Base Load Power Hub (BLPH)

TDS - Hydrogen Vent KO Drum - V-43001

Document Number: 1724000163-MAC-DS-00006

Document Class: 2

04	10/10/2024	Accepted for Construction (AFC)	M. Cattani	E. Benini	E. Dall'Arche
03	02/09/2024	Accepted for Construction (AFC)	M. Cattani	E. Benini	E. Dall'Arche
02	03/07/2024	Accepted for Construction (AFC)	M. Cattani	E. Benini	E. Dall'Arche
01	14/06/2024	Issue for Review (IFR)	M. Cattani	E. Benini	E. Dall'Arche
00	17/04/2024	Issue for Review (IFR)	C.Cervellati	E. Benini	E. Dall'Arche
Rev.	Date	Description	Prepared	Reviewed	Approved
C.A.M.P.I. Srl Ferrara - Italy					

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Table of Contents

SH.	DESCRIPTION	REVISIONS							
		00	01	02	03	04			
1	Cover	X	X	X	X	X			
2	Table of Contents	X	X	X	X	X			
3	Revision / Change Log	X	X	X	X	X			
4	Data Sheet	X	X		X				
5	General Notes	X	X						
6	Table of Connections	X	X	X	X				
7	Specific Notes to Table of Connections / Sketch	X	X		X				
8	Weight Data	X	X		X	X			

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Revision / Change Log

Rev.	Description
00	ISSUE FOR REVIEW (IFR)
01	ISSUE FOR REVIEW (IFR)
02	ACCEPTANCE for CONSTRUCTION (AFC)
03	ACCEPTANCE for CONSTRUCTION (AFC)
04	ACCEPTANCE for CONSTRUCTION (AFC)

HOLDS LIST

No.	Description
1.	
2.	
3.	
4.	

This document undergoes an issuance cycle within EDMS "Fusionlive".
Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

DESIGN DATA

Rev								
3	Design Conditions	Internal	3.5	bar (g)	at	-29 / 80	°C	
3		External		bar	at		°C	
		Volume	0.7	m^3				
		Dimension (Nominal)	0.6 ID x 2.35 T/T	m				
3	Minimum Design Metal Temp		-29	°C (MDMT)	at	3.5	bar (g)	
3	Operating Conditions	Internal	atm	bar (g)	at	25	°C	
	Corrosion Allowance		1.0	mm				
	Liquid Specific Gravity		1.0					
	PWHT Required		Per ASME Sect VIII Div 1	☑ Service PWHT	Yes			
	Radiography Requirements		Spot (RT-3)					
3	Shop Hydrotest Pressure		5.0 bar (g)					
3	Field Hydrotest Pressure		5.0 bar (g)					
	Painting Per		Coating system: N°1 of Norsok M-501					
	Insulation		BY OTHER	mm	MAX 50 mm THICKNESS ALLOWED BY THE SUPPORTS			
	Fireproofing		N/A	mm				
3	Erection Weight		780	kg (Includes legs)				
3	Empty Weight		780	kg (Start-Up Ready)				
3	Operating Weight		1015	kg				
3	Test Weight		1500	kg				
	Vessel Designed For Wind		1 Year Return, 3 sec. gust = 35 m/sec, 100 Year Return, 3 sec. gust = 45 m/sec					
	Vessel Designed For Earthquake		N/A					
3	Moment At POS	Wind:	3800	Nm (Operating)				
	Shear Force At POS	Wind:	3600	N				
3	Moment At POS	Earthquake:	0	Nm (Operating)	0	Nm (Empty)		
	Shear Force At POS	Earthquake:	0	N (Operating)	0	N (Empty)		

DESIGN CODE & MATERIAL SPECIFICATIONS

Rev						
	Construction Code	2004 ASME Section VIII Div.1 With Latest Adder	Code Stamp ☑	No	National Board Registration ☑	No
	Materials for Pressure Components and Parts Welded to Pressure Components:					
	Shell and Heads	SA-516-60 or 70	Thickness (mm)	10		
	Standard ANSI Weld Neck and LWN Flanges	SA-350 LF2 Cl.1				
	Fittings	General Note VM-8				
	Self Reinforcing & Special Forgings	N.A.				
	Nozzle Necks	SA-333 Gr.6				
	Shell Attachments	Plate (Reinforcing pad)	SA-516-60 or 70			
		Pipe	N.A.			
		Structural Shapes	N.A.			
	Materials for Parts Not Welded to Pressure Components:					
	Legs	S355J2				
	Plate	A-516-70				
	Pipe	N.A.				
	Pressure Bolting	SA-320-L7 / SA-194-7				
	Internal Bolting	N.A.				
	Internal Piping	N.A.				
	Other Internals	N.A.				
	Gaskets	Pressure Gaskets	1/16" Flexible Graphite w/ 304 S.S. Insert			
		Non-pressure Gaskets	N.A.			

This document undergoes an issuance cycle within EDMS "Fusionlive".
File: 1724000163-MAC-DS-00006_Rev4 Its distribution is electronically controlled. Once printed shall be considered as "NOT CONTROLLED" copy

Rev

GENERAL NOTES (If Applicable)

VM-1. All materials shown on this data sheet are to be furnished and installed by the Vessel Supplier unless otherwise noted.

VM-2. Substitutions of materials will not be allowed without ROSETTI's prior approval. This approval can only be obtained at the time Vessel Supplier submits his quotation.

VM-3. The inside diameter of manholes shall be equal to the size specified in the table of connections for 18" (450 mm) and smaller size manholes. Manholes size 20" (500 mm) and larger may have a minimum inside diameter 25 mm less than the nominal size listed in the table of connections.

VM-4. Manholes and handholes shall be furnished with blind flange, bolts and gasket. Each manhole shall be provided with a davit or hinge and internal manhole grip.

VM-5. Internal ladder rungs shall be provided below the manway.

VM-6. CAMPI will provide supports for insulation. Insulation will be provided by ROSETTI

VM-7. Vessel Supplier to provide vessel grounding lugs per CAMPI standard.

VM-8. In addition to meeting Code requirements for fittings, piping fittings shall be made from a material specification listed for plate, forging, or pipe pressure components on page 1 of this data sheet.

VM-9 Below is not mandatory. Vendor to indicate values relevant to Material Specifications from their material supplier
Max hardness in base metal shall be 235 HV10
- Steel shall be HIC resistant to ISO 15156-2
- Impact testing shall be at -46°C for base metal and weld metal in H2 service regardless of MDMT
- Phosphorus maximum to be 0.015% (from EIGA 121/14)
- Max strength 380 Mpa yield
- max CE of 0.39 should ideally be by product analysis not ladle analysis

This requirements are not applicable for piping, fittings and flanges.

Rev

TABLE OF CONNECTIONS

General Notes for Table of Connections:

3

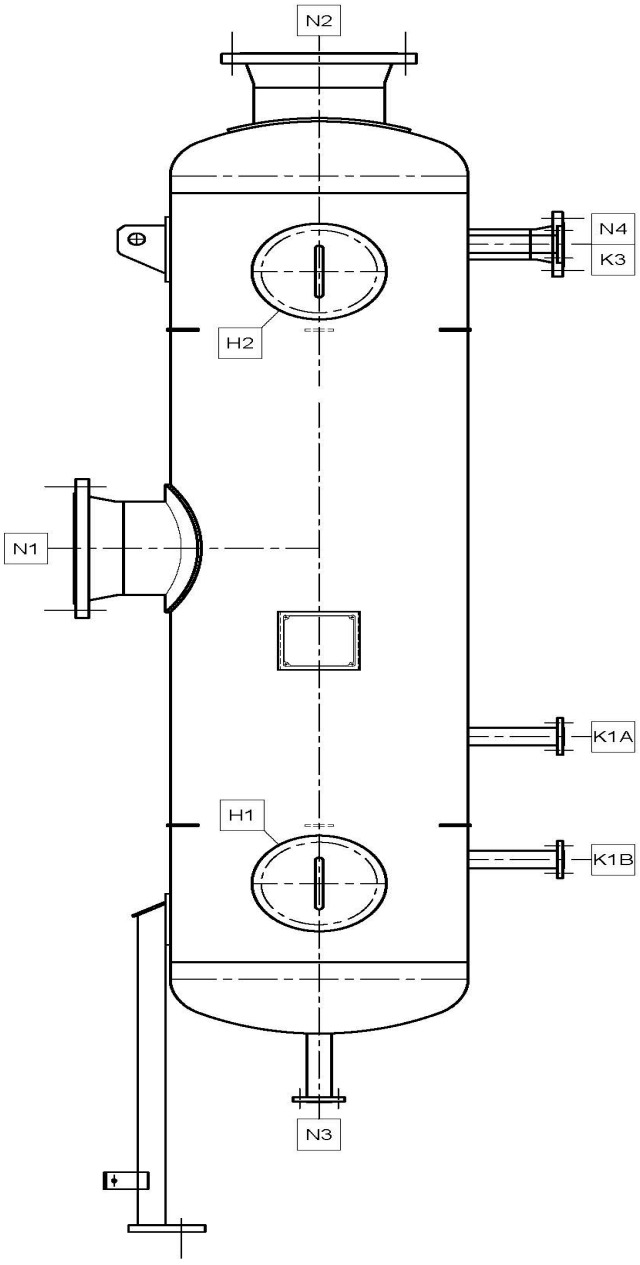
A. Connections shown in sketch are diagrammatic only. True location will be shown on GA Drawing N. 1724000163-MAC-DA-00004
B. Unless otherwise noted the dimensions from the face of flange to inside shall comply with Table 4 of Doc n° 123A90-DDL-MAC-50026
C. All pressure connections are to be flanged.
D. Note deleted
E. Note deleted
F. Note deleted
G. Flanges over 24" shall be per ASME B16.47 Series B.
H. All flange faces shall have a stock finish.
J. For specific notes to TABLE OF CONNECTIONS see next page.

Mark	Size	Rating	Face	Service	Elevation	Dim"A"	Specific Notes
N1	10"	150#	RF	GAS INLET	+1260		With pad 10(thk)x50(width)
N2	10"	150#	RF	GAS OUTLET	+2710		With pad 10(thk)x50(width)
N3	1"	150#	RF	LIQUID OUTLET	-360		
N4	3"	150#	RF	VENT	+2150		
K1A	1"	150#	RF	LT FOR ALARM	+710		
K1B	1"	150#	RF	LT FOR ALARM	+150		
K3	1"	150#	RF	PT	+2150		
H1	6"	150#	RF	INSPECTION PORT	+280		With blind flange, gasket, studbolt
H2	6"	150#	RF	INSPECTION PORT	+2070		With blind flange, gasket, studbolt

SPECIFIC NOTES TO TABLE OF CONNECTIONS - SKETCH

(All Notes Listed Hereunder Shall Apply Only If Called For By Number In The Table Of Connections)

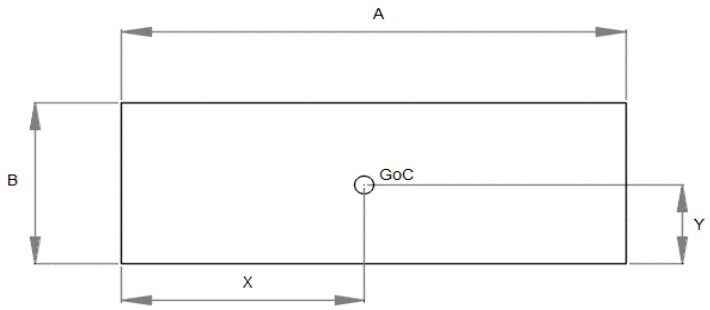
Rev	
3	1 Accepted for Construction
	2 Supply blind flange, bolts and gasket.
	3 Note deleted
	4 Nozzle size listed is minimum inside diameter of nozzle neck.



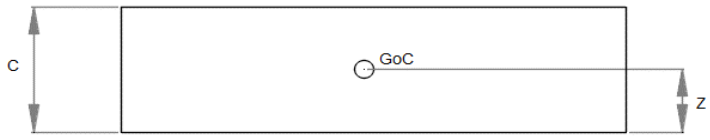
WEIGHT DATA (kg)

		Areas for imput by Supplier	
Dry Weight	(I)	780	kg
Content	(II)	235	kg
Operating Weight	(I+II)	1015	kg
Auxiliaries' weight, included in I (specify under Notes)		-------	kg
Test weight, i.e. filled with water		1500	kg
Transport weight		820	kg

CENTER OF GRAVITY (CoG) DAT FOR INSTALLED DRY CONDITION



Plan



Elevation

Overal dimension		
A =	1010	mm
B =	820	mm
C =	3450	mm

CoG location (mm)		
X =	300	mm
Y =	300	mm
Z =	1900	mm

NOTES

WEIGHT AND CoG STATUS (TICK OFF AS APPRPRIATE)

☑ Estimated	☐ Calculated
☐ Catalogue data	☐ Weighed