

 NISOC	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:	پروژه	بسته کاری	صادرکننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱ از ۴
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	PEDCO	120	ME	TB	0008	D03	

طرح نگهداشت و افزایش تولید ۲۷ مخزن

TBE FOR CHEMICAL INJECTION PACKAGES

نگهداشت و افزایش تولید میدان نفتی بینک

D03	JUL.2024	IFI	V.Amjadi	M.Fakharian	M.Sadeghian	
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 D03	شماره صفحه: ۲ از ۴	
REVISION RECORD SHEET											
Page	D00	D01	D02	D03	D04	Page	D00	D01	D02	D03	D04
1	X	X	X	X		65					
2	X	X	X	X		66					
3	X		X	X		67					
4	X	X	X	X		68					
5	X					69					
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 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض						 HIRGAN ENERGY							
		TBE FOR CHEMICAL INJECTION PACKAGES													
		شماره پیمان:		پروژه	بنه کاری	صادر کننده	تجهیزات	رشته	نوع مدارک	سرمال	نسخه				
۰۵۲ - - ۰۷۲ - ۹۱۸۴		BK	GCS	PEDCO	120	ME	TB	0008	D03			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-D3			GMC-2297-OFR-01		2717-T-EN-IPGN-PAC-0001,2024.02.20	
QUOTATION DATE:						15-02-2023			D03 20-Jul-24			D03 14-Jul-24		21-Feb-24	
No.	DESCRIPTION		UNITS	REQ'D BY PURCHASER	MEETS REQUISITION REQUIREMENTS										
							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	A	YES	
1.2	Delivery Time		-	As per project requirement	7 Month	YES	7 Month	YES	310 Days	YES	A	YES	A	YES	
1.3	Quality System Certificates			Required	A	YES	A	YES	A	YES	A	YES	A	YES	
1.4	Catalogues			Required	A	YES	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	A	YES	
1.6	Deviation List			Required	A	YES	A	YES	A	YES	A	YES	A	YES	
1.7	Reference and Installation List			Required	A	YES	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	A	YES	
1.9	Delivery Location		-	Required	Factory, Mashhad	YES	Factory, Mashhad	YES	Factory, Shiraz	YES	Hydropars Shop	YES		YES	
1.10	Special Tools List (If Required)			Required	A	YES	A	YES	A	YES	NA	YES	NA	NO	
1.11	P&ID			Required	A	YES	A	YES	A	YES	A	YES	A	YES	
1.12	Process Flow diagram			Required	NA	YES	NA	YES	NA	YES	After P.O	YES		YES	
1.13	Main Equipment list			Required	A	YES	A	YES	A	YES	A	YES	A	YES	
1.14	Operating Manual			Required	A	YES	A	YES	A	YES	After P.O	YES		YES	
1.15	Electrical Load List			Required	A	YES	A	YES	A	YES	After P.O	YES		YES	
1.16	Utility Consumption List			Required	A	YES	A	YES	A	YES	NA	YES		NO	
1.17	Control System Architecture Drawing			Required	A	YES	A	YES	A	YES	After P.O	YES		YES	
1.18	Performance Curve			Required	A	YES	A	YES	A	YES	NA	YES		NO	
1.19	Data Sheets for All Equipment Inside the Package			Required	A	YES	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		YES	
1.21	ESD Philosophy			Required	A	YES	A	YES	A	YES	Out of Scope	YES		NO	
1.22	Controller type of Package			Type A	A	YES	A	YES	A	YES	A	YES		YES	
1.23	Control Philosophy			Required	After P.O	YES	After P.O	YES	A	YES	According to PID	YES		YES	
1.24	Outline/General Lay-out Drawings			Required	NS	NO	A	YES	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	A	YES	
1.26	distribution panel with all electrical protection and accessors according to IPS-E-EL-100			Required			A	YES	A	YES	A	YES	A	YES	
1.27	Power Supply			V / HZ / PH (400/50/3)	A	YES	A	YES	A	YES	A	YES	A	YES	
2	TANK DATA														
2.1	Material		-	Required	SS316L	YES	SS316L	YES	SS316L	YES	S.S.316L	YES		YES	
2.2	Capacity		m3	Required	1.6	YES	1	YES	1	YES	1	YES		YES	
2.3	Dimension(DxH)		mm*mm	Required	NS	NO	1000*1500	D03 YES	~ 1000 x 1700	YES	1000X1600	YES		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		YES	
2.5	Design Pressure		barg	Required	NS	NO	ATM + F.O.L	YES	ATM + F.O.L	YES	ATM +FOW	YES		YES	
2.6	Thickness (Shell/Heads) Acc. to IPS		mm	Required	A	YES	A	YES	A	YES	A	YES		YES	
2.7	P.W.I.LT		-	Required	NA	YES	NA	YES	N.A.	YES	NA	YES		YES	
2.8	Corrosion Allowance		mm	Required	0	YES	0	YES	0	YES	0	YES		YES	
2.9	Impact Test		-	Required	NA	YES	NA	YES	N.A.	YES	NA	YES		YES	
2.10	Weight Imp. /Oper.		kg	Required	NS	NO	450 / 2900	D03 YES	550 / 1500	YES	~1500	YES		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		YES	
2.12	Mixer Type		-	Top Mounted, Electrical Driven	A	YES	A	YES	A	YES	Dynamic/ Vertical/ Top Mounted	YES		YES	

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		TBE FOR CHEMICAL INJECTION PACKAGES											
		شماره پیمان:	پروژه	بنه کاری	صادر کننده	تجهیزات	رشته	نوع مدارک	سرمال	نسخه			
۰۵۲ - - ۰۲۳ - ۹۱۴۱		BK	GCS	PEDCO	120	ME	TB	0008	D03			شماره صفحه: 4 از 4	
REQ. NO:		BIDDER NAME:			Kardanan Shargh Co			KSP Industrial Group		Green Mile Co		Hydropars	
QUOTATION NO.:					T-PS-40150-01-401-01-01			KSP-BN-TO-TP-01-D3		GMC-2297-OFR-01		2717-T-EN-IPGN-PAC-0001,2024.02.20	
QUOTATION DATE:					15-02-2023			D03 20-Jul-24		D03 14-Jul-24		21-Feb-24	
No.	DESCRIPTION	UNITS	REQ'D BY PURCHASER	MEETS REQUISITION REQUIREMENTS									
					Status		Status		Status		Status		
2.13	NDT Test	-	VT, PT, LEAK TEST	A	YES	A	YES	A	YES	A	YES	YES	
2.14	Sand Blast & Painting / Coating	-	Required	NA	YES	A	YES	N.A.	NO	NA	YES	YES	
2.15	Supported by	-	Legs	A	YES	A	YES	A	YES	Leg/Anchor Chair	YES	YES	
2.16	Sub Vendors	-	Required	Kardanan Shargh Co	YES	KSP	YES	Green Mile Co.	YES	Hydropars	YES	YES	
2.17	Radiography Test Acc. to IPS	-	Required	A	YES	A	YES	A	YES	NS	NO	NO	
3	SKID												
3.1	Material	-	Required	NS	NO	CS	YES	C.S.	YES	C.S. ST37	YES	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	YES	
3.3	Profile	-	Required	NS	NO	H14	YES	I Beam	YES	UNP 180 for Base	YES	YES	
3.4	Connection type with tank	-	Required	NS	NO	Welding to Tank Leg Base/Plate	YES	Bolt & Nuts	YES	Bolt	YES	YES	
3.5	Sub Vendors	-	Required	Kardanan Shargh Co	YES	KSP	YES	Green Mile Co.	YES	Hydropars	YES	YES	
4	Dosing Pump Data												
4.1	Type	-	Required	Double Diaphragm	YES	Double Diaphragm	YES	Double Diaphragm	YES	Hydraulic Double Diaphragm	YES	YES	
4.2	QTY.	-	Required	2+2	YES	2 + 2	YES	2 + 2	YES	4	YES	YES	
4.3	Design Code	-	Required	API 675	YES	API 675	YES	API-675	YES	API 675	YES	YES	
4.4	Stroke Adjustment	-	Required	Local, Manual	YES	Local, Manual	YES	Manual	YES	Manual	YES	YES	
4.5	Wetted Part Material	-	Required	SS316L	YES	SS316L PTFE Diaphragm	YES	S.S. 316L	YES	S.S.316L/PTFE (Diaphragm)	YES	YES	
4.6	Service	-	Required	Corrosion Inhibitor	YES	HP & LP Corrosion Inhibitor	YES	Corrosion Inhibitor	YES	Corrosion Inhibitor	YES	YES	
4.7	Capacity Max.	L/Hr.	Required	3.388	YES	4/4	YES	1.3/1.95	D03 YES	2.5 (high pressure)/3.5 (low pressure)	YES	YES	
4.8	Dis. Pressure Max	Barg.	Required	62	YES	62 & 9	YES	62 / 9	YES	75 (high pressure)/12 (low pressure)	YES	YES	
4.9	MotorPower	Kw	Required	0.75	YES	0.37	YES	0.37	YES	0.75 (will be finalized later)	YES	YES	
4.10	Ingress Protection	-	Required	IP55	YES	IP55	YES	IP 55	YES	55	YES	YES	
4.11	Isulation Class/Temperature rise		Required	F/B		A	YES	A	YES	A	YES	YES	
4.12	Connection	Suc./Dis.	Required	1/2"	YES	1/2" RF #600	YES	1/2" #300	YES	1/4"	YES	YES	
4.13	Sub Vendors	-	Required	DEPAMU	YES	KSP	YES	Exakta-SEKO (Italy)	YES	SEKO or AVL	YES	YES	
5	MIXER DATA												
5.1	Type	-	Required	Pitched Blade Turbine	YES	Vertical, Center, Top Mounted	YES	Top Entry	YES	Dynamic	YES	YES	
5.2	RPM	-	Required	NS	NO	24	YES	80	YES	1500 rpm	YES	YES	
5.3	Driver		Required	ElectroMotor	YES	ElectroMotor	YES	ElectroMotor	YES	Electric Motor	YES	YES	
5.4	Anti Rotation		Required	NS	NO	A (3 No.)	YES	NA	NO	N/A	NO	NO	
5.5	Gear Box Type		Required	NS	NO	Wormed Screw	YES	Worm	YES	N/A	YES	YES	
5.6	Manufacure		Required	Kardanan Shargh	YES	Mixer: KSP, Motor: VEM	YES	SEW (Germany)	YES	Hydropars	YES	YES	
5.7	Power	kW	Required	0.75	YES	0.37	YES	0.55	YES	0.75	YES	YES	
5.8	Speed(Max/Min)	rpm	Required	1450	YES	1450	YES	1450	YES	1500	YES	YES	
5.9	Ratio		Required	NS		1/60	YES	1450 : 80	YES	N/A	YES	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	YES	
5.11	Mixer sealing type	-	Packing	Packing	YES	Packing	YES	NA	NO	N/A	NO	NO	
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	YES	
6	PACKAGE INTERCONNECTING PIPE & FITTINGS												
6.1	Material	-	Required	SS316L	YES	SS316L	YES	S.S. 316L	YES	S.S.316L	YES	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	YES	
6.3	Type	-	Required	SW	YES	1" SW Fitting & Valve 2": RF	YES	SW	YES	Tubing	NO	NO	
Final conclusion					DECLINE		ACCEPTED		ACCEPTED		ACCEPTED (Note 1)		
NOTES: Note 1: If Approved by NISOC D03 A:Accepted N:Not Accepted NA:Not Applicable NS:Not Specified C:Clarification Required VTS: Vendor to Specify													