

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)								
	Work Breakdown Structure (WBS)								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۱ از ۲۵
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	MF	120	PM	WB	0001	V02	
طرح نگهداشت و افزایش تولید ۲۷ مخزن									
Work Breakdown Structure for Gas Dehydration Package (WBS) نگهداشت و افزایش تولید میدان نفتی بینک									
V02	NOV-2024	IFA	MFS	M.Fakharian	M.Sadghian				
V01	OCT-2024	IFA	MFS	M.Fakharian	M.Sadghian				
V00	JAN-2024	IFA	MFS	M.Fakharian	S.Faramarzpour				
Rev.	Date	Purpose of Issue / Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval			
status:									
IFA: Issued For Approval									
IFI: Issued For Information									
AFC: Approved For Construction									



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض

خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(تقریر داده BK-HD-GCS-CO-0010_08)



Work Breakdown Structure (WBS)

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه: ۲ از ۲۵
۰۵۳ - ۰۷۳ - ۹۱۸۴	BK	GCS	MF	120	PM	WB	0001	V02	

REVISION RECORD SHEET

Page	V00	V01	V02	V03	V04	Page	V00	V01	V02	V03	V04
1	X	X	X			65					
2	X	X	X			66					
3	X	X	X			67					
4	X	X	X			68					
5	X	X	X			69					
6	X	X	X			70					
7		X	X			71					
8		X	X			72					
9		X	X			73					
10			X			74					
11			X			75					
12			X			76					
13			X			77					
14			X			78					
15			X			79					
16			X			80					
17			X			81					
18			X			82					
19			X			83					
20			X			84					
21			X			85					
22			X			86					
23			X			87					
24			X			88					
25			X			89					
26						90					
27						91					
28						92					
29						93					
30						94					
31						95					
32						96					
33						97					
34						98					
35						99					
36						100					
37						101					
38						102					
39						103					
40						104					
41						105					
42						106					
43						107					
44						108					
45						109					
46						110					
47						111					
48						112					
49						113					
50						114					
51						115					
52						116					
53						117					
54						118					
55						119					
56						120					
57						121					
58						122					
59						123					
60						124					
61						125					
62						126					
63						127					
64						128					



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
0	BINAK OILFIELD DEVELOPMENT		100	%
1	DOCUMENTS		7	
1.1	According to VPIS:			
1.1.1	VENDOR PRINT INDEX & SCHEDULE (VPIS)	BK-GCS-MF-120-PM-LI-0001	0.09	1.34%
1.1.2	WORK BEAKDOWN STRUCTURE	BK-GCS-MF-120-PM-WB-0001	0.09	1.34%
1.1.3	TIME SCHEDULE	BK-GCS-MF-120-GE-SH-0001	0.09	1.34%
1.1.4	FINAL VENDOR DATA BOOK INDEX	BK-GCS-MF-120-GE-LI-0002	0.09	1.34%
1.1.5	SUB VENDOR LIST	BK-GCS-MF-120-GE-VL-0001	0.09	1.34%
1.1.6	SPARE PART LIST	BK-GCS-MF-120-GE-LI-0002	0.09	1.34%
1.1.7	HARDNESS TESTING PROCEDURE (TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS)	BK-GCS-MF-120-QC-PR-0001	0.05	0.66%
1.1.8	INSPECTION AND TEST PLAN (ITP)	BK-GCS-MF-120-QC-PR-0002	0.09	1.34%
1.1.9	QUALITY CONTROL PLAN (QCP)	BK-GCS-MF-120-QC-PR-0003	0.05	0.66%
1.1.10	SURFACE PREPARATION AND INTERNAL/EXTERNAL PAINTING PROCEDURE FOR TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS	BK-GCS-MF-120-QC-PR-0004	0.05	0.66%
1.1.11	PICKLING AND PASSIVATION PROCEDURE	BK-GCS-MF-120-QC-PR-0005	0.05	0.66%
1.1.12	POSTWELD HEAT TREATMENT PROCEDURE (TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS)	BK-GCS-MF-120-QC-PR-0006	0.05	0.66%
1.1.13	WPS & PQR (TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS)	BK-GCS-MF-120-QC-PR-0007	0.13	1.92%
1.1.14	PMI PROCEDURE (TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS)	BK-GCS-MF-120-QC-PR-0008	0.05	0.66%
1.1.15	NDT PROCEDURE (TOWER, COLUMNS, REBOILER, DRUMS, FILTERS & EXCHANGERS)	BK-GCS-MF-120-QC-PR-0009	0.05	0.66%
1.1.16	HYDROSTATIC TESTING PROCEDURE (TOWER, COLUMNS, REBOILER, DRUMS & FILTERS)	BK-GCS-MF-120-QC-PR-0010	0.05	0.66%
1.1.17	HYDROSTATIC TEST PROCEDURE FOR HEAT EXCHANGERS	BK-GCS-MF-120-QC-PR-0011	0.05	0.66%
1.1.18	WELD REPAIR PROCEDURE	BK-GCS-MF-120-QC-PR-0012	0.05	0.66%
1.1.19	PACKING, MARKING, SHIPPING PROCEDURE	BK-GCS-MF-120-QC-PR-0013	0.05	0.66%
1.1.20	N2 PURGING PROCEDURE	BK-GCS-MF-120-QC-PR-0014	0.05	0.66%
1.1.21	SAT PROCEDURE FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-QC-PR-0015	0.05	0.66%
1.1.22	OPERATION, COMMISSIONING & MAINTENANCE MANUAL FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-QC-ML-0001	0.09	1.34%
1.1.23	BASIS OF PROCESS DESIGN FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PR-DB-0001	0.12	1.74%
1.1.24	CONTROL PHILOSOPHY	BK-GCS-MF-120-PR-PH-0001	0.04	0.53%
1.1.25	PRESSURE SAFETY VALVE CALCULATION SHEETS	BK-GCS-MF-120-PR-CN-0001	0.04	0.53%
1.1.26	PROCESS DATA SHEET FOR DEHYDRATION GLYCOL CONTACTOR	BK-GCS-MF-120-PR-DS-0001	0.04	0.53%
1.1.27	PROCESS DATA SHEET FOR GLYCOL FLASH DRUM	BK-GCS-MF-120-PR-DS-0002	0.04	0.53%
1.1.28	PROCESS DATA SHEET FOR GLYCOL PARTICLE FILTER	BK-GCS-MF-120-PR-DS-0003	0.04	0.53%
1.1.29	PROCESS DATA SHEET FOR GLYCOL CARBON FILTER	BK-GCS-MF-120-PR-DS-0004	0.04	0.53%
1.1.30	PROCESS DATA SHEET FOR LEAN GLYCOL FILTER	BK-GCS-MF-120-PR-DS-0014	0.04	0.53%
1.1.31	PROCESS DATA SHEET FOR GLYCOL STILL COLUMN	BK-GCS-MF-120-PR-DS-0005	0.04	0.53%
1.1.32	PROCESS DATA SHEET FOR GLYCOL CIRCULATION PUMPS	BK-GCS-MF-120-PR-DS-0006	0.04	0.53%
1.1.33	PROCESS DATA SHEET FOR LEAN GLYCOL DRY GAS HEAT EXCHANGER	BK-GCS-MF-120-PR-DS-0007	0.04	0.53%
1.1.34	PROCESS DATA SHEET FOR RICH / LEAN GLYCOL HEAT EXCHANGER	BK-GCS-MF-120-PR-DS-0008	0.04	0.53%
1.1.35	PROCESS DATA SHEET FOR GLYCOL REFLUX CONDENSER	BK-GCS-MF-120-PR-DS-0009	0.04	0.53%
1.1.36	PROCESS DATA SHEET FOR GLYCOL REBOILER	BK-GCS-MF-120-PR-DS-0010	0.04	0.53%
1.1.37	PROCESS DATA SHEET FOR ANTI-FOAM PACKAGE	BK-GCS-MF-120-PR-DS-0011	0.04	0.53%
1.1.38	PROCESS DATA SHEET FOR PH-CONTROLLER PACKAGE	BK-GCS-MF-120-PR-DS-0012	0.04	0.53%



نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض

خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
1.1.39	PROCESS DATA SHEET FOR GLYCOL SURGE DRUM	BK-GCS-MF-120-PR-DS-0013	0.04	0.53%
1.1.40	PROCESS FLOW DIAGRAM FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PR-PF-0001	0.14	1.96%
1.1.41	HEAT AND MASS BALANCE FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PR-PF-0002	0.14	1.96%
1.1.42	PIPING & INSTRUMENTATION DIAGRAM FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PR-PI-0003	0.14	1.96%
1.1.43	CAUSE AND EFFECT DIAGRAM FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PR-CE-0001	0.04	0.53%
1.1.44	EQUIPMENT LIST	BK-GCS-MF-120-PR-LI-0001	0.04	0.53%
1.1.45	ALARM & TRIP SET POINT LIST	BK-GCS-MF-120-PR-LI-0002	0.04	0.53%
1.1.46	UTILITY CONSUMPTION LIST	BK-GCS-MF-120-PR-LI-0003	0.04	0.53%
1.1.47	CHEMICAL CONSUMPTION LIST	BK-GCS-MF-120-PR-LI-0004	0.04	0.53%
1.1.48	HAZOP STUDY REPORT	BK-GCS-MF-120-PR-RE-0001	0.04	0.53%
1.1.49	SIL STUDY REPORT	BK-GCS-MF-120-PR-RE-0002	0.04	0.53%
1.1.50	MECHANICAL CALCULATION BOOK FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-CN-0001	0.02	0.28%
1.1.51	GENERAL ARRANGEMENT FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-DW-0001	0.02	0.22%
1.1.52	DETAILS DRAWING FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-DW-0002	0.01	0.13%
1.1.53	NAME PLATE DETAIL DRAWING FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-DW-0003	0.005	0.07%
1.1.54	TEMPLATE DRAWING FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-DW-0004	0.01	0.14%
1.1.55	WELDING & NDT MAP FOR GLYCOL CONTACTOR (C-100)	BK-GCS-MF-120-ME-MP-0001	0.01	0.09%
1.1.56	MECHANICAL CALCULATION BOOK FOR STILL COLUMN (C-200)	BK-GCS-MF-120-ME-CN-0002	0.02	0.35%
1.1.57	GENERAL ARRANGEMENT FOR STILL COLUMN (C-200)	BK-GCS-MF-120-ME-DW-0005	0.02	0.28%
1.1.58	DETAILS DRAWING FOR STILL COLUMN (C-200)	BK-GCS-MF-120-ME-DW-0006	0.01	0.19%
1.1.59	NAME PLATE DETAIL DRAWING FOR STILL COLUMN (C-200)	BK-GCS-MF-120-ME-DW-0007	0.01	0.09%
1.1.60	WELDING & NDT MAP FOR STILL COLUMN (C-200)	BK-GCS-MF-120-ME-MP-0002	0.01	0.09%
1.1.61	MECHANICAL CALCULATION BOOK FOR GLYCOL FLASH DRUM (V-120)	BK-GCS-MF-120-ME-CN-0003	0.02	0.28%
1.1.62	GENERAL ARRANGEMENT FOR GLYCOL FLASH DRUM (V-120)	BK-GCS-MF-120-ME-DW-0008	0.02	0.26%
1.1.63	DETAILS DRAWING FOR GLYCOL FLASH DRUM (V-120)	BK-GCS-MF-120-ME-DW-0009	0.02	0.22%
1.1.64	NAME PLATE DETAIL DRAWING FOR GLYCOL FLASH DRUM (V-120)	BK-GCS-MF-120-ME-DW-0010	0.00	0.07%
1.1.65	WELDING & NDT MAP FOR GLYCOL FLASH DRUM (V-120)	BK-GCS-MF-120-ME-MP-0003	0.01	0.09%
1.1.66	MECHANICAL CALCULATION BOOK FOR GLYCOL SURGE DRUM (V-130)	BK-GCS-MF-120-ME-CN-0011	0.01	0.19%
1.1.67	GENERAL ARRANGEMENT FOR GLYCOL SURGE DRUM (V-130)	BK-GCS-MF-120-ME-DW-0036	0.01	0.18%
1.1.68	DETAILS DRAWING FOR GLYCOL SURGE DRUM (V-130)	BK-GCS-MF-120-ME-DW-0037	0.013	0.18%
1.1.69	NAME PLATE DETAIL DRAWING FOR GLYCOL SURGE DRUM (V-130)	BK-GCS-MF-120-ME-DW-0038	0.00	0.02%
1.1.70	WELDING & NDT MAP FOR GLYCOL SURGE DRUM (V-130)	BK-GCS-MF-120-ME-MP-0011	0.01	0.11%
1.1.71	MECHANICAL CALCULATION BOOK FOR GLYCOL PARTICLE FILTER (F-100 A/B)	BK-GCS-MF-120-ME-CN-0004	0.03	0.47%
1.1.72	GENERAL ARRANGEMENT FOR GLYCOL PARTICLE FILTER (F-100 A/B)	BK-GCS-MF-120-ME-DW-0011	0.03	0.42%
1.1.73	DETAILS DRAWING FOR GLYCOL PARTICLE FILTER (F-100 A/B)	BK-GCS-MF-120-ME-DW-0012	0.019	0.27%
1.1.74	NAME PLATE DETAIL DRAWING FOR GLYCOL PARTICLE FILTER (F-100 A/B)	BK-GCS-MF-120-ME-DW-0013	0.00	0.03%
1.1.75	WELDING & NDT MAP FOR GLYCOL PARTICLE FILTER (F-100 A/B)	BK-GCS-MF-120-ME-MP-0004	0.01	0.16%
1.1.76	MECHANICAL CALCULATION BOOK FOR GLYCOL CARBON FILTER (F-200)	BK-GCS-MF-120-ME-CN-0005	0.04	0.58%
1.1.77	GENERAL ARRANGEMENT FOR GLYCOL CARBON FILTER (F-200)	BK-GCS-MF-120-ME-DW-0014	0.04	0.52%
1.1.78	DETAILS DRAWING FOR GLYCOL CARBON FILTER (F-200)	BK-GCS-MF-120-ME-DW-0015	0.021	0.30%
1.1.79	NAME PLATE DETAIL DRAWING FOR GLYCOL CARBON FILTER (F-200)	BK-GCS-MF-120-ME-DW-0016	0.00	0.03%
1.1.80	WELDING & NDT MAP FOR GLYCOL CARBON FILTER (F-200)	BK-GCS-MF-120-ME-MP-0005	0.01	0.18%
1.1.81	MECHANICAL CALCULATION BOOK FOR LEAN GLYCOL FILTER (F-300)	BK-GCS-MF-120-ME-CN-0010	0.03	0.37%
1.1.82	GENERAL ARRANGEMENT FOR LEAN GLYCOL FILTER (F-300)	BK-GCS-MF-120-ME-DW-0033	0.02	0.34%
1.1.83	DETAILS DRAWING FOR LEAN GLYCOL FILTER (F-300)	BK-GCS-MF-120-ME-DW-0034	0.020	0.28%
1.1.84	NAME PLATE DETAIL DRAWING FOR LEAN GLYCOL FILTER (F-300)	BK-GCS-MF-120-ME-DW-0035	0.01	0.09%
1.1.85	WELDING & NDT MAP FOR LEAN GLYCOL FILTER (F-300)	BK-GCS-MF-120-ME-MP-0010	0.01	0.09%
1.1.86	THERMAL/MECH. CALCULATION BOOK FOR GLYCOL REFLUX CONDENSER (E-100)	BK-GCS-MF-120-ME-CN-0006	0.04	0.57%
1.1.87	GENERAL ARRANGEMENT FOR GLYCOL REFLUX CONDENSER (E-100)	BK-GCS-MF-120-ME-DW-0017	0.04	0.51%

 NISOC		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)								
		Work Breakdown Structure								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از	
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02		

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
1.1.88	DETAILS DRAWING FOR GLYCOL REFLUX CONDENSER (E-100)	BK-GCS-MF-120-ME-DW-0018	0.021	0.30%
1.1.89	NAME PLATE DETAIL DRAWING FOR GLYCOL REFLUX CONDENSER (E-100)	BK-GCS-MF-120-ME-DW-0019	0.00	0.03%
1.1.90	WELDING & NDT MAP FOR GLYCOL REFLUX CONDENSER (E-100)	BK-GCS-MF-120-ME-MP-0006	0.01	0.18%
1.1.91	THERMAL/MECH. CALCULATION BOOK FOR RICH-LEAN GLYCOL H.E. (E-200)	BK-GCS-MF-120-ME-CN-0007	0.04	0.58%
1.1.92	GENERAL ARRANGEMENT FOR RICH-LEAN GLYCOL H.E. (E-200)	BK-GCS-MF-120-ME-DW-0020	0.04	0.52%
1.1.93	DETAILS DRAWING FOR RICH-LEAN GLYCOL H.E. (E-200)	BK-GCS-MF-120-ME-DW-0021	0.021	0.30%
1.1.94	NAME PLATE DETAIL DRAWING FOR RICH-LEAN GLYCOL H.E. (E-200)	BK-GCS-MF-120-ME-DW-0022	0.00	0.03%
1.1.95	WELDING & NDT MAP FOR RICH-LEAN GLYCOL H.E. (E-200)	BK-GCS-MF-120-ME-MP-0007	0.01	0.18%
1.1.96	THERMAL/MECH. CALCULATION BOOK FOR LEAN GLYCOL GAS H.E. (E-300)	BK-GCS-MF-120-ME-CN-0008	0.04	0.58%
1.1.97	GENERAL ARRANGEMENT FOR LEAN GLYCOL GAS H.E. (E-300)	BK-GCS-MF-120-ME-DW-0023	0.04	0.52%
1.1.98	DETAILS DRAWING FOR LEAN GLYCOL GAS H.E. (E-300)	BK-GCS-MF-120-ME-DW-0024	0.021	0.30%
1.1.99	NAME PLATE DETAIL DRAWING FOR LEAN GLYCOL GAS H.E. (E-300)	BK-GCS-MF-120-ME-DW-0025	0.00	0.03%
1.1.100	WELDING & NDT MAP FOR LEAN GLYCOL GAS H.E. (E-300)	BK-GCS-MF-120-ME-MP-0008	0.01	0.18%
1.1.101	THERMAL/MECHANICAL CALCULATION BOOK FOR REBOILER (R-100)	BK-GCS-MF-120-ME-CN-0009	0.01	0.17%
1.1.102	GENERAL ARRANGEMENT FOR REBOILER (R-100)	BK-GCS-MF-120-ME-DW-0026	0.01	0.15%
1.1.103	DETAILS DRAWING FOR REBOILER (R-100)	BK-GCS-MF-120-ME-DW-0027	0.012	0.17%
1.1.104	NAME PLATE DETAIL DRAWING FOR REBOILER (R-100)	BK-GCS-MF-120-ME-DW-0028	0.00	0.02%
1.1.105	WELDING & NDT MAP FOR REBOILER (R-100)	BK-GCS-MF-120-ME-MP-0009	0.01	0.10%
1.1.106	LUBRICATION LIST	BK-GCS-MF-120-ME-LI-0001	0.02	0.34%
1.1.107	GENERAL ASSEMBLY DRAWING FOR GLYCOL CIRCULATION PUMPS	BK-GCS-MF-120-ME-DW-0029	0.02	0.34%
1.1.108	PUMPS CROSS SECTIONAL DRAWING FOR GLYCOL CIRCULATION PUMPS	BK-GCS-MF-120-ME-DW-0030	0.02	0.34%
1.1.109	NAME PLATE FOR GLYCOL CIRCULATION PUMPS	BK-GCS-MF-120-ME-DW-0031	0.02	0.34%
1.1.110	BURNER DATA SHEET FOR GLYCOL REBOILER	BK-GCS-MF-120-ME-DS-0001	0.02	0.34%
1.1.111	BURNER DRAWING FOR GLYCOL REBOILER	BK-GCS-MF-120-ME-DW-0032	0.02	0.34%
1.1.112	PACKAGE PLOT PLAN DRAWING	BK-GCS-MF-120-PI-DW-0001	0.05	0.75%
1.1.113	PIPING GENERAL ARRANGEMENT DRAWING	BK-GCS-MF-120-PI-DW-0002	0.05	0.75%
1.1.114	PIPING ISOMETRIC DRAWING FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-PI-DW-0003	0.05	0.75%
1.1.115	LINE LIST	BK-GCS-MF-120-PI-LI-0001	0.05	0.75%
1.1.116	TIE-IN-LIST	BK-GCS-MF-120-PI-LI-0002	0.05	0.75%
1.1.117	PDMS MODEL REVIEW REPORT (60%)	BK-GCS-MF-120-PI-RT-0001	0.05	0.75%
1.1.118	PDMS MODEL REVIEW REPORT (90%)	BK-GCS-MF-120-PI-RT-0002	0.05	0.75%
1.1.119	STRESS ANALYSIS REPORT	BK-GCS-MF-120-PI-RT-0003	0.05	0.75%
1.1.120	CONTROL VALVE CALCULATION SHEETS	BK-GCS-MF-120-IN-CN-0001	0.04	0.57%
1.1.121	FLOW ELEMENT CALCULATION SHEETS	BK-GCS-MF-120-IN-CN-0002	0.04	0.57%
1.1.122	CONTROL SYSTEM CONFIGURATION BLOCK DIAGRAM	BK-GCS-MF-120-IN-DW-0001	0.04	0.57%
1.1.123	ESD/BMS SYSTEM CONFIGURATION BLOCK DIAGRAM	BK-GCS-MF-120-IN-DW-0002	0.04	0.57%
1.1.124	INSTRUMENT JUNCTION BOX LAYOUT AND WIRING TERMINATION DIAGRAM	BK-GCS-MF-120-IN-DW-0003	0.04	0.57%
1.1.125	BURNER OPERATION PANEL LAYOUT & WIRING DIAGRAM WITH CONNECTIONS & DIMENSIONS	BK-GCS-MF-120-IN-DW-0004	0.04	0.57%
1.1.126	HOOK UP DRAWING	BK-GCS-MF-120-IN-DW-0005	0.04	0.57%
1.1.127	INSTRUMENT LOCATION LAYOUT	BK-GCS-MF-120-IN-DW-0006	0.04	0.57%
1.1.128	CONTROL PANEL LAYOUT AND ARRANGEMENT	BK-GCS-MF-120-IN-DW-0007	0.04	0.57%
1.1.129	ESD/BMS PANEL LAYOUT AND ARRANGEMENT	BK-GCS-MF-120-IN-DW-0008	0.04	0.57%
1.1.130	CONTROL SYSTEM WIRING DIAGRAM AND CONNECTIONS	BK-GCS-MF-120-IN-DW-0009	0.04	0.57%
1.1.131	ESD/BMS SYSTEM WIRING DIAGRAM AND CONNECTIONS	BK-GCS-MF-120-IN-DW-0010	0.04	0.57%
1.1.132	CONTROL SYSTEM LOGIC DIAGRAM	BK-GCS-MF-120-IN-DW-0011	0.04	0.57%
1.1.133	ESD/BMS SYSTEM LOGIC DIAGRAM	BK-GCS-MF-120-IN-DW-0012	0.04	0.57%
1.1.134	PRINT OUT OF HMI FOR BMS AND UCP	BK-GCS-MF-120-IN-DW-0013	0.04	0.57%
1.1.135	CONTROL SYSTEM CABINETS AND CONSOLES LAYOUT DRAWING	BK-GCS-MF-120-IN-DW-0014	0.04	0.57%

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)								
	Work Breakdown Structure								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 – 073 – 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
1.1.136	INSTRUMENT EARTH DISTRIBUTION DIAGRAM	BK-GCS-MF-120-IN-DW-0015	0.04	0.57%
1.1.137	INSTRUMENT CABLE ROUTE/ MAIN TUBING LAYOUT DRAWING	BK-GCS-MF-120-IN-DW-0016	0.04	0.57%
1.1.138	ESD LEVEL HIERARCHY	BK-GCS-MF-120-IN-DW-0017	0.04	0.57%
1.1.139	INSTRUMENT D.S. FOR CONTROL VALVES	BK-GCS-MF-120-IN-DS-0001	0.04	0.57%
1.1.140	INSTRUMENT D.S. FOR ON/OFF VALVES	BK-GCS-MF-120-IN-DS-0002	0.04	0.57%
1.1.141	INSTRUMENT D.S. FOR H2O ANALYZER	BK-GCS-MF-120-IN-DS-0003	0.04	0.57%
1.1.142	INSTRUMENT D.S. FOR TEMPERATURE GAUGE	BK-GCS-MF-120-IN-DS-0004	0.04	0.57%
1.1.143	INSTRUMENT D.S. FOR TEMPERATURE TRANSMITTERS	BK-GCS-MF-120-IN-DS-0005	0.04	0.57%
1.1.144	INSTRUMENT D.S. FOR PRESSURE GAUGES AND DIFF. PRESSURE GAUGES	BK-GCS-MF-120-IN-DS-0006	0.04	0.57%
1.1.145	INSTRUMENT D.S. FOR PRESSURE TRANSMITTERS AND DIFFE. PRESSURE TRANSMITTERS	BK-GCS-MF-120-IN-DS-0007	0.04	0.57%
1.1.146	INSTRUMENT D.S. FOR PRESSURE REGULATOR VALVES	BK-GCS-MF-120-IN-DS-0008	0.04	0.57%
1.1.147	INSTRUMENT D.S. FOR FLOW ELEMENTS	BK-GCS-MF-120-IN-DS-0009	0.04	0.57%
1.1.148	INSTRUMENT D.S. FOR LEVEL GAUGES	BK-GCS-MF-120-IN-DS-0010	0.04	0.57%
1.1.149	INSTRUMENT D.S. FOR LEVEL TRANSMITTERS	BK-GCS-MF-120-IN-DS-0011	0.04	0.57%
1.1.150	FLAME SCANNER DATA SHEET	BK-GCS-MF-120-IN-DS-0012	0.04	0.57%
1.1.151	INSTRUMENT D.S. FOR SAFETY VALVES	BK-GCS-MF-120-IN-DS-0013	0.04	0.57%
1.1.152	FAT PROCEDURE FOR CONTROL SYSTEM	BK-GCS-MF-120-IN-PR-0001	0.04	0.56%
1.1.153	FAT PROCEDURE FOR ESD/BMS SYSTEM	BK-GCS-MF-120-IN-PR-0002	0.04	0.56%
1.1.154	SAT PROCEDURE FOR CONTROL SYSTEM	BK-GCS-MF-120-IN-PR-0003	0.04	0.56%
1.1.155	SAT PROCEDURE FOR ESD/BMS SYSTEM	BK-GCS-MF-120-IN-PR-0004	0.04	0.56%
1.1.156	INSTRUMENT LIST	BK-GCS-MF-120-IN-LI-0001	0.04	0.57%
1.1.157	INPUT/OUTPUT SIGNAL LIST	BK-GCS-MF-120-IN-LI-0002	0.04	0.57%
1.1.158	INSTRUMENT CABLE LIST	BK-GCS-MF-120-IN-LI-0003	0.04	0.57%
1.1.159	UCP AND BMS SYSTEM POWER CONSUMPTION LIST	BK-GCS-MF-120-IN-LI-0004	0.04	0.57%
1.1.160	MODBUS IO LIST (MODBUS MAPPING LIST)	BK-GCS-MF-120-IN-LI-0005	0.04	0.57%
1.1.161	ELECTRICAL SINGLE LINE DIAGRAM	BK-GCS-MF-120-EL-DW-0001	0.06	0.89%
1.1.162	EARTHING DETAIL LAYOUT	BK-GCS-MF-120-EL-DW-0002	0.04	0.62%
1.1.163	ELECTRICAL CABLE ROUTE	BK-GCS-MF-120-EL-DW-0003	0.06	0.88%
1.1.164	ELECTRICAL PANEL LAYOUT AND WIRING DIAGRAM	BK-GCS-MF-120-EL-DW-0004	0.06	0.89%
1.1.165	LOCAL CONTROL STATION (LCS) PANEL LAYOUT AND WIRING DIAGRAM	BK-GCS-MF-120-EL-DW-0005	0.06	0.80%
1.1.166	ELECTRICAL EQUIPMENT LAYOUT	BK-GCS-MF-120-EL-DW-0006	0.04	0.62%
1.1.167	POWER AND CONTROL CABLE LIST	BK-GCS-MF-120-EL-LI-0001	0.06	0.88%
1.1.168	ELECTRICAL LOAD LIST	BK-GCS-MF-120-EL-LI-0002	0.06	0.88%
1.1.169	ELECTRICAL SIGNAL LIST	BK-GCS-MF-120-EL-LI-0003	0.06	0.89%
1.1.170	ELECTRICAL MOTORS DATA SHEETS, CURVES, DRAWINGS AND CERTIFICATES	BK-GCS-MF-120-EL-DS-0001	0.06	0.88%
1.1.171	CABLE DATASHEETS	BK-GCS-MF-120-EL-DS-0002	0.06	0.88%
1.1.172	ELECTRICAL PANEL DATASHEETS	BK-GCS-MF-120-EL-DS-0003	0.06	0.88%
1.1.173	LOCAL CONTROL STATION (LCS) DATASHEETS	BK-GCS-MF-120-EL-DS-0004	0.06	0.88%
1.1.174	HAZARDOUS AREA CLASSIFICATION AND IP CERTIFICATE FOR MOTORS, LCS, LCP, LIGHTINGS, JB, HEATERS, ETC	BK-GCS-MF-120-EL-DS-0005	0.06	0.88%
1.1.175	ELECTRICAL MOTORS FAT REPORTS	BK-GCS-MF-120-EL-DS-0006	0.06	0.88%
1.1.176	STRUCTURAL DESIGN CALCULATION FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-ST-CN-0001	0.04	0.62%
1.1.177	FOUNDATION LOADING DATA FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-ST-CN-0002	0.04	0.62%
1.1.178	STEEL STRUCTURAL DETAIL DRAWING FOR GAS DEHYDRATION PACKAGE	BK-GCS-MF-120-ST-DW-0001	0.04	0.62%
2	MANUFACTURING		84	
2.1	Vessel		31.40	
2.1.1	Glycol Contactor (C-100)		3.93	12.5%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.1.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.1.1.1	PLATE		0.54	60.0%
2.1.1.1.1.1	PO		0.11	20.0%
2.1.1.1.1.2	Delivery To Factory		0.16	30.0%
2.1.1.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.1.1.2	FLANGE		0.27	30.0%
2.1.1.1.2.1	PO		0.05	20.0%
2.1.1.1.2.2	Delivery To Factory		0.08	30.0%
2.1.1.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.1.1.3	PIPE		0.09	10.0%
2.1.1.1.3.1	PO		0.02	20.0%
2.1.1.1.3.2	Delivery To Factory		0.03	30.0%
2.1.1.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.1.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.1.2.1	PLATE		0.25	90.0%
2.1.1.2.1.1	PO		0.05	20.0%
2.1.1.2.1.2	Delivery To Factory		0.07	30.0%
2.1.1.2.1.3	Inspection Of Material By TPI		0.12	50.0%
2.1.1.2.2	PROFILE		0.03	10.0%
2.1.1.2.2.1	PO		0.01	20.0%
2.1.1.2.2.1	Delivery To Factory		0.01	30.0%
2.1.1.2.2.1	Inspection Of Material By TPI		0.01	50.0%
2.1.1.3	Internals		0.08	2.0%
2.1.1.3.1	PO		0.02	20.0%
2.1.1.3.2	Delivery To Factory		0.02	30.0%
2.1.1.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.1.4	VT & DT For Raw Material		0.04	1.0%
2.1.1.5	Consumable Material (Electrode)		0.04	1.0%
2.1.1.6	Cutting & Marking		0.20	5.0%
2.1.1.7	Rolling & Forming		0.31	8.0%
2.1.1.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.1.9	Welding		0.51	13.0%
2.1.1.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.1.11	NDT (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.1.12	Weld Repair		0.20	5.0%
2.1.1.13	NDT After Weld Repair (VT,MT.PT,UT,RT)		0.16	4.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.1.14	Final Visual and Dimensional		0.12	3.0%
2.1.1.15	PWHT (If Any)		0.04	1.0%
2.1.1.16	Hardness Check		0.04	1.0%
2.1.1.17	NDT After PWHT		0.04	1.0%
2.1.1.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.1.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.1.20	Hydrostatic Test		0.04	1.0%
2.1.1.21	Draining & Drying		0.04	1.0%
2.1.1.22	Abrasive & Paint Material		0.04	1.0%
2.1.1.23	Blasting & Painting (Each Layer OFT, Adhesion, Holiday)		0.04	1.0%
2.1.2	Still Column (C-200)		3.93	12.5%
2.1.2.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.2.1.1	PLATE		0.54	60.0%
2.1.2.1.1.1	PO		0.11	20%
2.1.2.1.1.2	Delivery To Factory		0.16	30%
2.1.2.1.1.3	Inspection Of Material By TPI		0.27	50%
2.1.2.1.2	FLANGE		0.27	30.0%
2.1.2.1.2.1	PO		0.05	20%
2.1.2.1.2.2	Delivery To Factory		0.08	30%
2.1.2.1.2.3	Inspection Of Material By TPI		0.14	50%
2.1.2.1.3	PIPE		0.09	10.0%
2.1.2.1.3.1	PO		0.02	20.0%
2.1.2.1.3.2	Delivery To Factory		0.03	30.0%
2.1.2.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.2.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.2.2.1	PLATE		0.25	90.0%
2.1.2.2.1.1	PO		0.05	20%
2.1.2.2.1.2	Delivery To Factory		0.07	30%
2.1.2.2.1.3	Inspection Of Material By TPI		0.12	50%
2.1.2.2.2	PROFILE		0.03	10.0%
2.1.2.2.2.1	PO		0.006	20.0%
2.1.2.2.2.2	Delivery To Factory		0.01	30.0%
2.1.2.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.2.3	Internals		0.08	2.0%
2.1.2.3.1	PO		0.02	20.0%
2.1.2.3.2	Delivery To Factory		0.02	30.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.2.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.2.4	VT & DT For Raw Material		0.04	1.0%
2.1.2.5	Consumable Material (Electrode)		0.04	1.0%
2.1.2.6	Cutting & Marking		0.20	5.0%
2.1.2.7	Rolling & Forming		0.31	8.0%
2.1.2.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.2.9	Welding		0.51	13.0%
2.1.2.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.2.11	NDT (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.2.12	Weld Repair		0.20	5.0%
2.1.2.13	NDT After Weld Repair (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.2.14	Final Visual and Dimensional		0.12	3.0%
2.1.2.15	PWHT (If Any)		0.04	1.0%
2.1.2.16	Hardness Check		0.04	1.0%
2.1.2.17	NDT After PWHT		0.04	1.0%
2.1.2.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.2.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.2.20	Hydrostatic Test		0.04	1.0%
2.1.2.21	Draining & Drying		0.04	1.0%
2.1.2.22	Abrasive & Paint Material		0.04	1.0%
2.1.2.23	Blasting & Painting (EachLayer OFT,Adhesion,Holiday)		0.04	1.0%
2.1.3	Glycol Flash Drum (V-120)		3.93	12.5%
2.1.3.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.3.1.1	PLATE		0.54	60.0%
2.1.3.1.1.1	PO		0.11	20.0%
2.1.3.1.1.2	Delivery To Factory		0.16	30.0%
2.1.3.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.3.1.2	FLANGE		0.27	30.0%
2.1.3.1.2.1	PO		0.05	20.0%
2.1.3.1.2.2	Delivery To Factory		0.08	30.0%
2.1.3.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.3.1.3	PIPE		0.09	10.0%
2.1.3.1.3.1	PO		0.02	20.0%
2.1.3.1.3.2	Delivery To Factory		0.03	30.0%
2.1.3.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.3.2	Raw Material Of Non-Pressure Parts		0.28	7.1%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.3.2.1	PLATE		0.25	90.0%
2.1.3.2.1.1	PO		0.05	20.0%
2.1.3.2.1.2	Delivery To Factory		0.07	30.0%
2.1.3.2.1.3	Inspection Of Material By TPI		0.12	50.0%
2.1.3.2.2	PROFILE		0.03	10.0%
2.1.3.2.2.1	PO		0.01	20.0%
2.1.3.2.2.2	Delivery To Factory		0.01	30.0%
2.1.3.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.3.3	Internals		0.08	2.0%
2.1.3.3.1	PO		0.02	20.0%
2.1.3.3.2	Delivery To Factory		0.02	30.0%
2.1.3.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.3.4	VT & DT For Raw Material		0.04	1.0%
2.1.3.5	Consumable Material (Electrode)		0.04	1.0%
2.1.3.6	Cutting & Marking		0.20	5.0%
2.1.3.7	Rolling & Forming		0.31	8.0%
2.1.3.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.3.9	Welding		0.51	13.0%
2.1.3.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.3.11	NDT (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.3.12	Weld Repair		0.20	5.0%
2.1.3.13	NDT After Weld Repair (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.3.14	Final Visual and Dimensional		0.12	3.0%
2.1.3.15	PWHT (If Any)		0.04	1.0%
2.1.3.16	Hardness Check		0.04	1.0%
2.1.3.17	NDT After PWHT		0.04	1.0%
2.1.3.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.3.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.3.20	Hydrostatic Test		0.04	1.0%
2.1.3.21	Draining & Drying		0.04	1.0%
2.1.3.22	Abrasive & Paint Material		0.04	1.0%
2.1.3.23	Blasting & Painting (EachLayer OFT,Adhesion,Holiday)		0.04	1.0%
2.1.4	Glycol Surge Drum (V-130)		3.93	12.5%
2.1.4.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.4.1.1	PLATE		0.54	60.0%
2.1.4.1.1.1	PO		0.11	20.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.4.1.1.2	Delivery To Factory		0.16	30.0%
2.1.4.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.4.1.2	FLANGE		0.27	30.0%
2.1.4.1.2.1	PO		0.05	20.0%
2.1.4.1.2.2	Delivery To Factory		0.08	30.0%
2.1.4.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.4.1.3	PIPE		0.09	10.0%
2.1.4.1.3.1	PO		0.02	20.0%
2.1.4.1.3.2	Delivery To Factory		0.03	30.0%
2.1.4.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.4.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.4.2.1	PLATE		0.25	90.0%
2.1.4.2.1.1	PO		0.05	20.0%
2.1.4.2.1.2	Delivery To Factory		0.07	30.0%
2.1.4.2.1.4	Inspection Of Material By TPI		0.12	50.0%
2.1.4.2.2	PROFILE		0.03	10.0%
2.1.4.2.2.1	PO		0.006	20.0%
2.1.4.2.2.2	Delivery To Factory		0.01	30.0%
2.1.4.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.4.3	Internals		0.08	2.0%
2.1.4.3.1	PO		0.02	20.0%
2.1.4.3.2	Delivery To Factory		0.02	30.0%
2.1.4.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.4.4	VT & DT For Raw Material		0.04	1.0%
2.1.4.5	Consumable Material (Electrode)		0.04	1.0%
2.1.4.6	Cutting & Marking		0.20	5.0%
2.1.4.7	Rolling & Forming		0.31	8.0%
2.1.4.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.4.9	Welding		0.51	13.0%
2.1.4.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.4.11	NDT (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.4.12	Weld Repair		0.20	5.0%
2.1.4.13	NDT After Weld Repair (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.4.14	Final Visual and Dimensional		0.12	3.0%
2.1.4.15	PWHT (If Any)		0.04	1.0%
2.1.4.16	Hardness Check		0.04	1.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.4.17	NDT After PWHT		0.04	1.0%
2.1.4.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.4.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.4.20	Hydrostatic Test		0.04	1.0%
2.1.4.21	Draining & Drying		0.04	1.0%
2.1.4.22	Abrasive & Paint Material		0.04	1.0%
2.1.4.23	Blasting & Painting (Each Layer OFT, Adhesion, Holiday)		0.04	1.0%
2.1.5	Glycol Particle Filter (F-100 A/B)		3.93	12.5%
2.1.5.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.5.1.1	PLATE		0.54	60.0%
2.1.5.1.1.1	PO		0.11	20.0%
2.1.5.1.1.2	Delivery To Factory		0.16	30.0%
2.1.5.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.5.1.2	FLANGE		0.27	30.0%
2.1.5.1.2.1	PO		0.05	20.0%
2.1.5.1.2.2	Delivery To Factory		0.08	30.0%
2.1.5.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.5.1.3	PIPE		0.09	10.0%
2.1.5.1.3.1	PO		0.02	20.0%
2.1.5.1.3.2	Delivery To Factory		0.03	30.0%
2.1.5.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.5.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.5.2.1	PLATE		0.25	90.0%
2.1.5.2.1.1	PO		0.05	20.0%
2.1.5.2.1.2	Delivery To Factory		0.07	30.0%
2.1.5.2.1.5	Inspection Of Material By TPI		0.12	50.0%
2.1.5.2.2	PROFILE		0.03	10.0%
2.1.5.2.2.1	PO		0.01	20.0%
2.1.5.2.2.2	Delivery To Factory		0.01	30.0%
2.1.5.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.5.3	Internals		0.08	2.0%
2.1.5.3.1	PO		0.02	20.0%
2.1.5.3.2	Delivery To Factory		0.02	30.0%
2.1.5.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.5.4	VT & DT For Raw Material		0.04	1.0%
2.1.5.5	Consumable Material (Electrode)		0.04	1.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.5.6	Cutting & Marking		0.20	5.0%
2.1.5.7	Rolling & Forming		0.31	8.0%
2.1.5.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.5.9	Welding		0.51	13.0%
2.1.5.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.5.11	NDT (VT,MT,PT,UT,RT)		0.16	4.0%
2.1.5.12	Weld Repair		0.20	5.0%
2.1.5.13	NDT After Weld Repair (VT,MT,PT,UT,RT)		0.16	4.0%
2.1.5.14	Final Visual and Dimensional		0.12	3.0%
2.1.5.15	PWHT (If Any)		0.04	1.0%
2.1.5.16	Hardness Check		0.04	1.0%
2.1.5.17	NDT After PWHT		0.04	1.0%
2.1.5.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.5.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.5.20	Hydrostatic Test		0.04	1.0%
2.1.5.21	Draining & Drying		0.04	1.0%
2.1.5.22	Abrasive & Paint Material		0.04	1.0%
2.1.5.23	Blasting & Painting (Each Layer OFT, Adhesion, Holiday)		0.04	1.0%
2.1.6	Glycol Carbon Filter (F-200)		3.93	12.5%
2.1.6.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.6.1.1	PLATE		0.54	60.0%
2.1.6.1.1.1	PO		0.11	20.0%
2.1.6.1.1.2	Delivery To Factory		0.16	30.0%
2.1.6.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.6.1.2	FLANGE		0.27	30.0%
2.1.6.1.2.1	PO		0.05	20.0%
2.1.6.1.2.2	Delivery To Factory		0.08	30.0%
2.1.6.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.6.1.3	PIPE		0.09	10.0%
2.1.6.1.3.1	PO		0.02	20.0%
2.1.6.1.3.2	Delivery To Factory		0.03	30.0%
2.1.6.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.6.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.6.2.1	PLATE		0.25	90.0%
2.1.6.2.1.1	PO		0.05	20.0%
2.1.6.2.1.2	Delivery To Factory		0.07	30.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.6.2.1.6	Inspection Of Material By TPI		0.12	50.0%
2.1.6.2.2	PROFILE		0.03	10.0%
2.1.6.2.2.1	PO		0.006	20.0%
2.1.6.2.2.2	Delivery To Factory		0.01	30.0%
2.1.6.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.6.3	Internals		0.08	2.0%
2.1.6.3.1	PO		0.02	20.0%
2.1.6.3.2	Delivery To Factory		0.02	30.0%
2.1.6.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.6.4	VT & DT For Raw Material		0.04	1.0%
2.1.6.5	Consumable Material (Electrode)		0.04	1.0%
2.1.6.6	Cutting & Marking		0.20	5.0%
2.1.6.7	Rolling & Forming		0.31	8.0%
2.1.6.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.6.9	Welding		0.51	13.0%
2.1.6.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.6.11	NDT (VT,MT,PT,UT,RT)		0.16	4.0%
2.1.6.12	Weld Repair		0.20	5.0%
2.1.6.13	NDT After Weld Repair (VT,MT,PT,UT,RT)		0.16	4.0%
2.1.6.14	Final Visual and Dimensional		0.12	3.0%
2.1.6.15	PWHT (If Any)		0.04	1.0%
2.1.6.16	Hardness Check		0.04	1.0%
2.1.6.17	NDT After PWHT		0.04	1.0%
2.1.6.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.6.19	Hydrostatic Test Water Quality		0.04	1.0%
2.1.6.20	Hydrostatic Test		0.04	1.0%
2.1.6.21	Draining & Drying		0.04	1.0%
2.1.6.22	Abrasive & Paint Material		0.04	1.0%
2.1.6.23	Blasting & Painting (EachLayer OFT,Adhesion,Holiday)		0.04	1.0%
2.1.7	Lean Glycol Filter (F-300)		3.93	12.5%
2.1.7.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.7.1.1	PLATE		0.54	60.0%
2.1.7.1.1.1	PO		0.11	20.0%
2.1.7.1.1.2	Delivery To Factory		0.16	30.0%
2.1.7.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.7.1.2	FLANGE		0.27	30.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.7.1.2.1	PO		0.05	20.0%
2.1.7.1.2.2	Delivery To Factory		0.08	30.0%
2.1.7.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.7.1.3	PIPE		0.09	10.0%
2.1.7.1.3.1	PO		0.02	20.0%
2.1.7.1.3.2	Delivery To Factory		0.03	30.0%
2.1.7.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.7.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.7.2.1	PLATE		0.25	90.0%
2.1.7.2.1.1	PO		0.05	20.0%
2.1.7.2.1.2	Delivery To Factory		0.07	30.0%
2.1.7.2.1.7	Inspection Of Material By TPI		0.12	50.0%
2.1.7.2.2	PROFILE		0.03	10.0%
2.1.7.2.2.1	PO		0.006	20.0%
2.1.7.2.2.2	Delivery To Factory		0.01	30.0%
2.1.7.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.1.7.3	Internals		0.08	2.0%
2.1.7.3.1	PO		0.02	20.0%
2.1.7.3.2	Delivery To Factory		0.02	30.0%
2.1.7.3.3	Inspection Of Material By TPI		0.04	50.0%
2.1.7.4	VT & DT For Raw Material		0.04	1.0%
2.1.7.5	Consumable Material (Electrode)		0.04	1.0%
2.1.7.6	Cutting & Marking		0.20	5.0%
2.1.7.7	Rolling & Forming		0.31	8.0%
2.1.7.8	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%
2.1.7.9	Welding		0.51	13.0%
2.1.7.10	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.7.11	NDT (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.7.12	Weld Repair		0.20	5.0%
2.1.7.13	NDT After Weld Repair (VT,MT.PT,UT,RT)		0.16	4.0%
2.1.7.14	Final Visual and Dimensional		0.12	3.0%
2.1.7.15	PWHT (If Any)		0.04	1.0%
2.1.7.16	Hardness Check		0.04	1.0%
2.1.7.17	NDT After PWHT		0.04	1.0%
2.1.7.18	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.7.19	Hydrostatic Test Water Quality		0.04	1.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.7.20	Hydrostatic Test		0.04	1.0%
2.1.7.21	Draining & Drying		0.04	1.0%
2.1.7.22	Abrasive & Paint Material		0.04	1.0%
2.1.7.23	Blasting & Painting (Each Layer OFT, Adhesion, Holiday)		0.04	1.0%
2.1.8	Glycol Reflux Condenser (E-100)		3.93	12.5%
2.1.8.1	Raw Material Of Pressure Parts		0.90	23.0%
2.1.8.1.1	PLATE		0.54	60.0%
2.1.8.1.1.1	PO		0.11	20.0%
2.1.8.1.1.2	Delivery To Factory		0.16	30.0%
2.1.8.1.1.3	Inspection Of Material By TPI		0.27	50.0%
2.1.8.1.2	FLANGE		0.27	30.0%
2.1.8.1.2.1	PO		0.05	20.0%
2.1.8.1.2.2	Delivery To Factory		0.08	30.0%
2.1.8.1.2.3	Inspection Of Material By TPI		0.14	50.0%
2.1.8.1.3	PIPE		0.09	10.0%
2.1.8.1.3.1	PO		0.02	20.0%
2.1.8.1.3.2	Delivery To Factory		0.03	30.0%
2.1.8.1.3.3	Inspection Of Material By TPI		0.05	50.0%
2.1.8.2	Raw Material Of Non-Pressure Parts		0.28	7.1%
2.1.8.2.1	PLATE		0.25	90.0%
2.1.8.2.1.1	PO		0.05	20.0%
2.1.8.2.1.2	Delivery To Factory		0.07	30.0%
2.1.8.2.1.8	Inspection Of Material By TPI		0.12	50.0%
2.1.8.2.2	PROFILE		0.03	10.0%
2.1.8.2.2.1	PO		0.006	20.0%
2.1.8.2.2.2	Delivery To Factory		0.008	30.0%
2.1.8.2.2.3	Inspection Of Material By TPI		0.014	50.0%
2.1.8.3	Internals		0.08	2.0%
2.1.8.3.1	PO		0.02	20.0%
2.1.8.3.2	Delivery To Factory		0.02	30.0%
2.1.8.3.3	Inspection Of Material By TPI		0.04	50.0%
2.8.1.4	VT & DT For Raw Material		0.04	1.0%
2.1.8.5	Consumable Material (Electrode)		0.04	1.0%
2.8.1.5	Cutting & Marking		0.20	5.0%
2.1.8.6	Rolling & Forming		0.31	8.0%
2.8.1.6	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		0.28	7.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.1.8.7	Welding		0.51	13.0%
2.8.1.7	Ferrite Check For Welding Gladded Parts		0.31	8.0%
2.1.8.8	NDT (VT,MT,PT,UT,RT)		0.16	4.0%
2.8.1.8	Weld Repair		0.20	5.0%
2.1.8.9	NDT After Weld Repair (VT,MT,PT,UT,RT)		0.16	4.0%
2.8.1.9	Final Visual and Dimensional		0.12	3.0%
2.1.8.10	PWHT (If Any)		0.04	1.0%
2.8.1.10	Hardness Check		0.04	1.0%
2.1.8.11	NDT After PWHT		0.04	1.0%
2.8.1.11	Pneumatic Test (Pad Test)		0.04	1.0%
2.1.8.12	Hydrostatic Test Water Quality		0.04	1.0%
2.8.1.12	Hydrostatic Test		0.04	1.0%
2.1.8.13	Draining & Drying		0.04	1.0%
2.8.1.13	Abrasive & Paint Material		0.04	1.0%
2.1.8.14	Blasting & Painting (Each Layer OFT, Adhesion, Holiday)		0.04	1.0%
2.2	Heat Exchangers		7	
2.2.1	E -200 Rich-Lean HE		3.5	50.0%
2.2.1.1	Raw Material for Pressure parts		1.15	32.7%
2.2.1.1.1	PLATE		0.69	60.0%
2.2.1.1.1.1	PO		0.14	20.0%
2.2.1.1.1.2	Delivery To Factory		0.21	30.0%
2.2.1.1.1.3	Inspection Of Material By TPI		0.34	50.0%
2.2.1.1.2	FLANGE		0.34	30.0%
2.2.1.1.2.1	PO		0.07	20.0%
2.2.1.1.2.2	Delivery To Factory		0.10	30.0%
2.2.1.1.2.3	Inspection Of Material By TPI		0.17	50.0%
2.2.1.1.3	PIPE		0.11	10.0%
2.2.1.1.3.1	PO		0.02	20.0%
2.2.1.1.3.2	Delivery To Factory		0.03	30.0%
2.2.1.1.3.3	Inspection Of Material By TPI		0.06	50.0%
2.2.1.2	Raw Material for Non-Pressure parts		0.27	7.8%
2.2.1.2.1	PLATE		0.25	90.0%
2.2.1.2.1.1	PO		0.05	20.0%
2.2.1.2.1.2	Delivery To Factory		0.07	30.0%
2.2.1.2.1.3	Inspection Of Material By TPI		0.12	50.0%
2.2.1.2.1.2	PROFILE		0.03	10.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.2.1.2.1.2.1	PO		0.01	20.0%
2.2.1.2.1.2.2	Delivery To Factory		0.01	30.0%
2.2.1.2.1.2.3	Inspection Of Material By TPI		0.01	50.0%
2.2.1.3	VT & DT For Raw Material		0.04	1.1%
2.2.1.4	Consumable Material (Electrode)		0.04	1.1%
2.2.1.5	Cutting & Marking		0.17	4.9%
2.2.1.6	Rolling & Forming		0.27	7.8%
2.2.1.7	Tube to Tube Sheet Joint {Expansion}		0.26	7.4%
2.2.1.8	Weld Preparation and Fit-Up (Shell, Nozzle, Tubes, Tube Sheet, ...)		0.38	10.9%
2.2.1.9	Welding		0.27	7.8%
2.2.1.10	NDT (VT, MT, PT, UT, RT)		0.07	2.0%
2.2.1.11	Weld Repair		0.10	2.9%
2.2.1.12	NDT After Weld Repair (VT, MT, PT, UT, RT)		0.04	1.0%
2.2.1.13	Final Visual and Dimensional		0.10	3.0%
2.2.1.14	PWHT (If Any)		0.04	1.1%
2.2.1.15	Hardness Check		0.04	1.1%
2.2.1.16	NDT After PWHT		0.04	1.1%
2.2.1.17	Pneumatic Test (Pad Test)		0.04	1.1%
2.2.1.18	Hydrostatic Test Water Quality		0.04	1.1%
2.2.1.19	Hydrostatic Test		0.04	1.1%
2.2.1.20	Draining & Drying		0.04	1.1%
2.2.1.21	Abrasive & Paint Material		0.04	1.1%
2.2.1.22	Blasting & Painting (Each Layer DFT, Adhesion, Holiday)		0.04	1.1%
2.2.2	E -300 LEAN TEG - DRY GAS EXCH		3.5	50.0%
2.2.2.1	Raw Material for Pressure parts		1.15	32.7%
2.2.2.1.1	PLATE		0.69	60.0%
2.2.2.1.1.1	PO		0.14	20.0%
2.2.2.1.1.2	Delivery To Factory		0.21	30.0%
2.2.2.1.1.3	Inspection Of Material By TPI		0.34	50.0%
2.2.2.1.2	FLANGE		0.34	30.0%
2.2.2.1.2.1	PO		0.07	20.0%
2.2.2.1.2.2	Delivery To Factory		0.10	30.0%
2.2.2.1.2.3	Inspection Of Material By TPI		0.17	50.0%
2.2.2.1.3	PIPE		0.11	10.0%
2.2.2.1.3.1	PO		0.02	20.0%
2.2.2.1.3.2	Delivery To Factory		0.03	30.0%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.2.2.1.3.3	Inspection Of Material By TPI		0.06	50.0%
2.2.2.2	Raw Material for Non-Pressure parts		0.27	7.8%
2.2.2.2.1	PLATE		0.25	90.0%
2.2.2.2.1.1	PO		0.05	20.0%
2.2.2.2.1.2	Delivery To Factory		0.07	30.0%
2.2.2.2.1.3	Inspection Of Material By TPI		0.12	50.0%
2.2.2.2.2	PROFILE		0.03	10.0%
2.2.2.2.2.1	PO		0.01	20.0%
2.2.2.2.2.2	Delivery To Factory		0.01	30.0%
2.2.2.2.2.3	Inspection Of Material By TPI		0.01	50.0%
2.2.2.3	VT & DT For Raw Material		0.04	1.1%
2.2.2.4	Consumable Material (Electrode)		0.04	1.1%
2.2.2.5	Cutting & Marking		0.17	4.9%
2.2.2.6	Rolling & Forming		0.27	7.8%
2.2.2.7	Tube to Tube Sheet Joint (Expansion)		0.26	7.4%
2.2.2.8	Weld Preparation and Fit-Up (Shell, Nozzle, Tubes, Tube Sheet, ...)		0.38	10.9%
2.2.2.9	Welding		0.27	7.8%
2.2.2.10	NDT (VT, MT, PT, UT, RT)		0.07	2.0%
2.2.2.11	Weld Repair		0.10	2.9%
2.2.2.12	NDT After Weld Repair (VT, MT, PT, UT, RT)		0.04	1.0%
2.2.2.13	Final Visual and Dimensional		0.10	3.0%
2.2.2.14	PWHT (If Any)		0.04	1.1%
2.2.2.15	Hardness Check		0.04	1.1%
2.2.2.16	NDT After PWHT		0.04	1.1%
2.2.2.17	Pneumatic Test (Pad Test)		0.04	1.1%
2.2.2.18	Hydrostatic Test Water Quality		0.04	1.1%
2.2.2.19	Hydrostatic Test		0.04	1.1%
2.2.2.20	Draining & Drying		0.04	1.1%
2.2.2.21	Abrasive & Paint Material		0.04	1.1%
2.2.2.22	Blasting & Painting (Each Layer DFT, Adhesion, Holiday)		0.04	1.1%
2.3	Re-boiler		6	
2.3.1	Raw Material for Pressure parts		2.07	34.51%
2.3.1.1	PLATE		1.24	60.0%
2.3.1.1.1	PO		0.25	20.00%
2.3.1.1.2	Delivery To Factory		0.37	30.00%
2.3.1.1.3	Inspection Of Material By TPI		0.62	50.00%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.3.1.2	FLANGE		0.62	30.0%
2.3.1.2.1	PO		0.12	20.00%
2.3.1.2.2	Delivery To Factory		0.19	30.00%
2.3.1.2.3	Inspection Of Material By TPI		0.31	50.00%
2.3.1.3	PIPE		0.21	10.0%
2.3.1.3.1	PO		0.04	20.00%
2.3.1.3.2	Delivery To Factory		0.06	30.00%
2.3.1.3.3	Inspection Of Material By TPI		0.10	50.00%
2.3.2	Raw Material for Non-Pressure parts		0.52	8.61%
2.3.2.1	PLATE		0.46	90.0%
2.3.2.1.1	PO		0.09	20.00%
2.3.2.1.2	Delivery To Factory		0.14	30.00%
2.3.2.1.3	Inspection Of Material By TPI		0.23	50.00%
2.3.2.2	PROFILE		0.05	10.0%
2.3.2.2.1	PO		0.01	20.00%
2.3.2.2.2	Delivery To Factory		0.02	30.00%
2.3.2.2.3	Inspection Of Material By TPI		0.03	50.00%
2.3.4	Consumable Material (Electrode)		0.05	0.82%
2.3.5	Cutting & Marking		0.30	4.92%
2.3.6	Rolling & Forming		0.52	8.61%
2.3.7	Weld Preparation and Fit-Up (Shell, Nozzle, ...)		1.11	18.44%
2.3.8	Welding		0.52	8.61%
2.3.9	NDT (VT, MT, PT, UT, RT)		0.10	1.65%
2.3.10	Weld Repair		0.12	1.93%
2.3.11	NDT After Weld Repair (VT, MT, PT, UT, R T)		0.10	1.65%
2.3.12	Final Visual and Dimensional		0.17	2.87%
2.3.13	PWHT (If Any)		0.05	0.82%
2.3.14	Hardness Check		0.05	0.82%
2.3.15	NDT After PWHT		0.05	0.82%
2.3.16	Pneumatic Test (Pad Test)		0.05	0.82%
2.3.17	Hydrostatic Test Water Quality		0.05	0.82%
2.3.18	Hydrostatic Test		0.05	0.82%
2.3.19	Draining & Drying		0.05	0.82%
2.3.20	Abrasive & Paint Material		0.05	0.82%
2.3.21	Blasting & Painting (Each Layer DFT, Adhesion, Holiday)		0.05	0.82%
2.4	Field Instruments (Transmitters/ Switch/ Gauge/ Analyzer etc.)		5	
2.4.1	PO		1.00	20.00%
2.4.2	Visual Dimensional Inspection (Appearance)		0.75	15.00%
2.4.3	Calibration Check		0.50	10.00%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.4.4	Tag & Model No & Specification Check		0.63	12.50%
2.4.5	Review Material, IP,ATEX Certificate		0.63	12.50%
2.4.6	Pressure & Performance Test		1.00	20.00%
2.4.7	Packing Inspection& Painting		0.50	10.00%
2.5	Cable, Wires & Tray		1.45	
2.5.1	Cable & Wires		0.73	50%
2.5.1.1	PO		0.15	20%
2.5.1.2	Visual Inspection		0.29	40%
2.5.1.3	Type Test Sertificate or Manufacturer Catalogue		0.29	40%
2.5.2	Tray		0.73	50%
2.5.2.1	PO		0.15	20.0%
2.5.2.2	Material Inspection		0.29	40.0%
2.5.2.3	Visual & Dimensional Inspection		0.29	40.0%
2.6	Junction Box		2	
2.6.1	PO		0.40	20.0%
2.6.2	Review IP, ATEX Certificate		0.40	20.0%
2.6.3	Tag & Model No Check		0.40	20.0%
2.6.4	Review IP, ATEX certificate		0.40	20.0%
2.6.5	Packing inspection and painting		0.40	20.0%
2.7	Local Panel (Outdoor-Hazardous Area)		2	
2.7.1	PO		0.40	20.0%
2.7.2	Visual Inspection & Dimenslonal Check		0.17	8.3%
2.7.3	Accessories Tag & Model No Check		0.17	8.3%
2.7.4	Construction		0.17	8.3%
2.7.5	Review IP, ATEX Certificate		0.17	8.3%
2.7.6	Packing Inspection & Painting		0.17	8.3%
2.8	Control & ESD/BMS Panels (Indoor-Safe Area)		10	
2.8.1	ESD/BMS		5	50.00%
2.8.1.1	PO		1.00	20%
2.8.1.2	Visual Inspection & Dimenslonal Check		0.50	10%
2.8.1.3	Tag & Model No Check		0.50	10%
2.8.1.4	Functional & Performance Test		2.50	50%
2.8.1.5	Review IP, ATEX Certificate		0.50	10%
2.8.2	Control System		5	50.00%
2.8.2.1	PO		1.00	20%
2.8.2.2	Visual Inspection & Dimenslonal Check		0.50	10%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره صفحه : از	نسخه	سریال	نوع مدرک	رشته	تسهیلات	صادر کننده	بسته کاری	پروژه	شماره پیمان:
	V02	0001	WB	PM	120	MF	GCS	BK	053 - 073 - 9184

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.8.2.3	Tag & Model No Check		0.50	10%
2.8.2.4	Functional & Performance Test		2.50	50%
2.8.2.5	Review IP, ATEX Certificate		0.50	10%
2.9	Valves		5.5	
2.9.1	Manual Valves		2.475	45.00%
2.9.1.1	Manual Valves		2.48	100.0%
2.9.1.1.1	PO		0.50	20.0%
2.9.1.1.2	Material Inspection		0.50	20.0%
2.9.1.1.3	Visual & Dimensional Check		0.50	20.0%
2.9.1.1.4	Other Required Tests		0.99	40.0%
2.9.2	Inst.Valves (On/Off, Control & Safety Valves)		3.025	55.00%
2.9.2.1	PSV		1.01	33.3%
2.9.2.1.1	PO		0.20	20.0%
2.9.2.1.2	Material Inspection		0.10	10.0%
2.9.2.1.3	Visual and Dimensional Inspection		0.10	10.0%
2.9.2.1.4	Construction		0.10	10.0%
2.9.2.1.5	Accessory		0.10	10.0%
2.9.2.1.6	Pressure Test		0.10	10.0%
2.9.2.1.7	Calibration		0.10	10.0%
2.9.2.1.8	Performance Test		0.15	15.0%
2.9.2.2	On/Off Valve		1.01	33.3%
2.9.2.2.1	PO		0.20	20.0%
2.9.2.2.2	Material Inspection		0.10	10.0%
2.9.2.2.3	Visual and Dimensional Inspection		0.10	10.0%
2.9.2.2.4	Construction		0.10	10.0%
2.9.2.2.5	Accessory		0.10	10.0%
2.9.2.2.6	Pressure Test		0.10	10.0%
2.9.2.2.7	Calibration		0.10	10.0%
2.9.2.2.8	Performance Test		0.15	15.0%
2.9.2.3	Control Valve		1.01	33.3%
2.9.2.3.1	PO		0.20	20.0%
2.9.2.3.2	Material Inspection		0.10	10.0%
2.9.2.3.3	Visual and Dimensional Inspection		0.10	10.0%
2.9.2.3.4	Construction		0.10	10.0%
2.9.2.3.5	Accessory		0.10	10.0%
2.9.2.3.6	Pressure Test		0.10	10.0%

 NISOC	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08)									
	Work Breakdown Structure									
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از	
053 – 073 – 9184	BK	GCS	MF	120	PM	WB	0001	V02		

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.9.2.3.7	Calibration		0.10	10.0%
2.9.2.3.8	Performance Test		0.15	15.0%
2.10	Strainers		1	
2.10.1	PO		0.20	20%
2.10.2	Material Inspection		0.20	20%
2.10.3	Visual and Dimensional Inspection		0.30	30%
2.10.4	Hydro Test		0.30	30%
2.11	Piping Items (Pipe, Flange, Fitting, Gasket, Bolt & Nuts)		1.5	
2.11.1	Pipe		0.38	25.0%
2.11.1	PO		0.08	20%
2.11.2	Delivery To Factory		0.11	30%
2.11.3	Inspection Of Material By TPI		0.03	8%
2.11.6	Visual and Dimensional Inspection		0.03	8%
2.11.7	Weld Preparation and Fit-Up		0.03	8%
2.11.8	Welding		0.03	8%
2.11.9	NDT(VT, MT, PT, UT, RT)		0.03	8%
2.11.10	Hydrostatic Test		0.03	8%
2.11.2	Flange		0.38	25.0%
2.11.2.1	PO		0.08	20%
2.11.2.2	Delivery To Factory		0.11	30%
2.11.2.3	Inspection Of Material By TPI		0.03	8%
2.11.2.4	Visual and Dimensional Inspection		0.03	8%
2.11.2.5	Weld Preparation and Fit-Up		0.03	8%
2.11.2.6	Welding		0.03	8%
2.11.2.7	NDT(VT, MT, PT, UT, RT)		0.03	8%
2.11.2.8	Hydrostatic Test		0.03	8%
2.11.3	Fitting		0.30	20.0%
2.11.3.1	PO		0.06	20.0%
2.11.3.2	Delivery To Factory		0.09	30.0%
2.11.3.3	Inspection Of Material By TPI		0.03	8.3%
2.11.3.4	Visual and Dimensional Inspection		0.03	8.3%
2.11.3.5	Weld Preparation and Fit-Up		0.03	8.3%
2.11.3.6	Welding		0.03	8.3%
2.11.3.7	NDT(VT, MT, PT, UT, RT)		0.03	8.3%
2.11.3.8	Hydrostatic Test		0.03	8.3%
2.11.4	Gasket		0.23	15%



نگهداشت و افزایش تولید میدان نفتی بینک
سطح الارض و ابنیه تحت الارض
خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک
(قرارداد BK-HD-GCS-CO-0010_08)



Work Breakdown Structure

شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 - 073 - 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.11.4.1	PO		0.05	20%
2.11.4.2	Delivery To Factory		0.07	30%
2.11.4.3	Inspection Of Material By TPI		0.02	8%
2.11.4.4	Visual and Dimensional Inspection		0.02	8%
2.11.4.5	Weld Preparation and Fit-Up		0.02	8%
2.11.4.6	Welding		0.02	8%
2.11.4.7	NDT(VT, MT, PT, UT, RT)		0.02	8%
2.11.4.8	Hydrostatic Test		0.02	8%
2.11.5	Bolt & Nuts		0.23	15%
2.11.5.1	PO		0.05	20%
2.11.5.2	Delivery To Factory		0.07	30%
2.11.5.3	Inspection Of Material By TPI		0.02	8%
2.11.5.4	Visual and Dimensional Inspection		0.02	8%
2.11.5.5	Weld Preparation and Fit-Up		0.02	8%
2.11.5.6	Welding		0.02	8%
2.11.5.7	NDT(VT, MT, PT, UT, RT)		0.02	8%
2.11.5.8	Hydrostatic Test		0.02	8%
2.12	Pump		2	
2.12.1	PO		0.40	20.0%
2.12.2	Inspection Of Material By TPI		0.40	20.0%
2.12.3	Final Visual and Dimensional Inspection		0.40	20.0%
2.12.4	Performance test		0.80	40.0%
2.13	Ladder & Platform (Package Structure)		5	
2.13.1	Visual and Dimensional Check After Welding		5	100%
2.14	Chemical Injection Package		2	
2.14.1	Raw Material for Tank		0.69	34.7%
2.14.2	Final Inspection For Fabricated Tank		0.10	5.1%
2.14.3	Piping & Structure Works		0.80	39.8%
2.14.4	Performance test		0.10	5.1%
2.14.5	Packing Inspection		0.10	5.1%
2.14.6	IRN		0.10	5.1%
2.14.7	Final Book		0.10	5.1%
2.15	Reboiler Burner		2	
2.15.1	PO		0.4	20%
2.15.2	Final Visual and Dimensional Inspection		0.8	40%
2.15.3	Burner Test		0.8	40%
2.16	Painting of Package Assembly (Piping, Structure)		0.05	
2.16.1	Abrasive & Paint Material		0.025	50%

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید بسته نم زدای گاز ایستگاه تقویت فشار گاز بینک (قرارداد BK-HD-GCS-CO-0010_08) Work Breakdown Structure								
شماره پیمان:	پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	شماره صفحه : از
053 – 073 – 9184	BK	GCS	MF	120	PM	WB	0001	V02	

WBS	Task Name	Doc. No.	WF (Total)	WF (Disc.)
2.16.2	Blasting & Painting (Each Layer DFT, Adhesion)		0.025	50%
2.17	Pickling (For Stainless Steel Part)		0.05	
2.17.1	Pickling and Passivation		0.05	100%
2.18	Preservation		0.05	
2.18.1	N2 Purge /Silica		0.05	100%
3	PACKING		1	
3.1	Packing Inspection		1	100%
4	IRN		1	
4.1	Release Note		1	100%
5	FINAL DATA BOOK		5	
5.1	Final Document Preparation		5	100%
6	IC		1	
6.1	Inspection Certificate		1	100%
7	SAT		1	
7.1	SAT		1	100%