ 39	50 ~ 600	200 ~ 450
Compressive Strength	kg/mm	12 ~ 22	19.7	-	7.0 ~ 7.7
Flexural Strength	kg/mm ²	20 ~ 30	19.7	1.4 ~ 2.1	5.6 ~ 10.5
Modulus Of Elasticity	kg/mm ²	650 ~ 1,500	21,100	105	140 ~ 420
Modulus Of Thermal Conductivity	Kcal/ kg°C	0.2 ~ 0.3	40	0.10	0.15 ~ 0.28
Specific Heat	Kcal/ kg°C	0.29 ~ 0.32	0.1 ~ 0.11	0.55	0.30 ~ 0.50
Coefficient Of Linear Expansion	10 ⁶ / °C	15 ~ 30	11 ~ 14	110 ~ 130	50 ~ 99
Temperature Limits	°C	-50 ~ +120	-	+65 ~ 70	+60 ~ 65



VERTICAL & HORIZONTAL

Horizontal Tank with End Cap, Vertical Tank with Flat/Arch/Conc Bottom



Volume (M³)	Inner Diameter (IDØ) mm	Height (H)mm
1	1000	1300
2	1200	1800
3 ~ 5	1500	1750~2850
5 ~ 8	1750	2080~3330
10	2000	3200
6 ~ 15	2000	1920~4800
12 ~ 25	2500	2450~5100
20	2500	4100
30	3000	4250
21 ~ 40	3000	3000~5670
40	3200	5000
50	3200	6230
30 ~ 60	3200	3750~7470
60	3600	5900
75	3600	7380
40 ~ 80	3600	3930~7860
100	4000	7960
120	4000	9560
60 ~ 150	4000	4780~11950

- . Dome Endcap
- . Cornical Endcap
- . Dome cover
- . Flat Cover
- . Open Top
- . Arch Bottom
- . Flat Bottom

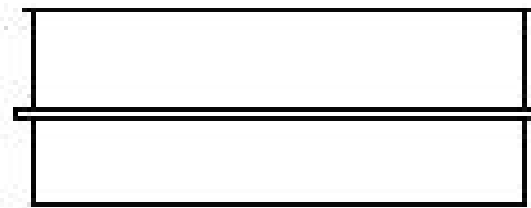
. Other Specification can be design per requirement

Design



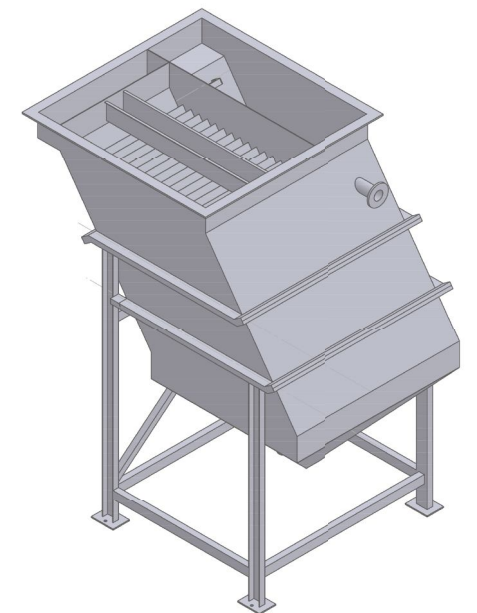
RECTANGULAR

CLARIFIER



Design :

. Other Specification can be designed as per requirements





Scrubber



Design :
• Other Specification can be designed as per requirements.



Pipe & Ductings

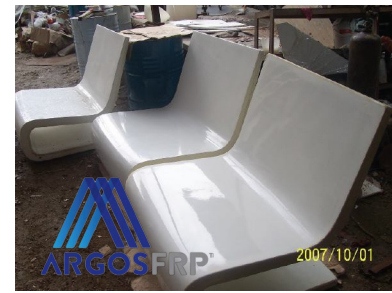
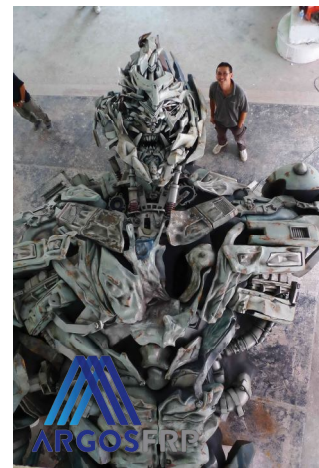
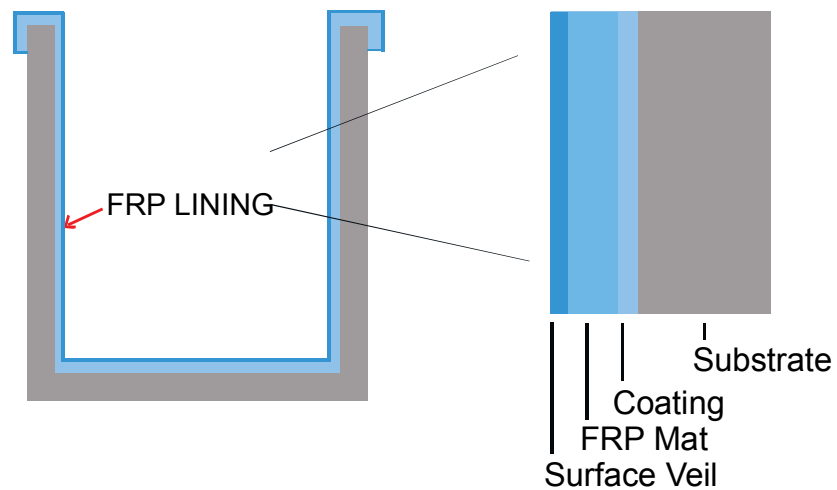




PVDF / PP/PVC

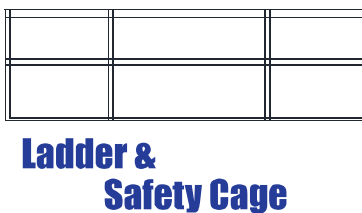
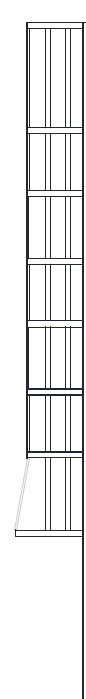
LINING

Lining on Concrete / M.Steel & etc

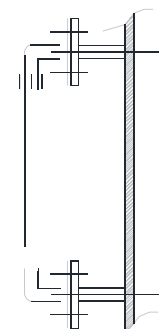


Custom Made Product

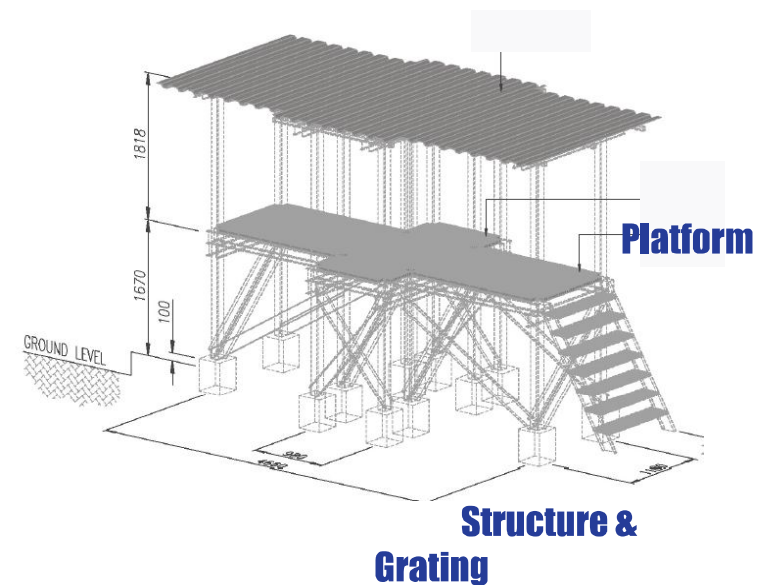
Accessories & Fittings



Ladder & Safety Cage



Level Indicator



Platform

Structure & Grating

Design :
. Other Specification can be designed as per requirements