Base Load Power Hub (BLPH)

NITROGEN GENERATION PACKAGE
EQUIPMENT DATA SHEETS
INCLUDING PSA, ETC.

Document Number: 1724000437-MAC-DS-00011

Document Class: 2

03	08/02/2025	Accepted for Construction (AFC)	GT	MC	TM
02	21/12/2024	Issue for Review (IFR)	GT	MC	TM
01	08/05/2024	Issue for Review (IFR)	GT	MC	TM
00	28/03/2024	Issue for Review (IFR)	GT	MC	TM
Rev.	Date	Description	Prepared	Reviewed	Approved

COES

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

coes	CLIENTE / CUSTOMER	:	ROSETTI MARINO	COMM: / JOB:	:	167/24	
	RIFERIMENTO / REFERENCE	:	CROSSWIND	UNITA' / ITEM	:	/	
	IMPIANTO / DRYING UNIT	:	NITROGEN GENERATION PACKAGE	FOGLIO N° / SHEET	:	1	DI : 3 / OF

FOGLIO DATI PER IMPIANTO GENERATORE AZOTO
NITROGEN GENERATOR DATA SHEET

DATI GENERALI
GENERAL DATA

1	QUANTITA' / QUANTITY	:	1
2	ITEM / TAG	:	C-64001A/B
3	SERVIZIO / SERVICE	:	NITROGEN GENERATOR
4	RIGENERAZIONE / REGENERATION	:	PSA

DATI PROGETTO MECCANICO
MECHANICAL DESIGN DATA

5	PRESSIONE PROGETTO SERBATOI / VESSELS DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO SERBATOI / VESSELS DESIGN TEMPERATURE	:	-29 / +80°C
6	MATERIALE SERBATOI / VESSELS MATERIAL	:	SA 516 Gr.70	SOVRASPESS. CORROSIONE SERBATOI / VESSELS CORROSION OVER-THICKNESS	:	3 mm
7	NORMATIVA PROGETTO SERBATOI / VESSELS DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO SERBATOI / VESSELS INSPECTION CODE	:	2014/68/EU PED (CAT. IV)
8	TIPO FONDI / HEAD TYPE	:	ELLIPTICAL 2:1	SPESSORE VIROLA / SHELL THICKNESS	:	8 mm
9				SPESSORE FONDI / HEAD THICKNESS	:	8 mm (6.72 mm M.A.F.)

DATI FUNZIONALI
FUNCTIONAL DATA

10	PORTATA ARIA IN INGRESSO / INLET AIR FLOWRATE	:	150	Nm^3/h	
11	PRESSIONE DI ESERCIZIO / OPERATING PRESSURE	:	9	barg	
12	TEMPERATURA DI ESERCIZIO / OPERATING TEMPERATURE	:	35	°C	
13	PUNTO DI RUGIADA IN INGRESSO / INLET DEW POINT	:	-40	°C	
14	TIPO MATERIALE ADSORBENTE / DESICCANT MATERIAL TYPE	:	CARBON MOLECULAR SIEVE		
15	QUANTITA' ADSORBENTE PER TORRE / DESICCANT QUANTITY/EACH TOWER	:	200	kg	
16	PORTATA AZOTO IN USCITA / OUTLET NITROGEN FLOWRATE	:	60	Nm^3/h	
17	PUREZZA AZOTO IN USCITA / OUTLET NITROGEN PURITY	:	97	%	
18	POTENZA TOTALE INSTALLATA / TOTAL DEMANDE RATE	:	0.5 1.5	kW kW	from normal power supply from UPS
19	PERDITA DI CARICO / PRESSURE DROP	:	0.5	bar	
20	DURATA CICLO / LENGHT OF CYCLE	:	1+1	min	
21	CONSUMO kWh PER RIGENERAZIONE / kWh CONSUMPTION/EACH REGENERATION	:	/		
22	TENSIONE DI ALIMENTAZIONE / SUPPLY VOLTAGE	:	Normal supply: 230V 1Ph+N+PE Power supply from UPS: 230V 1Ph+N+PE		
23	GRADO DI PROTEZIONE / PROTECTION DEGREE	:	IP 65		
24	CLASSIFICAZIONE AREA / AREA CLASSIFICATION	:	SAFE		
25	RADIOGRAFIE / RT TEST	:	☐ YES	☒ NO	
26	VERNICIATURA / PAINTING	:	☒ EXTERNAL ACC. TO 1724000437-MAT-PRO-00021	☐ INTERNAL	
26	ZINCATURA / GALVANIZING	:	☐ YES	☒ NO	
27	RUMOROSITA' / NOISE LEVEL	:	85dB(A) max PRESSURE LEVEL at 1 m		
28	SILENZIATORE / SILENCER	:	☒ INCLUDED IN PACKAGE	☐ NO	
29	Notes: - details of nozzle are included into equipment sectional drawing				
	- UCP details are included in document no. 1724000437-MAC-DG-00009				

REV. / REV.	DESCRIZIONE / DESCRIPTION	EMESSO / ISSUED	APPROVATO / APPROVED	DATA / DATE
03	ACCEPTED FOR CONSTRUCTION	GT	TM	03-feb-25
02	ISSUE FOR REVIEW	GT	TM	21-dic-24
01	ISSUE FOR REVIEW	GT	TM	08-mag-24
00	ISSUE FOR REVIEW	GT	TM	28-mar-24

coes	CLIENTE / CUSTOMER	:	ROSETTI MARINO	COMM: / JOB:	:	167/24	
	RIFERIMENTO / REFERENCE	:	CROSSWIND	UNITA' / ITEM	:	/	
	IMPIANTO / DRYING UNIT	:	NITROGEN GENERATION PACKAGE	FOGLIO N° / SHEET	:	2	DI : 3 / OF

FOGLIO DATI PER SERBATOIO
PRESSURE VESSEL DATA SHEET

DATI PROGETTO MECCANICO
MECAHNICAL DESIGN DATA

1	QUANTITA' / QUANTITY	:	1			
2	ITEM / TAG	:	V-64001			
3	SERVIZIO / SERVICE	:	SERBATOIO AZOTO / NITROGEN VESSEL			
4	TIPO / TYPE	:	VERTICALE / VERTICAL			
5	MATERIALE / MATERIAL	:	LTCS			
6	NORMATIVA PROGETTO / DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO / INSPECTION CODE	:	2014/68/EU PED
7	MATERIALE / MATERIAL	:	SA 516 Gr.70	SOVRASPESS. CORROSIONE / CORROSION OVER-THICKNESS	:	3 mm
8	PRESSIONE PROGETTO / DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO / DESIGN TEMPERATURE	:	-29 / +80 °C
9	DIAMETRO ESTERNO / EXTERNAL DIAMETER	:	2000 mm	LUNGHEZZA T/T / T/T LENGHT	:	3126 mm
10	TIPO FONDI / HEAD TYPE	:	ELLIPTICAL 2:1	SPESSORE FONDO / HEAD THICKNESS	:	15 mm (12.75 M.A.F.)
11	VOLUME / VOLUME	:	11 m^3	SPESSORE VIROLA / SHELL THICKNESS	:	15 mm
12	RADIOGRAFIE / RT TEST	:	☒ YES SPOT ☐ NO			
11	VERNICIATURA / PAINTING	:	☒ EXTERNAL ☐ INTERNAL ACC. TO 1724000437-MAT-PRO-00021			
12	ZINCATURA / GALVANIZING	:	☐ YES ☒ NO			
13	Notes: - details of nozzle are included into equipment sectional drawing, doc. no. 1724000437-MAC-DD-00006					
14						

ELENCO CONNESSIONI
NOZZLES LIST

	SIGLA / TAG	DIAMETRO / DIAMETER	TIPO / TYPE	SERIE / RATING	SERVIZIO / SERVICE	NOTE / REMARKS
15						
16	N1	1"	WN	ANSI 150	PROCESS INLET/OUTLET	
17	N2	1"	WN	ANSI 150	SAFETY VALVE	
18	N3	1/2"	NPT	6000#	PRESSURE GAUGE	COUPLING
19	N4	1/2"	NPT	6000#	PRESSURE TRANSMITTER	COUPLING
20	N5	1"	WN	ANSI 150	DRAIN	
21	N6	16"	WN	ANSI 150	MAN HOLE	
22						
23						

STRUMENTI - ACCESSORI
INSTRUMENTS - ACCESSORIES

24	☒	VALVOLA DI SICUREZZA / SAFETY VALVE
25	☒	MANOMETRO / PRESSURE GAUGE
26	☒	TRASMETTITORE DI PRESSIONE / PRESSURE TRANSMITTER
27	☒	VALVOLA DI DRENAGGIO MANUALE / MANUAL DRAIN VALVE
28	☐	SCARICATORE DI CONDENSA / DRAIN TRAP
29		

REV. / REV.	DESCRIZIONE / DESCRIPTION	EMESSO / ISSUED	APPROVATO / APPROVED	DATA / DATE
03	ACCEPTED FOR CONSTRUCTION	GT	TM	03-feb-25
02	ISSUE FOR REVIEW	GT	TM	21-dic-24
01	ISSUE FOR REVIEW	GT	TM	08-mag-24
00	ISSUE FOR REVIEW	GT	TM	28-mar-24

coes	CLIENTE / CUSTOMER	:	ROSETTI MARINO	COMM: / JOB:	: 167/24
	RIFERIMENTO / REFERENCE	:	CROSSWIND	UNITA' / ITEM	: /
	IMPIANTO / DRYING UNIT	:	NITROGEN GENERATION PACKAGE	FOGLIO N° / SHEET	: 3 DI : 3 OF

FOGLIO DATI PER FILTRO
FILTER DATA SHEET

DATI GENERALI
GENERAL DATA

1	QUANTITA' / QUANTITY	:	2
2	ITEM / TAG	:	S-64001A/B
3	SERVIZIO / SERVICE	:	DUST REMOVING
4			

DATI PROGETTO CALDARERIA
VESSELS DESIGN DATA

5	PRESSIONE PROGETTO / DESIGN PRESSURE	:	12 barg	TEMPERATURA PROGETTO / DESIGN TEMPERATURE	:	-29 / +80 °C
6	MATERIALE / MATERIAL	:	LTCS	SOVRASPESS. CORROSIONE / CORROSION OVER-THICKNESS	:	3 mm
7	NORMATIVA PROGETTO / DESIGN CODE	:	ASME VIII DIV.1	NORMATIVA COLLAUDO / INSPECTION CODE	:	2014/68/EU PED
8						

DATI FUNZIONALI
FUNCTIONAL DATA

9	GAS DA TRATTARE / GAS TO BE TREATED	:	NITROGEN 97%	PORTATA IN INGRESSO / INLET FLOWRATE	:	60	Nm^3/h
10	PRESSIONE DI ESERCIZIO / OPERATING PRESSURE	:	8.5 barg	TEMPERATURA DI ESERCIZIO / OPERATING TEMPERATURE	:	35	°C
11	PERDITA DI CARICO/FILTRO PULITO / PRESSURE DROP/CLEAN FILTER	:	0.1 bar	PERDITA DI CARICO/FILTRO SPORCO / PRESSURE DROP/DIRTY FILTER	:	0.3	bar
12	EFFICIENZA / EFFICIENCY	:	99.9 %	GRADO DI FILTRAZIONE / FILTRATION DEGREE	:	1	µm
13	OLIO RESIDUO / RESIDUAL OIL	:	N/A				
14							

CARATTERISTICHE ELEMENTI FILTRANTI
FILTRATION ELEMENTS DATA

15	TIPO ELEMENTO FILTRANTE / FILTRATION ELEMENT TYPE	:	CARTRIDGE	MATERIALE / MATERIAL	:	COALESCING MICROFIBER
16	N° CARTUCCE PER FILTRO / No. OF ELEMENTS/EACH FILTER	:	1	MODELLO / MODEL	:	30A
17						

STRUMENTI - ACCESSORI
INSTRUMENTS - ACCESSORIES

18	☐	BY-PASS FILTRO / FILTER BY-PASS						
19	☒	TUBAZIONE DI RACCORDO FILTRO / CONNECTION PIPE TO FILTER						
20	☒	VALVOLE INTERCETTAZIONE / ON/OFF VALVES	☒	2 VIE / 2-WAY	☐	3 VIE / 3-WAY	☐	AUTOMATICHE / AUTOMATIC
21	☐	MANOMETRO DIFFERENZIALE / DIFFERENTIAL PRESSURE GAUGE						
22	☒	TRASMETTITORE DI PRESSIONE DIFFERENZIALE / DIFFERENTIAL PRESSURE TRANSMITTER	AS PER P&ID NO. 1724000437-PR-PID-00018					
23	☒	VALVOLA DI DRENAGGIO / DRAIN VALVE						
24	☐	SCARICATORE DI CONDENSA / STEAM TRAP			☐	AUTOMATICO / AUTOMATIC	☐	GALLEGGIANTE / FLOATING
25	☐	VALVOLE DI SICUREZZA / SAFETY VALVES						
26	☒	VERNICIATURA / PAINTING	☒	EXTERNAL / ACC. TO 1724000437-MAT-PRO-00021	☐	INTERNAL		

NOTE / REMARKS :

REV. REV.	DESCRIZIONE / DESCRIPTION	EMESSO / ISSUED	APPROVATO / APPROVED	DATA / DATE
03	ACCEPTED FOR CONSTRUCTION	GT	TM	03-feb-25
02	ISSUE FOR REVIEW	GT	TM	21-dic-24
01	ISSUE FOR REVIEW	GT	TM	08-mag-24
00	ISSUE FOR REVIEW	GT	TM	28-mar-24