

DESIGN	DISCIPLINE	SIGNATURE
		DATE

金县1-1油田**CEPA**平台加挂**6**口调整井项目
(详细设计)

JOB NO. 2026MD002

INSTRUMENT

B	26.02.04	ISSUED FOR COMMENTS	刘新宇	陈毅仲	林峰		
REV.	DATE	DESCRIPTION	BY	CH'K	REV'W	EXAM.	APPR.
CLIENT CNOOC(China) Limited Tianjin		JX1-1 CEPA DATA SHEET FOR ULTRASONIC FLOWMETER (CN-USP-BHB-JX1-1)	 中海油能源发展装备技术有限公司 CNOOC EnerTech Equipment Technology Co., Ltd.				
			DOCUMENT NO.				REV.
			MD(DD)-DDS-CEPA-IN-1009				B
CERTIFI. NO. A212002897							

[illegible]

				DATA SHEET FOR ULTRASONIC FLOWMETER			 中海油能源发展装备技术有限公司 CNOOC EnerTech Equipment Technology Co., Ltd.
				sheet 2 of 4			
No.	Bv	Date	Revision Description	Code:	DWG No.:	MD(DD)-DDS-CEPA-IN-1009	Rev.: B

General Notes :

1. Site Condition

The instruments must be able to withstand the effect of a highly salt laden atmosphere couple with high humidity.

Ambient Air Temperature Range: -21.9~34 °C

Relative Humidity: 100%

2. Vendor shall refer the following document for other general requirements. Specification For General Instrumentation: SPC-JX1-1-IN-1001 .

3. Painting of all external surfaces of flowmeters and accessories shall be in accordance with Project Specification. Specification for Protective Coating Document no. SPC-JX1-1-CC-1001.

4. Engraved traffolyte 316 SS nameplates with color white/black/white shall be provided by vendor with following details:

- Tag number,
- Manufacturer's name,
- Serial number and trade mark,
- Model number,
- Hazardous area certification,
- Flange size and rating,
- Material of construction,
- Power supply,
- Year of manufacture.

5. Vendor shall provide the following documents:

- Detail specification/data sheet
- Detail instrument drawing showing instrument assembly
- Instruction/Maintenance Manual

6. Vendor must supply the formal specification to clarify the product's parameters .

7. The flowmeter shall be supplied as a complete unit which contains:

- Transducers with Flanged end connection, suitable to mount on the spool piece.
- Provision for replacement of transducers to perform on line maintenance, without shutting down of the process.
- Cables between sensor & transmitter and accessories for mounting transmitter.

8. All cables used for this package shall be armoured cable. Armoured cable shall be suitable for offshore environmental conditions with necessary cable glands at both ends, to connect the transducers and electronic transmitter. The cable shall be HOFR(Heat-Resisting, Oil-Resisting and Flame Retard), low smoke zero halogen, cross linked polyethylene primary insulation type.

9. All cables supplied by vendor shall be laid out and wire connected by vendor.

10. Installation accessories shall be supplied and installed by Vendor, or integral to the metering element/flowmeter computer etc. by Vendor.

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No.	By	Date	Revision Description	Code:	DWG No.: MD(DD)-DDS-WHPG-IN-1009	sheet 3 of 4	REV B

GENERAL	1	Tag No.				CEPA-FIT-1502																												
	2	Service				For Pig Launcher CEPA-PL-1502 Inlet Pipeline																												
	3	P&ID No.		P&ID Rev. No.		MD(DD)-DWG-CEPA-PR-1501		Rev.B																										
	4	Line No.		Line Sch.		3"-AG-1501-D2-HT25		SCH 160																										
	5	Line Material				A106 Gr. B SMLS, BE, ASME B31.3																												
	6	Area Classification				Class I, Zone 2, Group II A, T4																												
PROCESS CONDITIONS	7	Fluid				Associated Gas																												
	8	Flow	Min.	Norm.	Max.	0	Sm ³ /h	Sm ³ /h	11042 Sm ³ /h																									
	9	Pressure	Min.	Norm.	Max.		KPaG	3750~6350 KPaG	6800 KPaG																									
	10	Temperature	Min.	Norm.	Max.		℃	70 ℃	78 ℃																									
	11	Max. Allowable Differential Pressure				50	KPa																											
	12	Design Temperature / Pressure				150	℃		8255 KPaG																									
	13	Oper. Specific Gravity																																
	14	Viscosity				0.01	cP																											
	15	Molecular Weight				16.96																												
	16	Specific Heat Ratio	Compressibility			0.000717		0.9973																										
	17	Vapor Pressure	Critical Pressure			KPaA		KPaA																										
	18	Bi-Directional Flow				Yes																												
	METERING ELEMENT	19																																
20		Connection Size	Type & Rating			3	in		ANSI 600LB RF																									
21		Measure Principle				Wide-beam Transit-time																												
22		Flowmeter Type				Inline Spool Piece Type																												
23		Transducer Type				Integral Mounted with Spool Piece																												
24		Number of Path	Mounting Type			2	Pathes		Cross-duct Mounting																									
25		Number of Transducers				4 Transducers																												
26		Transducer Material				316SS																												
27		Tube Material				Carbon Steel (A106 Gr.B)																												
28		Connection Material				Carbon Steel (A105)																												
29		Measure Range				150~15000	Sm ³ /h																											
30		Accuracy				±1.0% FS																												
31		Repeatability				±0.2%																												
32	Rangeability				100:1																													
33	Power Supply				Powered by Transmitter																													
TRANSMITTER	34																																	
	35	Tag No.				CEPA-FIT-1502																												
	36	Function				Local Indication and Transmit to CCS																												
	37	Mounting				Integrated With Metering Element																												
	38	Enclosure Material				Copper Free Aluminum with Epoxy Coating																												
	39	Explosion Proof	Weather Proof			Ex'd' II B T4		IP56																										
	40	Power Supply				24V DC, 4-Wire Type																												
	41	Cable Entry				1/2" NPTF * 2																												
	42	Output				4~20 mA+Hart																												
	43	Calibrated Range				0~15000	Sm ³ /h																											
	44	Power Consumption				< 20	W																											
	45	Flow Display Type				Local LCD Display, Indicate Flowrate/Totalizer																												
	46	Flowrate Unit	Totalizer Unit			m ³ /h		m ³																										
ACCESSORY AND OPTIONS	47																																	
	48	Signal Cable Length																																
	49	Installation Accessories																																
	50	Pressure/Temp. Compensate				Yes, compensate by CCR																												
	51	Flow Conditioner																																
PURCHASE	52																																	
	53	Manufacture				*																												
	54	Model No.				*																												
	55	Serial No.				*																												
	56																																	
NOTES: 1. * marked field shall be confirmed by vendor.																																		
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