


# Basic Engineering Study for Aung Sinkha Development Project Phase 1A



## DATASHEET FOR SCREW ANCHORS



 <b>PTTEP</b>	<b>PTT Exploration and Production Public Company Limited</b> <b>Aung Sinkha Development Project Phase 1A</b> <b>Basic Engineering</b>
<input checked="" type="checkbox"/> <b>1. APPROVED</b> <input type="checkbox"/> <b>2. APPROVED with comments (Proceed to IFB)</b> <input type="checkbox"/> <b>3. Review with comments</b> <input type="checkbox"/> <b>4. Rejected to be reissued</b> <input type="checkbox"/> <b>5. Not APPROVED</b>	
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<b>Signed:</b>	

C1	02-Feb-23	CP	Issued for Bid (VE)	JK	CJ	SD	SA
A1	10-Jan-23	THS	Issued for Review (VE)	JK	CJ	SD	SA
REV.	DATE	BY	DESCRIPTION	CHECK	APPR.	CHECK	APPR.
				ENGINEERING APPROVAL		COMPANY APPROVAL	

REVISION CODE : A = Issued for Review – B = Issued for Approval – C = Issued for Bid

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	<b>PTTEP INTERNATIONAL LIMITED</b>		
	Basic Engineering Study for Aung Sinkha Development Project Phase 1A		
	MM-ASK-1A-APL02-PLR-DTS-0007	REV. C1	

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<b>Aung Sinkha Development Project PROJECT: Review Comment</b>			<b>PTTEPI RETURN STATUS</b>	<b>Aung Sinkha Development Project PROJECT</b>	
PTTEPI		T.EN		 	
Date issued:	23-Jan-2023	Date Received:			
Issued by:	surasitd	Action on:			
Approval by:	sarana	Approval by:			
Approved					
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COMMENT NO.	SECT.	PAGE & REF.	CLIENT COMMENTS (REVIEWER)	T.EN RESPONSE	COMMENT STATUS OPEN/CLOSED

Comment by:



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 REVISION NO. C1  
 BY CP  
 CHKD JK  
 APPR'D CJ  
 SHEET 2 OF 2

Revision

	PARAMETER	UNIT	VALUE
1	<b>GENERAL</b>		
2	NOMINAL PIPE SIZE	-	NPS8
3	DWG NO.	-	MM-ASK-1A-APL01-PLR-DWG-0013
4	PIPING CLASS	-	#300
5	SERVICE	-	Condensate
6	ENVIRONMENT	-	Onshore Buried Pipeline
7	DESIGN TEMPERATURE (MIN. / MAX.)	°C	0 / 70
8	DESIGN PRESSURE	barg	48.7
9	OPERATING TEMPERATURE (MIN. / MAX.)	°C	20.3 / 44.1
10	OPERATING PRESSURE (MIN. / MAX.)	barg	10.4
11	CORROSION/ EROSION ALLOWANCE	mm	3
12			
13	<b>SCREW ANCHOR</b>		
14	TYPE	-	Double Helix Screw Anchor
15	INSTALLED TYPE	-	Underground
16	SAFETY FACTOR FOR SCREW ANCHOR COMPONENT	-	2
17	ANCHOR SHAFT SIZE AND MATERIAL	-	1 ½" × 1 ½" ASTM A148 grade 105-85
18	HELIX SIZE AND MATERIAL	-	VTA
19	ANCHOR EXTENSION SHAFT SIZE AND MATERIAL	-	1 ½" × 1 ½" ASTM A148 grade 105-85
20	COUPLING MATERIAL	-	ASTM A148 grade 105-85
21	POLYESTER SADDLE	-	VTA
22	PROTECTIVE COATING	-	None
23	CATHODIC PROTECTION BOLTED TO ANCHOR SHAFT	-	Sacrificial Zinc Anode Bolted to Each Anchor Shaft
24	SACRIFICIAL ZINC ANODE SIZE (MINIMUM OF EACH SIDE)	kg	VTA (Note 1)
25			
26	<b>INSTALLATION DETAILS</b>		
27	MAXIMUM SCREW ANCHOR SPACING	m	42 where the number of screw anchors > 3 and 35 where the number of screw anchors ≤ 3
28	MINIMUM HOLD-DOWN LOAD /PAIR	kN	8
29	MINIMUM INSTALLATION TORQUE	kN*m	VTA
30	MAXIMUM ALLOWABLE DEFLECTION OF PIPELINE	mm	200
31	WATER DENSITY	kg/m <sup>3</sup>	1,000
32	WEIGHT	kg	VTA
33	QUANTITY	items	(Note 2)
34			
35	<b>INSPECTION &amp; TESTING</b>		
36	PULL TEST		10% of Installed Screw Anchors
37	PULL TEST LOAD		115% of Design Screw Anchor Load (one side only)
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39			
40	<b>NOTES:</b>		
41	1. Zinc anode size will be confirmed by Vendor with supporting calculation.		
42	2. Screw anchor quantity shall be as per MM-ASK-1A-APL02-PLR-MTO-0001.		
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