

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک							 شرکت توسعه پتروایران	
	TBE For Chemical Injection Packages								
شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادرکننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک TB	سریال 0008	نسخه D02	شماره صفحه: ۱ از ۴

طرح نگهداشت و افزایش تولید ۲۷ مخزن

TBE For Chemical Injection Packages

نگهداشت و افزایش تولید میدان نفتی بینک

D02	MAR.2024	IFI	H.Ghadyani	M.Fakharian	S.Faramarzpour	
D01	MAY.2023	IFI	H. Adineh	M.Fakharian	A.M.Mohseni	
D00	Mar.2023	IFI	H. Adineh	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Class: 3

CLIENT Doc. Number: F0Z-709230

status:

IDC: Inter-Discipline Check

IFC: Issued For Comment

IFA: Issued For Approval

AFD: Approved For Design

AFC: Approved For Construction

AFP: Approved For Purchase

AFQ: Approved For Quotation

IFI: Issued For Information

AB-R: As-Built for CLIENT Review

AB-A: As-Built –Approved

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض							 	
	احداث ردیف تراکم گاز در ایستگاه جمع آوری بینک TBE For Chemical Injection Packages								
	شماره پیمان: ۰۵۳ - ۰۷۳ - ۹۱۸۴	پروژه BK	بسته کاری GCS	صادر کننده PEDCO	تسهیلات 120	رشته ME	نوع مدرک TB	سریال 0008	نسخه D02

REVISION RECORD SHEET											
Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X	x			65					
2	X	X	x			66					
3	X		x			67					
4	X	X	x			68					
5	X					69					
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 NISOC		تکهداشت و افزایش تولید میدان نفتی بینک سطح الارض											
		TBE for Chemical Injection Package											
		شماره پیمان:	پروژه	بنه کاری	صادر کننده	تجهیزات	رشته	نوع مدارک	سرمال	نسخه			
۰۵۲ - - ۰۷۲ - ۹۱۸۴		BK	GCS	PEDCO	120	ME	TB	0008	D02			شماره صفحه: ۴ از ۴	
REQ. NO:		BIDDER NAME:			Kardanan Shargh Co			KSP Industrial Group		Green Mile Co		Hydropars	
QUOTATION NO.:					T-PS-401150-01-401-01-01			KSP-BN-TO-TP-01-D2		GMC-2297-OFR-01		2717-T-EN-IPGN-PAC-0001,2024.02.20	
QUOTATION DATE:					15-02-2023			22-Feb-24		2-Mar-24		21-Feb-24	
No.	DESCRIPTION			UNITS	REQ'D BY PURCHASER	MEETS REQUISITION REQUIREMENTS							
						Status		Status		Status		Status	
1	GENERAL												
1.1	Guarantee & Warranty as per project requirement			-	12 month after succesfull start up or 18 month after delivery at site	A	YES	A	YES	A	YES	A	YES
1.2	Delivery Time			-	As per project requirement	7 Month	YES	7 Month	YES	310 Days	YES	A	YES
1.3	Quality System Certificates				Required	A	YES	A	YES	A	YES	A	YES
1.4	Catalogues				Required	A	YES	A	YES	A	YES	A	YES
1.5	Signed and Stamped project MR's Scope of Supply & Work				Required	NS	NO	A	YES	A	YES	A	YES
1.6	Deviation List				Required	A	YES	A	YES	A	YES	A	YES
1.7	Reference and Installation List				Required	A	YES	A	YES	A	YES	A	YES
1.8	Recommended Spare Part List for erection & Commissioning				Required	A	YES	A	YES	A	YES	A	YES
1.9	Delivery Location			-	Required	Factory, Mashhad	YES	Factory, Mashhad	YES	Factory, Shiraz	YES	Hydropars Shop	YES
1.10	Special Tools List (If Required)				Required	A	YES	A	YES	A	YES	NA	NO
1.11	P&ID				Required	A	YES	A	YES	A	YES	A	YES
1.12	Process Flow diagram				Required	NA	YES	NA	YES	NA	YES	Ater P.O	YES
1.13	Main Equipment list				Required	A	YES	A	YES	A	YES	A	YES
1.14	Operating Manual				Required	A	YES	A	YES	A	YES	After P.O	YES
1.15	Electrical Load List				Required	A	YES	A	YES	A	YES	After P.O	YES
1.16	Utility Consumption List				Required	A	YES	A	YES	A	YES	NA	NO
1.17	Control System Architecture Drawing				Required	A	YES	A	YES	A	YES	After P.O	YES
1.18	Performance Curve				Required	A	YES	A	YES	A	YES	NA	NO
1.19	Data Sheets for All Equipment Inside the Package				Required	A	YES	A	YES	A	YES	A	YES
1.20	Calculation Note For PSV Sizing				Required	NS	NO	A	YES	A	YES	After P.O	YES
1.21	ESD Philosophy				Required	A	YES	A	YES	A	YES	Out of Scope	NO
1.22	Controller type of Package				Type A	A	YES	A	YES	A	YES	A	YES
1.23	Control Philosophy				Required	After P.O	YES	After P.O	YES	A	YES	According to PID	YES
1.24	Outline/General Lay-out Drawings				Required	NS	NO	A	YES	A	YES	A	YES
1.25	Recommended Spare Part List for 2 Years of Operation				Required	A	YES	A	YES	A	YES	A	YES
1.26	distribution panel with all electrical protection and accessons according to IPS-E-EL-100				Required			A	YES	A	YES	A	YES
1.27	Power Supply				V / HZ / PH (400/50/3)			A	YES	A	YES	A	YES
2	TANK DATA												
2.1	Material			-	Required	SS316L	YES	SS316L	YES	SS316L	YES	S.S.316L	YES
2.2	Capacity			m3	Required	1.6	YES	2.5	YES	1	YES	1	YES
2.3	Dimension(DxH)			mm*mm	Required	NS	NO	1535*1500	YES	~ 1000 x 1700	YES	1000X1600	YES
2.4	Type			-	Cylindrical shell with Elliptical Heads	Cylindrical / Vertical	YES	Cylindrical Shell, with Torispherical Head	YES	Cylindrical shell, Elliptical Bottom, flat Top	YES	Cylindrical shell with Elliptical Heads	YES
2.5	Design Pressure			barg	Required	NS	NO	ATM + F.O.L	YES	ATM + F.O.L	YES	ATM +FOW	YES
2.6	Thickness (Shell/Heads) Acc. to IPS			mm	Required	A	YES	A	YES	A	YES	A	YES
2.7	P.W.I.LT			-	Required	NA	YES	NA	YES	N.A.	YES	NA	YES
2.8	Corrosion Allowance			mm	Required	0	YES	0	YES	0	YES	0	YES
2.9	Impact Test			-	Required	NA	YES	NA	YES	N.A.	YES	NA	YES
2.10	Weight Imp. /Oper.			kg	Required	NS	NO	650 / 3500	YES	550 / 1500	YES	~1500	YES
2.11	Tank Connection			-	Required	NS	NO	A (tank Connection to Piping, via THRD Coupling / Flange for LG & LT)	YES	A	YES	Flange	YES
2.12	Mixer Type			-	Top Mounted, Electrical Driven	A	YES	A	YES	A	YES	Dynamic/ Vertical/ Top Mounted	YES

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شماره پیمان: ۰۵۲ - - ۰۲۳ - ۹۱۸۴		پروژه	بنه کاری	صادر کننده	تجهیزات	رشته	نوع مدارک	سرمال	نسخه												
BK		GCS	PEDCO	120	ME	TB	0008	D02													
REQ. NO:		BIDDER NAME:				Kardanan Shargh Co		D02		KSP Industrial Group		D02		Green Mile Co		D02		Hydropars		D02	
QUOTATION NO.:						T-PS-40150-01-401-01-01				KSP-BN-TO-TP-01-D2		GMC-2297-OFR-01		2717-T-EN-IPGN-PAC-0001,2024.02.20							
QUOTATION DATE:						15-02-2023				22-Feb-24		2-Mar-24		21-Feb-24							
No.	DESCRIPTION		UNITS	REQ'D BY PURCHASER	MEETS REQUISITION REQUIREMENTS																
						Status		Status		Status		Status		Status		Status					
2.13	NDT Test		-	VT, PT, LEAK TEST	A	YES	A	YES	A	YES	A	YES	A	YES	A	YES					
2.14	Sand Blast & Painting / Coating		-	Required	NA	YES	A	YES	N.A.	NO	NA	YES	NA	YES	NA	YES					
2.15	Supported by		-	Legs	A	YES	A	YES	A	YES	Leg/ Anchor Chair	YES	Leg/ Anchor Chair	YES	Leg/ Anchor Chair	YES					
2.16	Sub Vendors		-	Required	Kardanan Shargh Co	YES	KSP	YES	Green Mile Co.	YES	Hydropars	YES	Hydropars	YES	Hydropars	YES					
2.17	Radiography Test Acc. to IPS		-	Required	A	YES	A	YES	A	YES	NS	YES	NS	YES	NS	YES					
3 SKID																					
3.1	Material		-	Required	NS	NO	CS	YES	C.S.	YES	C.S. ST37	YES	C.S. ST37	YES	C.S. ST37	YES					
3.2	Dimension		m*m*m	Required	3000x 2400x3000 mm	YES	Appx. 4x3x3.5 m	YES	2300 x 2700 x 2900 mm	YES	~ 3.5X4.5X3.5	YES	~ 3.5X4.5X3.5	YES	~ 3.5X4.5X3.5	YES					
3.3	Profile		-	Required	NS	NO	H14	YES	I Beam	YES	UNP 180 for Base	YES	UNP 180 for Base	YES	UNP 180 for Base	YES					
3.4	Connection type with tank		-	Required	NS	NO	Welding to Tank Leg BasePlate	YES	Bolt & Nuts	YES	Bolt	YES	Bolt	YES	Bolt	YES					
3.5	Sub Vendors		-	Required	Kardanan Shargh Co	YES	KSP	YES	Green Mile Co.	YES	Hydropars	YES	Hydropars	YES	Hydropars	YES					
4 Dosing Pump Data																					
4.1	Type		-	Required	Double Diaphragm	YES	Double Diaphragm	YES	Double Diaphragm	YES	Hydraulic Double Diaphragm	YES	Hydraulic Double Diaphragm	YES	Hydraulic Double Diaphragm	YES					
4.2	QTY.		-	Required	2+2	YES	2 + 2	YES	2 + 2	YES	4	YES	4	YES	4	YES					
4.3	Design Code		-	Required	API 675	YES	API 675	YES	API-675	YES	API 675	YES	API 675	YES	API 675	YES					
4.4	Stroke Adjustment		-	Required	Local, Manual	YES	Local, Manual	YES	Manual	YES	Manual	YES	Manual	YES	Manual	YES					
4.5	Wetted Part Material		-	Required	SS316L	YES	SS316L PTFE Diaphragm	YES	S.S. 316L	YES	S.S.316L/PTFE (Diaphragm)	YES	S.S.316L/PTFE (Diaphragm)	YES	S.S.316L/PTFE (Diaphragm)	YES					
4.6	Service		-	Required	Corrosion Inhibitor	YES	HP & LP Corrosion Inhibitor	YES	Corrosion Inhibitor	YES	Corrosion Inhibitor	YES	Corrosion Inhibitor	YES	Corrosion Inhibitor	YES					
4.7	Capacity Max.		L/Hr.	Required	3.388	YES	4/4	YES	2.4/3.3	YES	2.5 (high pressure)/3.5 (low pressure)	YES	2.5 (high pressure)/3.5 (low pressure)	YES	2.5 (high pressure)/3.5 (low pressure)	YES					
4.8	Dis. Pressure Max		Barg.	Required	62	YES	62 & 9	YES	62 / 9	YES	75 (high pressure)/12 (low pressure)	YES	75 (high pressure)/12 (low pressure)	YES	75 (high pressure)/12 (low pressure)	YES					
4.9	MotorPower		Kw	Required	0.75	YES	0.37	YES	0.37	YES	0.75 (will be finalized later)	YES	0.75 (will be finalized later)	YES	0.75 (will be finalized later)	YES					
4.10	Ingress Protection		-	Required	IP55	YES	IP55	YES	IP 55	YES	55	YES	55	YES	55	YES					
4.11	D02	Insulation Class/Temperature rise		F/B	A	YES	A	YES	A	YES	A	YES	A	YES	A	YES					
4.12	Connection		Suc./Dis.	Required	1/2"	YES	1/2" RF #600	YES	1/2" #300	YES	1/4"	YES	1/4"	YES	1/4"	YES					
4.13	Sub Vendors		-	Required	DEPAMU	YES	KSP	YES	Exakta-SEKO (Italy)	YES	SEKO or AVL	YES	SEKO or AVL	YES	SEKO or AVL	YES					
5 MIXER DATA																					
5.1	Type		-	Required	Pitched Blade Turbine	YES	Vertical, Center, Top Mounted	YES	Top Entry	YES	Dynamic	YES	Dynamic	YES	Dynamic	YES					
5.2	RPM		-	Required	NS	NO	24	YES	80	YES	1500 rpm	YES	1500 rpm	YES	1500 rpm	YES					
5.3	Driver		-	Required	ElectroMotor	YES	ElectroMotor	YES	ElectroMotor	YES	Electric Motor	YES	Electric Motor	YES	Electric Motor	YES					
5.4	Anti Rotation		-	Required	NS	NO	A (3 No.)	YES	NA	NO	N/A	YES	N/A	YES	N/A	YES					
5.5	Gear Box Type		-	Required	NS	NO	Wormed Screw	YES	Worm	YES	N/A	YES	N/A	YES	N/A	YES					
5.6	Manufacture		-	Required	Kardanan Shargh	YES	Mixer: KSP, Motor: VEM	YES	SEW (Germany)	YES	Hydropars	YES	Hydropars	YES	Hydropars	YES					
5.7	Power		kW	Required	0.75	YES	0.37	YES	0.55	YES	0.75	YES	0.75	YES	0.75	YES					
5.8	Speed(Max/Min)		rpm	Required	1450	YES	1450	YES	1450	YES	1500	YES	1500	YES	1500	YES					
5.9	Ratio		-	Required	NS	NO	1/60	YES	1450 : 80	YES	N/A	YES	N/A	YES	N/A	YES					
5.10	Impeller (Blade Dimension./Mat./Q.T.Y)		-	Required	NS	NO	Impeller Dial: 400 mm (1 No.) Blade: 190*60 mm (3 No. Blades Reqrd) SS316L	YES	400 / S.S.316L / 1	YES	145mm/S.S.316L/1	YES	145mm/S.S.316L/1	YES	145mm/S.S.316L/1	YES					
5.11	Mixer sealing type		-	Packing	Packing	YES	Packing	YES	NA	NO	N/A	YES	N/A	YES	N/A	YES					
5.12	Shaft(Mat./Length./Diameter./)		-	Required	SS 316L	YES	SS316L / 1300 mm /34 mm	YES	S.S. 316 / 1300/ 25	YES	S.S.316L/1300mm/1" SCH40s	YES	S.S.316L/1300mm/1" SCH40s	YES	S.S.316L/1300mm/1" SCH40s	YES					
6 PACKAGE INTERCONNECTING PIPE & FITTINGS																					
6.1	Material		-	Required	SS316L	YES	SS316L	YES	S.S. 316L	YES	S.S.316L	YES	S.S.316L	YES	S.S.316L	YES					
6.2	Rating		-	Required	NS	NO	Suc & Dis. Piping: 3000 PSI Suc & Dis. Flange: HP: #600 / LP: #150	YES	#600 / #300	YES	6000PSI	YES	6000PSI	YES	6000PSI	YES					
6.3	Type		-	Required	SW	YES	1" SW Fitting & Valve 2": RF	YES	SW	YES	Tubing	YES	Tubing	YES	Tubing	YES					
Final conclusion					DECLINE			D02		ACCEPTED		ACCEPTED		ACCEPTED		ACCEPTED					
NOTES:																					
A:Accepted N:Not Accepted NA:Not Applicable NS:Not Specified C:Clarification Required VTS: Vendor to Specify																					