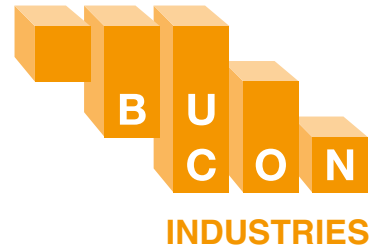


BUCO*tank*[®]

**QUALITY AND INNOVATION
IN CORRUGATED STEEL TANKS**



Bucon Industries



DUTCH QUALITY IN CORRUGATED STEEL TANKS



The need to save water is increasing dramatically worldwide. All sectors are looking for reliable and affordable tank systems for the storage of, among other things, drinking water, waste water, irrigation water, manure, seawater and sludge. Our modularly built corrugated steel tanks offer the solution.

Bucon Industries has implemented ground-breaking innovations on a well-known concept and can offer the best and cheapest solution.

THE IMPROVEMENTS ARE:

- Higher S 350 GD steel quality for more strength and tank heights of up to 6.10 metres
- Newly developed galvanising layer means 70% less zinc use and much higher corrosion resistance. It also prevents white rust
- The modernest machines of their kind deliver perfect uniformity and quality
- Environmentally-friendly colour coating in light grey (RAL 7038) and dark green (RAL 6009)
- Patented bolt set provides 2x stronger connections and fewer bolt sets per tank
- An improved corrugated profile measuring 76 x 20 mm ensures, even with low steel thickness, greater dimensional sheet stability
- Available in easy to transport sheet lengths of 2300mm and 3048mm

BUCO*tank*[®]: Ironclad

The strength of the tank construction is determined by the steel quality, corrugated profile and bolt sets.

IN THE BUCO*tank*[®] DESIGN, THESE PARTS HAVE BEEN IMPROVED:

- S 350 GD steel quality, which is stronger than usual
- The corrugated profile is increased from 18 to 20 mm, which makes our tanks considerably firmer and more rigid
- The patented bolt set can handle a much greater tensile strength and provides twice as strong a connection

BUCO*tank*[®] strength calculations are based on EN 1993-1-8 and EN 6773.

THE PATENTED BOLT SET DESIGN

The bolts and rings of the BUCO*tank*[®] have the same shape as the corrugation of the steel sheets. This achieves a much larger contact surface with the sheets. As a result, the tensile strength that the connection is able to handle is twice as large as with normal bolts. The BUCO*tank*[®] bolt sets also ensure faster assembly as they cannot continue running.



Unique galvanisation method

BUCON[®] ZINC/MAGNESIUM/ALUMINIUM GALVANISATION

The S350 GD steel is galvanised on both sides to provide protection against rust. The steel's corrosion resistance is not only determined by the thickness of the coating, but also by the composition. Studies at various universities have clearly shown that 3% magnesium provides greatly improved corrosion protection compared to other products on the market. That is why the BUCO*tank*[®] has a unique Magnelis^{®*} galvanising layer that includes 3%

magnesium and 3.5% aluminium in addition to zinc. Magnelis[®] offers the best available protection against rust, even under the most challenging conditions.

The patented Magnelis[®] galvanising method for corrugated steel tanks is available exclusively from Bucon Industries.



BUCON[®] galvanisation after 34 weeks in a salt spray test



Conventional galvanisation after 6 weeks in a salt spray test

* Magnelis[®] is a registered trademark of ArcelorMittal Flat Carbon Europe S.A.

BUCOtank[®] in colour

CHROMATE-FREE ORGANIC COLOUR COATING



The Bucon colour coating is organic and is applied immediately after galvanisation. This guarantees perfect adhesion of the coating and a very uniform layer thickness of 55 µm. This high-quality coating ensures long-term protection in aggressive environments.

- Highest level of rust protection (RC5)
- Highest level of UV resistance (RUV4)
- High scratch resistance (40 N)
- Excellent forming characteristics (1.5T)
- Extremely reliable and durable
- Available as standard in light grey (RAL7038) and dark green (RAL6009)



BUCOsquare[®]

SQUARE OR RECTANGULAR

The machines at Bucon Industries are able to make very sharp corners/bends in corrugated sheets without damage. Bucon Industries is therefore the only manufacturer able to make 'square' tanks. These are extremely suitable as a drip tray or buffer tank for ancillary water installations.



BUCOrroof[®] CORRUGATED STEEL ROOFS

The BUCOrroof[®] patented corrugated steel roof is a very good and easy to install cover for new and existing silos with a diameter of up to 10 meters. The roof is sufficiently light-proof, draining and so sturdy that it can even be walked on. No extra reinforcements are required on the tank wall for the corrugated steel roof. Available for all tank brands with a minimum sheet thickness of 1 millimetre.



Tank liners

The metal tank construction is made liquid-tight with a prefabricated plastic sail/liner.

All tank sails are made to measure for the tank. Different plastics can be used depending on the liquid. The most common materials are Poly Vinyl Chloride (PVC), Polyolefin (PEX), Polypropylene (PP) and Ethylene Propylene Diene Monomer (EPDM).

The material thicknesses vary from 0.5 to 1.0 mm and are dependent on the liquid and application.



Tank wall and bottom outlet

The inlet and outlet pipes are preferably connected via the bottom. This is done by means of conical outlet placed in the bottom of the sail. If desired, pipes can also be fed through the tank wall using tank wall connectors.

Conical outlet



Flange outlet



Tank wall connector



Anti-algae covers

High temperatures can accelerate algae growth in the water, especially if residues of fertilisers are still present in the water. To prevent algae growth, we use tension sails (for smaller diameters or when the tanks are inside) and floating sails.

Anti-algae slack sail



Anti-algae floating sail



Floating closed cover

If no water is allowed to enter the tank from the outside, a closed cover is a solution. This prevents incoming debris such as leaves, sand or dust from entering the stored water.

Closed floating cover



Closed floating cover, insulated



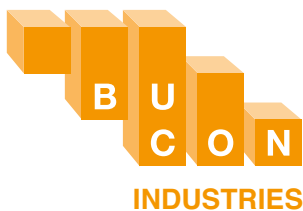
Standard BUCOtank[®]: size chart

Long panel

H (m)	0,85	1,55	2,35	3,10	3,85	4,60	5,35	6,10
∅ (m)	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³
1,82	2	4	6	8	10	12	14	16
2,73	5	9	14	18	23	27	31	36
3,64	9	16	24	32	40	48	56	64
4,55	13	25	38	50	62	75	87	100
5,46	19	36	54	72	90	108	125	143
6,38	26	50	74	98	122	147	171	195
7,29	34	65	96	128	160	191	223	255
8,20	43	82	122	162	202	242	282	322
9,11	54	101	150	200	249	299	348	398
10,02	65	122	182	242	302	362	422	481
10,93	77	145	217	288	359	430	502	573
11,84	90	170	254	338	421	505	589	672
12,75	105	198	295	392	489	586	683	780
13,66	120	227	338	450	561	672	784	895
14,57	137	258	385	512	638	765	892	
15,48	154	291	435	578	721	864	1.007	
16,39	173	327	487	647	808	968		
17,31	193	364	543	721	900	1.079		
18,22	214	403	601	799	997	1.195		
19,13	236	445	663	881	1.100	1.318		
20,04	259	488	728	967	1.207			
20,95	283	533	795	1.057	1.319			
21,86	308	581	866	1.151	1.436			
22,77	334	630	940	1.249	1.558			
23,68	361	682	1.016	1.351				
24,59	389	735	1.096	1.457				
25,50	419	791	1.179	1.567				
26,41	449	848	1.264	1.681				
27,32	481	908	1.353	1.798				
28,24	513	969	1.445	1.920				
29,15	547	1.033	1.539					
30,06	582	1.098	1.637					
30,97	617	1.166	1.738					

Short panel

H (m)	0,85	1,55	2,35	3,10	3,85	4,60	5,35	6,10
∅ (m)	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³
1,35	1	2	3	4	6	7	8	9
2,02	3	5	7	10	12	15	17	20
2,69	5	9	13	18	22	26	30	35
3,36	7	14	21	27	34	41	48	54
4,04	11	20	30	39	49	59	68	78
4,71	14	27	40	53	67	80	93	106
5,38	19	35	53	70	87	104	122	139
6,05	24	45	66	88	110	132	154	176
6,73	29	55	82	109	136	163	190	217
7,40	35	67	99	132	165	197	230	263
8,07	42	79	118	157	196	235	274	312
8,74	49	93	139	184	230	275	321	367
9,42	57	108	161	214	267	319	372	425
10,09	66	124	185	245	306	367	427	488
10,76	75	141	210	279	348	417	486	555
11,43	84	159	237	315	393	471	549	627
12,11	94	178	266	353	441	528	615	703
12,78	105	199	296	393	491	588	686	783
13,45	117	220	328	436	544	652	760	868
14,12	129	243	362	481	600	719	838	957
14,80	141	266	397	527	658	789	919	
15,47	154	291	434	577	719	862	1.005	
16,14	168	317	472	628	783	939	1.094	
16,82	182	344	512	681	850	1.019		
17,49	197	372	554	737	919	1.102		
18,16	212	401	598	794	991	1.188		
18,83	228	431	643	854	1.066	1.278		
19,51	245	463	689	916	1.143			
20,18	262	495	738	981	1.224			
20,85	280	528	788	1.047	1.307			
21,52	298	563	840	1.116	1.392			
22,20	317	599	893	1.187	1.481			
22,87	337	636	948	1.260				
23,54	357	674	1.004	1.335				
24,21	378	713	1.062	1.412				
24,89	399	753	1.122	1.492				
25,56	421	794	1.184	1.574				
26,23	443	836	1.247	1.657				
26,90	466	880	1.312	1.744				
27,58	490	924	1.378	1.832				
28,25	514	970	1.446	1.922				
28,92	539	1.017	1.516					
29,59	564	1.065	1.587					
30,27	590	1.113	1.660					
30,94	616	1.164	1.735					



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