





**SEWON CELLONTECH**

**DOCUMENT  
FOR  
EQUIPMENT**

SWC JOB NO

ITEM NO.

SWC DOC. NO.

PRESSURE VESSEL DATA SHEET				Data Sheet No.: DS-CL03A-C-300-V3173	
Specification No.: 085354-3010-PV-10				Requisition No.: 508298-000-45-MR-5120-0001	
<b>DESIGN DATA</b>				<b>PAINTING &amp; INSULATION</b>	
Service GTG Glycol Aerial Cooler Expansion Vessel				External Surface Preparation Per Spec 085354-3010-PC-50 Table 3, System A1	
Operating Temperature 57.0 °C		Pressure Atmospheric kPag		Internal Surface Preparation N/A	
Design Temp. Min.: -45.0 °C		Max.: 93.0 °C		Structural Surface Preparation N/A	
Design Pressure @ Minimum Temperature: 100/FV kPag		@ Maximum Temperature: 100/FV kPag		Vessel External Prime Per Spec 085354-3010-PC-50 Table 3, System A1	
Sour Service No		Lethal Service No		Vessel Internal Prime N/A	
New Vessel MAWP Limited by Flange @ 1782 kPag				Structural Prime N/A	
Corrosion Allowance - Shell / Heads 1.6 / 1.6 mm				Vessel External Finish Per Spec 085354-3010-PC-50 Table 3, System A1	
Wall Thickness - Shell / Heads 10 / 8.5 (mm)				Vessel Internal Finish N/A	
Joint Efficiency - Shell / Heads 0.85 / 0.85				Structural Finish N/A	
Registration Alberta Design Code ASME Sec VIII D1				External Insulation - Shell N/A	
Code Stamp Yes, U Stamp Orientation Horizontal				External Insulation - Heads N/A	
Post Weld Heat Treatment Per Code				Internal Insulation N/A	
Head Type 2:1 Semi-elliptical				External Cladding N/A	
Allowable Stress @ Design Temperature Per Code kPa				Insulation - Bottom Head N/A	
Ambient Temperature -39 to 39 °C		Max Wind Speed 31.4 m/s		Insulation - Skirt N/A	
Minimum Metal Design Temperature -45 °C				Fireproofing - Skirt N/A	
Fluid Glycol / Water Fluid Density 1094 kg/m³				Fireproofing - Saddles N/A	
<b>MATERIALS</b>				<b>QUALITY CONTROL / INSPECTION / TESTING</b>	
Shell SA516 Gr 70N		Repairs SA516 Gr 70N		Hydrotest Pressure Per Code kPag	
Heads SA516 Gr 70N		Fittings SA420 WPL6		Hydrotest Medium Clean Water	
Trays N/A		Supports SA516 Gr 70N		Hydrotest Duration 1 hrs	
Bolts/Nuts SA193-L7M/SA193-L7M		Flanges SA350-LF2 CL1		Radiographic Inspection Min, RT3	
Nozzle-Necks SA 333 Gr 6		Gaskets SPW SS 316		Ultrasonic Inspection Per Spec 085354-3010-EW-20	
Internal Lining N/A		Pipe SA 333 Gr 6		Magnetic Particle Inspection Per Spec 085354-3010-EW-20	
Internals N/A		Mist Eliminator N/A		Dye Penetrant Inspection Per Spec 085354-3010-EW-20	
Structural Attachments - External SA516 Gr 70N				Material Mill Test Reports Per MR, Section III	
Structural Attachments - Internal SA516 Gr 70N				Post Weld Heat Treatment Records Per MR, Section III	
Material Impact Test Required Yes				Hydrotest Reports Per MR, Section III	
Certified Elevated Temp Tests Req'd No				Radiographic Inspection Reports Per MR, Section III	
<b>DIMENSIONAL/SHIPPING DATA</b>				<b>NOTES</b>	
Vessel Size 609.6 mm		ID x 4877 mm S/S		<b>1) External coating of all vessel surfaces per Table 3 - System A1</b> <b>2) Saddle height (measured from vessel center line to underneath of base plate) shall be 620 mm. To be confirmed during detail engineering.</b> <b>3) Vessel shall comply with all requirements of Cold service as per clause 13.0 of specification # 085354-3010-PV-10.</b> <b>4) Paired flanges to be used for instruments shall be set with a jig to avoid cumulative errors in alignment.</b> <b>5) All saddle to shell and lift lug welds shall be MPI examined all around.</b> <b>6) All process nozzles of pressure vessels shall be designed to withstand loading and moments as specified in project spec # 085354-4060-PS-001.</b>	
Boil/Gas Dome N/A mm		ID x N/A mm S/S			
Capacity 1.4 m³					
Centerline/Bottom Seam Elevation *		m			
Weight - Empty 1270 kg		Weight - Hydrotest 2650 kg			
Weight - Operat'g 2780 kg		Weight - Shipping 1270 kg			
O/A Shipping Dimensions (LxWxH) 6.3 x 1.9 x 1.6 m					
Nozzle Covers/Connection Plugs Required					
Shipping Cradles N/A					
Ocean Transport Protection Required (if applicable)					
<b>ACCESSORIES BY FABRICATOR</b>					
Manway Davits N		Ladders N			
Ladder and Platform Clips N		Platforms N			
Pipe Support and Guide Clips N		Lifting Lugs Y			
Insulation Supports N		Pipe Coll N			
Insulation Supports Bottom Head N		Anodes N			
Fireproofing Supports N		Nameplate Y			
Saddles Y		Mist Eliminator N			
Tray/Packing Supports N		Vortex Breaker N			
Manway Internal Grab Rungs N		Two Grounding Lugs Y			
Siphon Drains on Nozzles					
<b>REVISIONS</b>					
NO.	DATE	BY	CHK	APP	DESCRIPTION
A	23-Jul-12	SM	RA	SP	Issued for Squad Check
B	9-Aug-12	SM	RA	SP	Issued for Quotation
C	22-Oct-12	SM	RA	SP	Re issued for Quotation
D	31-Jan-13	WW	SP/RA	SP	Issued for Purchase

<b>PRESSURE VESSEL DATA SHEET</b>		<b>Data Sheet No.:</b>	
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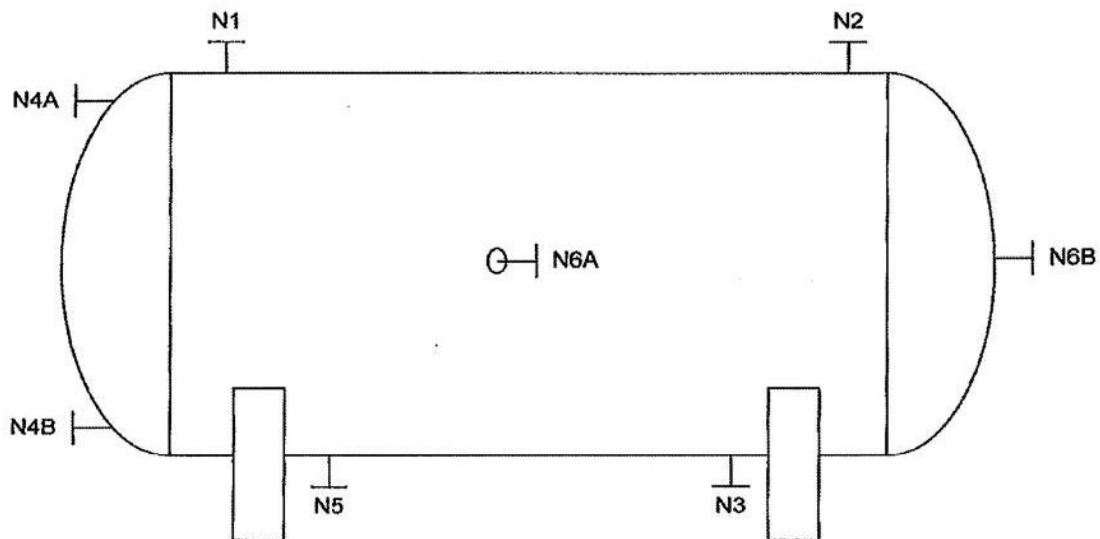
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## VESSEL SKETCH



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