

## DATA SHEET FOR PSA NITROGEN GENERATOR PACKAGE(Y-285421) OF **FQN**

Owner Doc.No.	CMIT-240048-728-PCS-15.17-1002					
Job's Doc. No.	253001D0728TE01D19-2					
Phase	Detailed Des	sign				
Rev.	В	Page 1 of 8				

Company:	CMIT	CNOOC IRAQ LIMITED
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FQN NEW DEGASSING STATION UPGRADING PROJECT Project:

FQN DEGASSING STATION Unit:

Contract No.: CMIT-PRT-10.53-240048

> Discipline: **PCS**

Yu H.L. Prepared by:

Checked by:

Li ch. q. Approved by:

В	ISSUED FOR APPROVAL	Yu.H.L	Li.CH.Q	Liu.ming	20250721
A	ISSUED FOR REVIEW	Yu.H.L	Li.CH.Q	Liu.ming	20250618
Rev.	Description	Prepared	Checked	Approved	Date

								Owner Doo	.No. CN	IIT-240	048-72	28-PCS-	15.17-1002	
中海油石化	工程有限公司 al Engineering Co.,Ltd.	DATA	SHEET	FOR PSA N	NITRO	GEN	GENERATO	OR <sup>Job's Doc.</sup>	No. 25	3001[	00728	TE01D	19-2	
CNOOC Petrochemic	al Engineering Co.,Ltd.		PAC	KAGE(Y-28	35421)	OF F	QN	Phase			Detai	led Des	sign	
								Rev.		В		Page	2 of 8	
APPLICABLE TO:  • PROPOSAL	JOB	FQN NE		SSING STATI	ON UP	GRADI	NG	CLIEN	ΝT	CN	ooc	IRAC	LIMITED	
• PURCHASE	LOCATION			IRAC	Q			QUANT	ITY			1		
o AS-BUILT	UNIT			728	MANUFACTURER									
1 SITE CONDIT	IONS AND	GENER	AL DAT	A										
AMBIENT TEMPERA	ATURE (°C)						Max.: 55				Mir	า.: <b>-</b> 5		
RELATIVE HUMIDIT	Y (%)						Max.: 80				Mir	า.: 25		
ATMOSPHERIC PR	ESSURE (kPa	1)					Max.:102				Miı	า.:98		
AREA CLASSIFICAT	ΓΙΟΝ							SAFE	AREA					
NOISE LIMITATION								≤85 [d	B(A)]					
ALTITUDE								<b>4</b> ~24 m	n ASL					
INSTALLATION							INDOOR			ı	JNDE	R SHE	D	
COATING SYSTEM							AS MAN	NUFACTUR	ER'S	STAN	DARD	)		
2 WEIGHTS AN	ID SPACE F	REQUIR	EMENTS	 S										
EMPTY W	EIGHT (Kg)		V	/TA	S	HIPPI	NG WEIGHTS	(Kg)			V	ΤA		
OPERATING	WEIGHT (Kg	)	V	′TA	APPR	OXIMA	ATE SPACE (L	_ x W x H)			V	ΤA		
3 TESTING REG	QUIREMEN	TS												
•					REQ'D					WIT	NESS	3		
PERFORMANCE					YES					YES				
MECHANICAL RUN	TEST				YES	YES								
COMPLETE UNIT T	MECHANICAL RUN TEST COMPLETE UNIT TEST					YES					ΈS			
HYDROSTATIC TES	ST				YES					1	10			
NOISE TEST					YES					1	NO			
TAG NO	E-28	35421A	'B	SER\	/ICE		PRE-CC	OLER		QU	ANTI	TY	2	
1 CODE, REGU	LATIONS A	ND SP	ECIFICA	TIONS		-			1					
CODES AND REGU	LATIONS	MANUI	ACTURE	R'S STANDA	RD	OFFIC	IAL LANGUA	GE			EN	IGLISH		
GENERAL SPECIFIC	CATIONS					SPEC	IAL SPECIFIC	ATION						
2 OPERATING	CONDITION	NS												
1 PRESSURE					l ме	Pag			0	.9				
2 INLET TEMPERA	ATURF MIN/M	IAX				C C				/65				
3 FLOW NORMAL					1	n³/h				ГА				
4 OUTLET TEMPE						С			≤4	40				
3 PERFORMAN	ICE DATA													
1 PRESSURE DRO	OP (allowed/ca	lculated)			kF	⊃a			30/15	(VTC	)			
2 DESIGN PRESS	URE				MF	Pag			1	.2				
3 DESIGN TEMPE					٥	С				5				
4 INSTALLED ELE						W				/TC)				
5 ELECTRICAL SU			ncy/Nos of	Phases)	V/H	Hz/-				50/3				
6 CONDENSING C		ID			<u> </u>	-				ir				
7 REFRIGERANT					.	-				ГА				
8 COMPRESSOR					<u> </u>	-				ГА				
9 NOISE LIMITATI	-				<del>                                     </del>	BA				35				
10 NUMBER OF HE	AT EXCHAN	jERS			<del>                                     </del>	-				.0				
11 DESIGN LIFE					yea	ars			2	5				



# DATA SHEET FOR PSA NITROGEN GENERATOR PACKAGE(Y-285421) OF FQN

 Owner Doc.No.
 CMIT-240048-728-PCS-15.17-1002

 Job's Doc. No.
 253001D0728TE01D19-2

 Phase
 Detailed Design

 Rev.
 B
 Page 3 of 8

TAG NO	DRY-2	285421A/B	SERVICE	REFR	IGERANT DRYER	QUANTITY	2		
1 CODE, REGU	LATIONS	AND SPECIFI	CATIONS	-		-			
CODES AND REGU	LATIONS	ASN	IE VIII DIV. 1	OFFIC	ENGI	ENGLISH			
GENERAL SPECIFIC	CATIONS			SPEC	IAL SPECIFICATION				
2 OPERATING	CONDITIC	ONS							
1 CHARACTERIST	TICS OF WE	T AIR(INLET)							
2 PRESSURE		, ,		MPag		0.9			
3 TEMPERATURE	MIN/MAX			°C		5/38			
4 FLOW NORMAL	/DESIGN			Nm³/h		VTA			
5 CHARACTERIST	TICS OF DR	Y AIR(OUTLET)							
6 FLOW NORMAL	/DESIGN			Nm³/h		VTA			
7 DEW POINT				°C	5°C (	(at 0.9MPag)			
8 OUTLET TEMPE	RATURE			°C		30°C			
3 DRYER CHAF	RACTERIS	STICS							
					HEATLESS REGENER	RATION			
1 REGENERATION	N TYPE				HEAT REGENERATIO	N			
					REFRIGERATION				
2 INLET AND OUT	LET FILTRA	ATION			OIL (2)	IQUID 🖸 🛭	DUST		
3 NUMBER OF INI	ET FILTER	S AND CAPACIT	Y	-		1*100%			
4 OUTLET FILTRA	TION (dust)			μm	≤3				
5 NUMBER OF OU	JTLET FILTE	ERS AND CAPAC	ITY	-	2*100%				
6 OUTLET OIL CO	NCENTRAT	TON		mg/m <sup>3</sup>	≤10				
7 OVERALL PACK	AGE PRESS	SURE DROP (allo	wed/calculated)	kPa	50/30 (VTC)				
8 DESIGN PRESS	URE			MPag		1.2			
9 DESIGN TEMPE	RATURE			°C		85			
10 TYPE OF REFRI	GERANT					VTA			
11 REFRIGERANT				kG		VTA			
12 COOLING AIR V	OLUMN			m³/h	VTA				
13 TYPE OF DRAIN					ELECTRON				
14 TYPE OF COMP					CLOSED TYPE				
15 ELECTRICAL SU			s of Phases)	V/ Hz/-					
16 INSTALLED ELE				kW	2	20 (VTC)			
17 NOISE LIMITATI	ON (1 m free	e field)		dBA		≤85			
18 WEIGHT AND S	IZE			kG					

### NOTES:

VTC: Vendor to confirm; VTA: Vendor to advise.

- 1 One air compressor, one pre-cooler, one refrigerant dryer and all other accessories shall be mounted to a skid in the container and equipped with air-conditioner.
- 2 For scope of supply of this skid, refer to P&ID CMIT-240048-728-PCS-15.11-1003、1004. For general air compression system arrangement, refer to equipment layout drawing CMIT-240048-728-PCS-15.01-1001.
- 3 Vendor shall provide P&ID, Data Sheet, Caculation, General Arrangement, Erection/Installation Instruction, Spare-Parts List, Operating manual, Testing Certificates, etc. for EPC contractor approval.
- 4 The interconnecting piping, piping supports and cable trays, etc. shall be prefabricated on vendor's shop. The welding work is not permitted at site. The detail materials of piping system and valves shall comply with CMIT-240048-728-PIP-15.03-3001\_A\_SPECIFICATION FOR PROCESS PIPING MATERIALS, CMIT-240048-728-PIP-15.03-3002\_SPECIFICATION FOR MANUAL VALVES. All piping systemwelding and NDT shall comply with CMIT-240048-728-EQP-15.03-0001\_A\_SPECIFICATION FOR PIPING AND PIPELINE WELDING IN NON-SOUR SERVICE.
- 5 Material certificates shall be furnished as per EN 10204 Type 3.1 for pressure parts / parts directly welded to pressure parts and EN 10204 Type 2.2 for non-pressure/structural parts.

										Owner Doc.	No. CI	ЛIT-24004	8-728-PCS-15.1	17-1002
		工和专用公司	D.	ATA S	HEET FOR	RPSA	NITE	ROGEN		Job's Doc. N	lo. 25	53001D	0728TE01D	19-2
	CNOOC Petrochemic	工程有限公司 cal Engineering Co.,Ltd.						21) OF FQN	I	Phase		De	tailed Desig	ın
						·				Rev.		В	Page 4	l of 8
APPL	ICABLE TO:	ЈОВ	FON NEW	DEGAS	SING STATION	I LIPGR	ADING	PRO IECT	CI	IENT		CNO	OC IRAQ LI	
	OPOSAL	LOCATION	T QIV IVEV	DEGAG	IRAC			- ROOLOT		JANTITY		10110	1	
	RCHASE												<u>'</u>	
0 AS-	BUILT	UNIT			728				MA	ANUFAC	TURE	₹		
1 SI	TE CONDIT	IONS AND	GENERA	L DAT	Ά									
AMBIE	NT TEMPERA	ATURE (°C)						Max.: 55				N	1in.: -5	
	TIVE HUMIDIT	_ , ,						Max.: 80					lin.: 25	
		ESSURE (kPa)	)					Max.:102				N.	/lin.:98	
-	CLASSIFICAT	TON								SAFE AF				
ALTIT	LIDE									≤85 [dB( <mark>4</mark> ~24 m <i>F</i>	/-			
	LLATION							OUTDOOR		4~24 111 7	AOL .	LIND	ER SHED	
	ING SYSTEM					AS MANU		JRER'S STANDA	RD	AND SPEC	: CMIT-			03-00-000
2 W	FIGHTS AN	D SPACE R	FOLIRE	MENT	s									
<u> </u>		EIGHT (Kg)			/TA	Q1	HIPDII	NG WEIGHTS	: (K	(a)			VTA	
		WEIGHT (Kg)	, +		/TA			ATE SPACE (I	<u>`</u>	<del>"</del>			VTA	
3 ТЕ		QUIREMENT			J. 1111/	5, ,,,,, (1	- ^							
3115	STING KE	ZUINEIVIEN	13	1		חבטים					,	WITNES	20	
DEDE	ORMANCE					REQ'D YES			_			YES	55	
	IANICAL RUN	TEST				YES						YES		
	PLETE UNIT T		YES						YES					
HYDR	OSTATIC TES	ST				YES								
NOISE	TEST					YES								
T	AG NO	NG-2	85421A/E	3	SERV	/ICE	F	SA NITROGEN	N GENERATOR QUANTITY					2
1 C	DDE, REGU	LATIONS A	ND SPEC	CIFICA	TIONS									•
	S AND REGU				II DIV. 1		OFFI	CIAL LANGUA	GE				ENGLISH	
	RAL SPECIFIC					SPECIAL SPECIFICA								
2 0	PERATING	CONDITION	ıs								•			
		ΓΕ(N <sub>2</sub> , OUTLE				l N	m³/h				100			
-	ATING PRESS	`	- /			MPaG					0.85			
DISCH	ARGE OPER	ATING PRESS	SURE			М	PaG				0.8			
OPER	ATING TEMP	ERATURE					°C				30			
POWE	R (Voltage/Fre	equency/Nos o	f Phases)				-			400V	/50HZ	/3Phase	)	
-	CULAR WEIG						-				VTA	1		
3 DE	ESIGN DAT	A												
NITRO	GEN PURITY	•					%				≥99.	9		
	N TEMPERA						°C				85			
-	N PRESSURE					_	PaG				1.2			
	ON LIFE	on,Inspection i	equiremen	te Paint	ina	ye	ears	Defends 41	\c. \	AD (CAAIT	25	40 700	DCS 45 04	1002)
	COPE OF SI		equilemen	to.i aiiit	iiig			Refer to tr	ie iv	/IR (CIVITI	-2400	40-720-	PCS-15.21-	1002)
4.1	PSA nitrogen	generator	AS	ME VIII I	DIV. 1 & CMIT-	240048-	728-E	QP-15.03-0001					e vessels (2 d em, Instrume	
(NG-285421A/B)										automati	valve	s, piping	and all other refer to the P	
4.2 O <sub>2</sub> analyzer						-				Type/Desi Approved			by Vendor and	I
4.3 Silencer (SIL-285421A/B) As manu						turer's s	standa	rd				. ,		
4.4	IA buffer vess	sel (V-285421A	/B)		Refer to t	he data	sheet						vessel and r	
4.5	Nitrogen buffer	vessel(V-28542	22A/E		Refer to t	he data	sheet		buffer vessel shall be caculated by ver and provide to EPC contractor for app					
4.6	Interconnectin	g piping, valves	All cor	nection	ıs shall be, as	minimu	ım, at	the Skid		Refer to	the P	RID.		
	instrumentati	on & cables	Battar	y-Limits										
										-				
4.7	Foundation be	olts												
4.7		olts												
	Foundation be	olts				IOTES:								

#### VTC: Vendor to confirm; VTA: Vendor to advise.

- 1 Two MOL sieve vessels, IA buffer vessel, nitrogen buffer vessel and all other accessories shall be mounted to a skid.
- 2 For scope of supply of this skid, refer to CMIT-240048-728-PCS-15.11-1003、1004.For general PSA nitrogen generator arrangement, refer to equipment layout drawing CMIT-240048-728-PCS-15.01-1001.
- 3 Vendor shall provide P&ID, Data Sheet, Caculation, General Arrangement, Erection/Installation Instruction, Spare-Parts List, Operating manual, Vessels Testing Certificates, etc. for EPC contractor approval.
- 4 The interconnecting piping, piping supports and cable trays, etc. shall be prefabricated on vendor's shop. The welding work is not permitted at site detail materials of piping system and valves shall comply with CMIT-240048-728-PIP-15.03-3001\_A\_SPECIFICATION FOR PROCESS PIPING MATERIALS, CMIT-240048-728-PIP-15.03-3002\_SPECIFICATION FOR MANUAL VALVES.All piping systemwelding and NDT shall comply with CMIT-240048-728-EQP-15.03-0001\_A\_SPECIFICATION FOR PIPING AND PIPELINE WELDING IN NON-SOUR SERVICE.
- 5 Material certificates shall be furnished as per EN 10204 Type 3.1 for pressure parts / parts directly welded to pressure parts and EN 10204 Type 2.2 for non-pressure/structural parts.
- 6 Equipment shall conform to the specification for welded pressure vessels.

									C	Owner Doc.No	o. CMIT-	240048-728-PCS-1	5.17-1002		
	(1) 中海油石化∶	工程有限公司 cal Engineering Co.,Ltd.	DATA S	HEET F	OR PSA N	NTROGE	N G	<b>ENERAT</b>	OR J	lob's Doc. No	25300	1D0728TE01D	19-2		
	CNOUC Petrochemic	æi ⊏ngineering Co.,Ltd.		PAC	KAGE(Y-28	35421) OI	F FC	QΝ		Phase		Detailed Des	ign		
									I	Rev.	E	Page	5 of 8		
	PPLICABLE TO: PROPOSAL	JOB	FQN NEW	DEGASSI	NG STATION	UPGRADIN	IG PR	OJECT		CLIENT		CNOOC IRAQ	LIMITED		
	PURCHASE	LOCATION			IRAC	AQ QUANTITY					Y	1			
0	AS-BUILT	UNIT			728	MANUFACTU!									
1	SITE CONDIT	IONS AND	GENERA	L DATA	١										
AM	BIENT TEMPERA	TURE (°C)					ı	Max.: 55				Min.: -5			
RE	LATIVE HUMIDIT	Y (%)					ı	Max.: 80				Min.: 25			
ΑT	MOSPHERIC PRE	ESSURE (kPa)					N	Max.:102				Min.:98			
AR	EA CLASSIFICAT	ION								SAFE AF	REA				
NO	ISE LIMITATION									≤85 [dB(	A)]				
AL <sup>-</sup>	ΓΙΤUDE									<mark>4~</mark> 24 m <i>A</i>	ASL				
INS	TALLATION						0	UTDOOR				UNDER SHEE	)		
СО	ATING SYSTEM							AS MAN	NUF/	ACTURE	R'S STA	ANDARD			
2	WEIGHTS AN	D SPACE R	EQUIRE	MENTS											
		EIGHT (Kg)			ΤΑ	SHIF	PPING	G WEIGHTS	S (Ka	)		VTA			
		WEIGHT (Kg)			ΤΑ			E SPACE (I	• •			VTA			
		( 0/					<u> </u>	,		- /	I		_		
	TAG NO	V-28	5421A/E	3	SERV	/ICE	I/	BUFFER	VE	SSEL	<u> </u>	UANTITY	2		
1	Process Data														
_	SERVICE:										IA				
	OPERATING PRI					MPag	_				0.85				
	OPERATING TE					°C	_				30				
	GAS FLOWRATE					Nm³/h	-+				~400				
_	SET PRESSURE		/ALVES			MPag					1.2				
2	Design Criter	ia													
1	Design Code:		ASME Se	c. VIII Div	. 1 -2023 ED	Design Life	e:				Year	25			
2	Design Temperat	ure:	$^{\circ}$		85	Ambient T	empe	erature:			°C	Min5 Max	c. 55		
3	Design Pressure:		MPag		1.2	Min. Desig	gn Me	etal Tempera	ature:	:	°C	-5			
4	External Design F	Pressure:	MPag		N/A	Max Allowa	ble E	xternal Worki	ng Pr	essure:	MPa	g N/A	4		
	Shell Inside Diam	eter:	mm		VTA	Medium:	[	☑Sweet	□Sc		Lethal	□Wet H <sub>2</sub> S			
	Shell Length:		mm		VTA	Location:		□Indoor	<b>☑</b> 0	urdoor	□Unde	rground(Buried)			
_	Skirt Inside Diame	eter:	mm		N/A	Under She						Yes			
	Skirt/Leg Height:		mm		VTA	Vessel Ty						lorizontal □ Ve	rtical ☑		
_	Capacity:		m <sup>3</sup>	-	VTA	Head Type						Semi-Ellipse	•		
	Corrosion Allowar		mm	Shell:2, H	ead:2, Nozzles:2	Liquid Lev		11/1.1a = -15			mm	VT			
	Max. Design Wine Seismic Zone:	u Speea:	m/s	7.	<b>42</b> one 2B	Thickness					mm	VT			
	Joint Efficiency:			<b>-</b>	ne 2B 1 Head:1	Thickness NET WEI	` _	ı).			kg	VT.			
	Max. Allowable Wo	rking Pressure	Mpag		VTA	Full of Wa		/FIGHT			kg	VT			
	MAP (New & Cold	<u> </u>	MPag		VTA	Operating					kg	VT			
	Insulation Thickne	,	mm	<del> </del>		Internal Lin					19	N/A	-		
	Hazardous Area (			Non H	lazardous	External P					СМ	T-230084-1-796-PIP-1	5.03-00-2009		
	General specifica		CMIT-2300	)84-1-796-EQP		Official lan					+	ENGL			
	•					Notes					'				
		· · · · · · · · · · · · · · · · · · ·										<u> </u>			



### DATA SHEET FOR PSA NITROGEN GENERATOR PACKAGE(Y-285421) OF FQN

Owner Doc.No. CMIT-240048-728-PCS-15.17-1002 Job's Doc. No. 253001D0728TE01D19-2 Phase Detailed Design

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							Rev.	В	Pa	age 6 of 8		
3	Interr	nal & Ext	ernal Attac	hments			-					
1	Туре о	f Support:		,	VTA	Demister:			Yes	☑No		
2	Manwa	ay with Dav	rit/Hinge:	⊻Yes	s □No	Trays (sieve):		□Yes ☑No				
3	Vortex	Breaker:		□Yes	s	Skid Mounting:		✓	□No			
4	Insulat	ion Suppor	ts/Clips:	⊻Yes	s □No	Ladders & Platforms:			Yes	⊠No		
5	Heatin	g Coil:		□Yes	s	Inner Ladder Rung:			Yes	⊠No		
6	Lifting	Lugs:		⊻Yes	s □No	Sacrificial Anodes:			Yes	⊠No		
7	Tailing	Lugs:		□Yes	s	Spill Over Weir:			Yes	⊠No		
8	Interna	l Pipes:		□Yes	s	Inlet Distribution:			Yes	⊠No		
9	Earthir	ng Boss:		⊻Yes	s □No							
4	Mate	rials										
1	Materia	al Code:		ASME BPVC	SEC. II 2023 ED	Nozzles (Pipe/Forged):		SA-10	6Gr.B /	/ SA-105N		
2	Shell:			SA5	16Gr.70	Nozzle Flanges:			SA-10	)5N		
3	Head:			SA5	16Gr.70	Backing Plate Welded to Shell:		5	SA 5160	Gr.70		
4	Skirt/sa	ddle/leg:		SA 36/S	A 516 Gr.70	Basing Ring / Anchor Chair:	Ring / Anchor Chair:			/TC)		
5	Tray:				N/A	Insulation Supports/Clips:			١			
6	Bolts:(I	External)		SA 1	93 Gr.B7	Internals Fixed/Removable:			4			
7	Nuts:(E	External)		SA 1	94 Gr.2H	Name Plate & Earthing Boss:			)4			
8	Sacrific	cial Anodes	S:		N/A	Nozzle Flanges Gasket:				te Gaskets With SS316 ering Ring, 4.5mm THK		
5	Fabri	cation a	nd Testing	Requiremer	nts							
1			Non-destru	ctive Testing		Fabrication Code:		ASM	E Sec. \	VIII Div. 1		
2	Joint C	ategory	Test Means	Test Ratio	Grade	NDE Code:		А	SME S	Sec. V		
3		CLIELL	RT	FULL	UW-51	Welding Code:		А	SME S	ec. IX		
4	,	SHELL				Impact Test:			N/A	١		
5	Α	HEAD	RT	FULL	UW-51	Stress Relief (PWHT):		F	As per C	Code		
6		ПЕАО				Positive Material Identification:			Yes	⊠No		
7		В	RT	FULL	UW-51	HIC Testing:			Yes	⊠No		
8						Hydraulic Test Pressure:		MPa(g)	As	s per Code		
9	С	NOZZLE NPS>10 or THK.>29mm	RT	FULL	UW-51	Hardness Test:	As per Code					
10		OTHER	MT/PT	FULL		Third Party Inspection:			Yes	□No		
11		D	MT/PT	FULL		Code Stamp Required:			Yes	⊠No		
\/	TC: Ven	dor to confir	m; VTA: Vendor	to advise		Notes						
				ot and confirm m	atoriala liatad abayı							

- Vendor shall complete this data sheet and confirm materials listed above
- 2. Insulation shall be provided as per CMIT-240048-728-PIP-15.03-3003.
- 3. Nozzles orientation and size will be difined by vendor.
- 4. Pressure bearing parts shall be certified in accordance with EN 10204 Type 3.1. Non-pressure bearing parts shall be certified in accordance with EN 10204 Type 2.2.
- 5.Materials which are directly attached/welded to shell/heads shall be of same material grade as shell/head.
- 6.All nozzles shall be set-in type only unless otherwise specified.
- 7.Bolt Holes shall straddle to vessel centerline.
- 8. Nozzle flanges shall be as per ASME B16.5 for sizes up to and indluding 24"NPS.
- 9.Nozzles shall be designed for MAWP of equipment. The MAWP shall be limited by the lesser of the shell, head or flange rating.
- 10. Vendor shall be responsible for carrying out WRC537/297 local load analysis for nozzles to shell junction for other external attachments.
- 11.FEA analysis shall be performed if the shell to nozzle/attachment junction isoutside the scope of WRC537/297.
- 12. The nominal thickness of the head shall not be less than the minimum required thickness of the connecting cylindrical shell.
- 13.Referenced P&ID:CMIT-240048-728-PCS-15.11-1003、1004.

	中海油石化I CNOOC Petrochemic	工程有限公司 al Engineering Co.,Ltd.	DATA S						OR	Job's Doc. I		CMIT-240048-728-PCS-15.17-1002 253001D0728TE01D19-2 Detailed Design				
				PAC	KAGE(Y-28	35421) O	-  -	QN		Phase						
										Rev.		В		Page	7 of 8	
	PPLICABLE TO: PROPOSAL	JOB	FQN NEW	DEGASS	NG STATION		IG P	ROJECT		CLIEN		<u> </u>	CNOOCI		_IMITED	
•	PURCHASE	LOCATION			IRAC	<u> </u>				QUANTI	TY			1		
0.	AS-BUILT	UNIT			728				MA	NUFACT	URER					
1	SITE CONDIT	IONS AND	GENERA	L DAT	4											
AM	BIENT TEMPERA	TURE (°C)						Max.: 55					Min.:	-5		
	LATIVE HUMIDIT							Max.: 80					Min.:	25		
	MOSPHERIC PRE	. ,	)					Max.:102					Min.:	98		
	EA CLASSIFICAT		<u>'</u>							SAFE A	RFA					
	ISE LIMITATION	1011							≤85 [dl							
_	TITUDE									4~24 m	` /-					
	TALLATION							OUTDOOR		. 27111	,		UNDER	SHED		
	ATING SYSTEM								VI IE	ACTURI	=Ric (	NAT?				
Ť		0.004.00		NAC->:		<u> </u>		AO IVIAI	NOI"	AUTURI	_1\0\	) i /\	אטאועט			
2	WEIGHTS AN		LQUIRE													
	EMPTY WE	EIGHT (Kg)		TA	SHIF	PIN	NG WEIGHTS	3 (K	g)			VTA	4			
	OPERATING	WEIGHT (Kg)		V	TA	APPROX	IMA	TE SPACE (	Lх۱	W x H)			VTA	١		
	TAG NO	V-28	SERV	/ICE	N	ITROGEN BUI	FFEI	R VESSE	L	Ql	JANTIT	Y	2			
1	Process Data															
1	SERVICE:									NITRO	SEN (I	Purity	/: 99.9% <u>)</u>	)		
2	OPERATING PRI	ESSURE				MPag	MPag					0.8				
3	OPERATING TEN	MPERATURE				°C					4	40				
4	GAS FLOWRATE					Nm³/h					1	00				
5	SET PRESSURE	OF SAFETY \	/ALVES			MPag					1	.2				
2	Design Criteri	a						•								
_	Design Code:		ASME Se	c. VIII Div	. 1 -2023 ED	Design Lif	e:				Ύ	ears		25		
_	Design Temperat	nie.	°C		85	Ambient Temperature:					_		Min5	Max	. 55	
	Design Pressure:		MPag		1.2	Min. Design Metal Temperature:						℃ -5				
_	External Design F	ressure:	MPag		N/A	1		External Worki								
-	Shell Inside Diam		mm		VTA	Medium:		☑Sweet			□Lethal □Wet H <sub>2</sub> S			-		
$\rightarrow$	Shell Length:		mm		VTA	Location:				Ourdoor	□Underground(Burie					
	Skirt Inside Diame	eter:	mm		N/A	Under She	ed:				Yes					
_	Skirt/Leg Height:		mm		VTA	Vessel Ty					+	Но	rizontal 🗆		 tical	
_	Capacity:		m <sup>3</sup>		VTA	Head Type					2:		emi-Ellips			
$\rightarrow$	Corrosion Allowar	nce:	mm		ead:2, Nozzles:2	Liquid Lev						nm		VTA	<del></del>	
$\rightarrow$	Max. Design Wind		m/s		42	Thickness		nell/Head):			_	nm		VTA		
_	Seismic Zone:			Zo	ne 2B	Thickness	_				n	nm		VTA	<del></del>	
13	Joint Efficiency:			Shell:	1 Head:1	NET WEI						кg		VTA	<del></del>	
14	Max. Allowable Wo	rking Pressure:	Mpag		VTA	Full of Wa	ter \	WEIGHT			_	٠ ۲g		VTA	١	
15	MAP (New & Cold	d):	MPag		VTA	Operating	WE	IGHT			-	٠g		VTA	١	
16	Insulation Thickne	ess:		Internal Li	ning	/ Coating:					N	/A				
17	Hazardous Area (	Classification:		Non H	lazardous	External P	aint	System:				CMIT-	230084-1-79	6-PIP-15	.03-00-2009	
18	General specifica	tion	CMIT-2300	84-1-796-EQP	-15.03-00-0001	Official lar	gua	age					E	NGLI	SH	
						Notes										



# ■ 中海油石化工程有限公司 DATA SHEET FOR PSA NITROGEN GENERATOR Job's Doc. No. 253001D0728TE01D19-2

Owner Doc.No. CMIT-240048-728-PCS-15.17-1002

	C C	NOOC Petrochemic	al Engineering Co.,Ltd.		•						
				F	PACKAGE(Y-28	85421) OF FQN	Phase	De	etailed D	Design	
							Rev.	В	Pa	age 8 of 8	
3	Inter	nal & Ext	ternal Attac	hments							
1	Туре	of Support:			VTA	Demister:			Yes	☑No	
2	Manwa	ay with Dav	vit/Hinge:	⊻Ye	s □No	Trays (sieve):			Yes	☑No	
3	Vortex	Breaker:		□Ye	s	Skid Mounting:		☑Yes □No			
4	Insula	tion Suppor	ts/Clips:	<b>⊻</b> Ye	s □No	Ladders & Platforms:	☑No				
5	Heatin	ng Coil:		□Ye	s	Inner Ladder Rung:			Yes	☑No	
6	Lifting	Lugs:		⊻Ye	s □No	Sacrificial Anodes:			Yes	☑No	
7	Tailing	g Lugs:		□Ye	s	Spill Over Weir:	Spill Over Weir:				
8	Interna	al Pipes:		□Ye	s	Inlet Distribution:			∃Yes	☑No	
9	Earthi	ng Boss:		⊻Ye	s □No						
4	Mate	rials									
1	Materi	ial Code:		ASME BPVC	SEC. II 2023 ED	Nozzles (Pipe/Forged):		SA-10	)6Gr.B /	' SA-105N	
2	Shell:			SA5	16Gr.70	Nozzle Flanges:			SA-10	5N	
3	Head:			SA5	16Gr.70	Backing Plate Welded to Shel	l:		SA 516G	∃r.70	
4	Skirt/sa	addle/leg:		SA 36/S	A 516 Gr.70	Basing Ring / Anchor Chair:		;	SA-36(V	/TC)	
5	Tray:				N/A	Insulation Supports/Clips:	sulation Supports/Clips:				
6	Bolts:(	(External)		SA 1	93 Gr.B7	Internals Fixed/Removable:			VTA	١	
7	Nuts:(	External)		SA 194 Gr.2H Name Plate & Earthing Boss: SS304					)4		
8	8 Sacrificial Anodes: N/A Nozzle Flanç				Nozzle Flanges Gasket:				te Gaskets With SS316 ering Ring, 4.5mm THK		
5	Fabri	ication a	nd Testing	Requireme	nts						
1			Non-destru	ctive Testing		Fabrication Code:		ASM	E Sec. \	VIII Div. 1	
2	Joint C	Category	Test Means	Test Ratio	Grade	NDE Code:	NDE Code:				
3		SHELL	RT	FULL	UW-51	Welding Code:		А	SME Se	ec. IX	
4	A	SHELL				Impact Test:			N/A	Ļ	
5	] ^	HEAD	RT	FULL	UW-51	Stress Relief (PWHT):	ress Relief (PWHT):		As per C	Code	
6		TILAD				Positive Material Identification	:		∃Yes	☑No	
7		В	RT	FULL	UW-51	HIC Testing:			Yes	☑No	
8						Hydraulic Test Pressure:		MPa(g)	As	per Code	
9	С	NOZZLE NPS>10 or THK.>29mm	RT	FULL	UW-51	Hardness Test:		,	As per C	Code	
10		OTHER	MT/PT	FULL		Third Party Inspection:				□No	
11		D	MT/PT	FULL		Code Stamp Required:			]Yes	☑No	
V	TC: Ven	dor to confir	m; VTA: Vendor	to advise		Notes					
_					naterials listed above	e.					
					8-PIP-15.03-3003.						
_			and size will be			0 4 No	L		ide EN 4	0004 Tr 0 0	
						<ol> <li>3.1.Non-pressure bearing parts shall ame material grade as shell/head.</li> </ol>	be certified if	n accordance v	VITT EN 10	0204 Type 2.2.	
_			et-in type only u			ano material grade de enemeneda.					
-			ldle to vessel ce								
					up to and indluding						
			-			limited by the lesser of the shell,he					
_						nalysis for nozzles to shell junction		emai attachme	ents.		
111.	ı EA an	aiyəiə Silali L	se benomiea ii r	HE SHEH IO HOZZ	ieratiaciinient juncti	on isoutside the scope of WRC537	1231.				

12. The nominal thickness of the head shal not be less than the minimum required thickness of the connecting cylindrical shell.

13.Referenced P&ID:CMIT-240048-728-PCS-15.11-1003、1004.