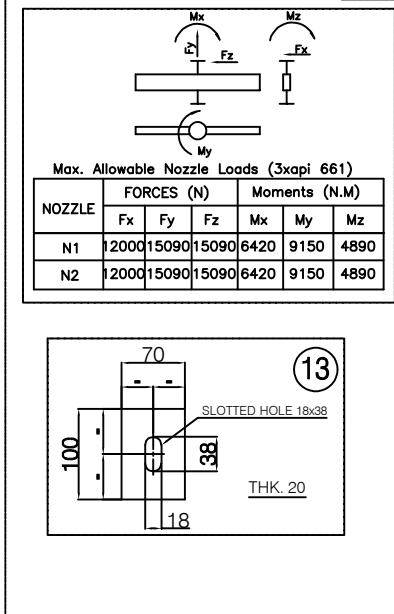
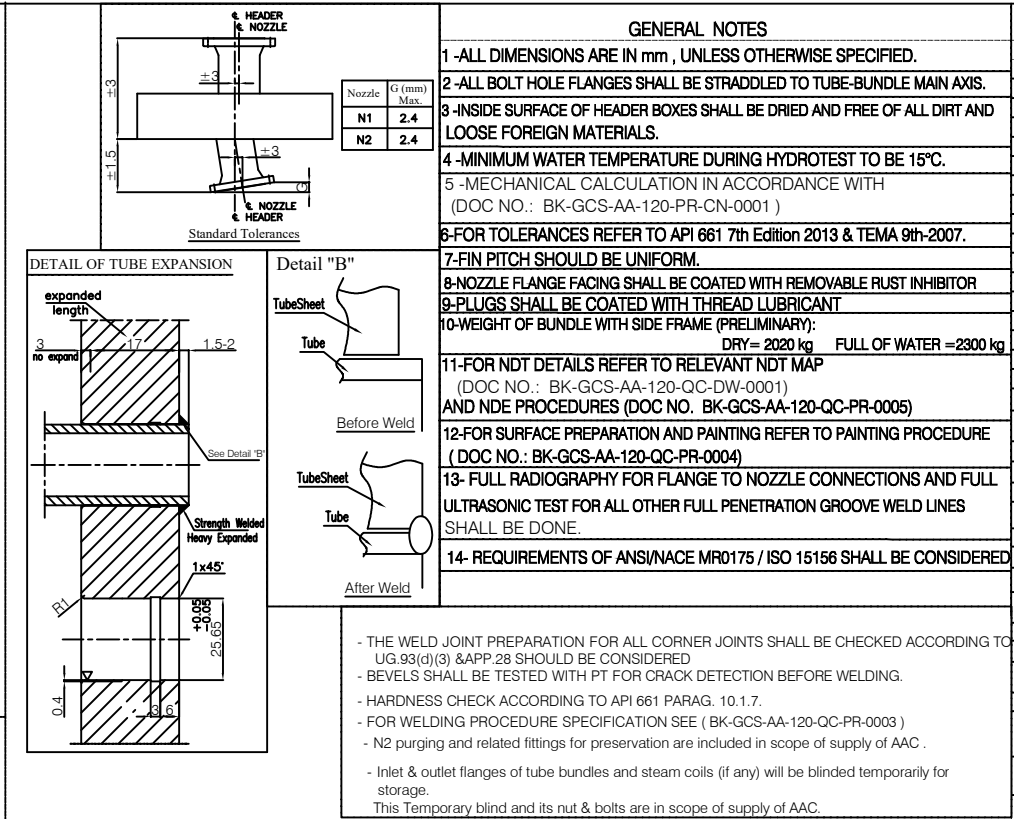
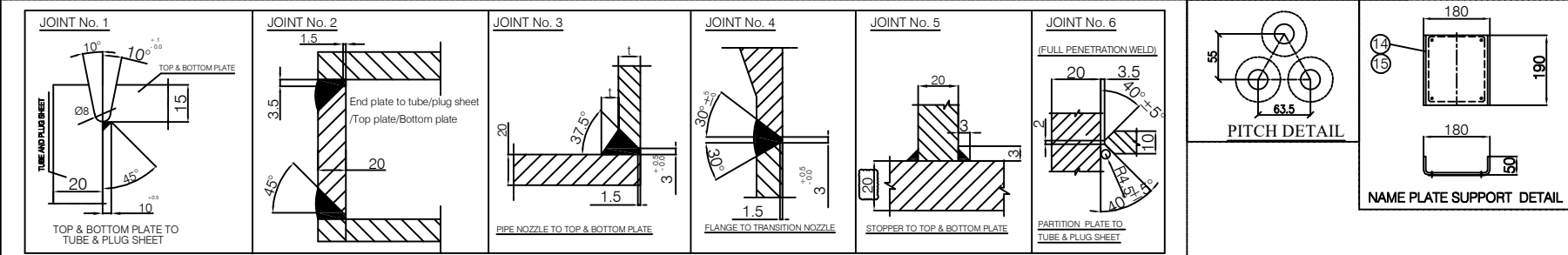
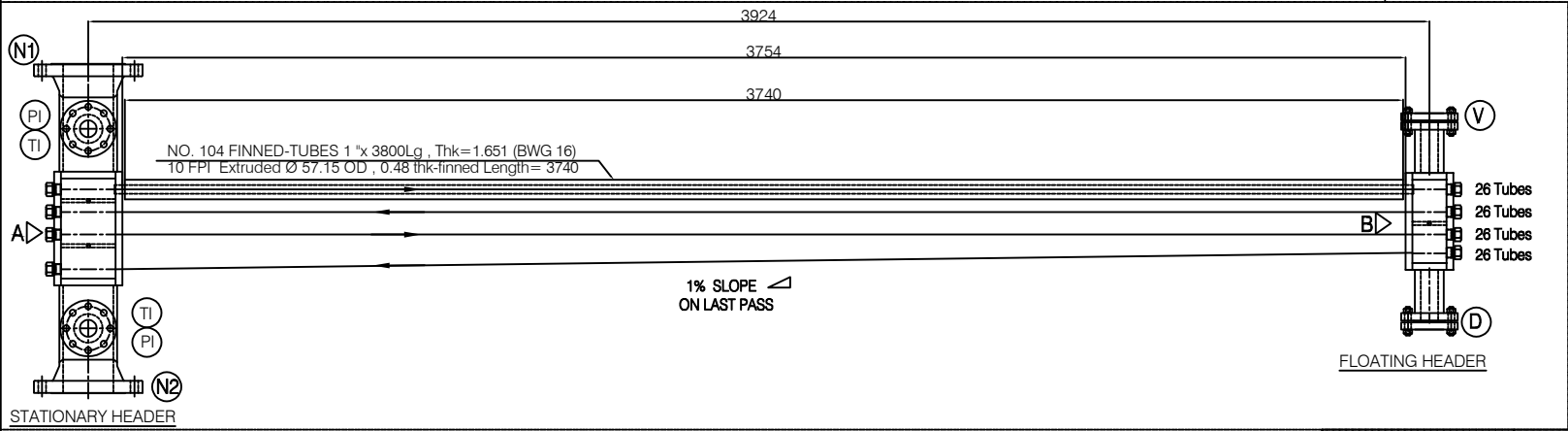
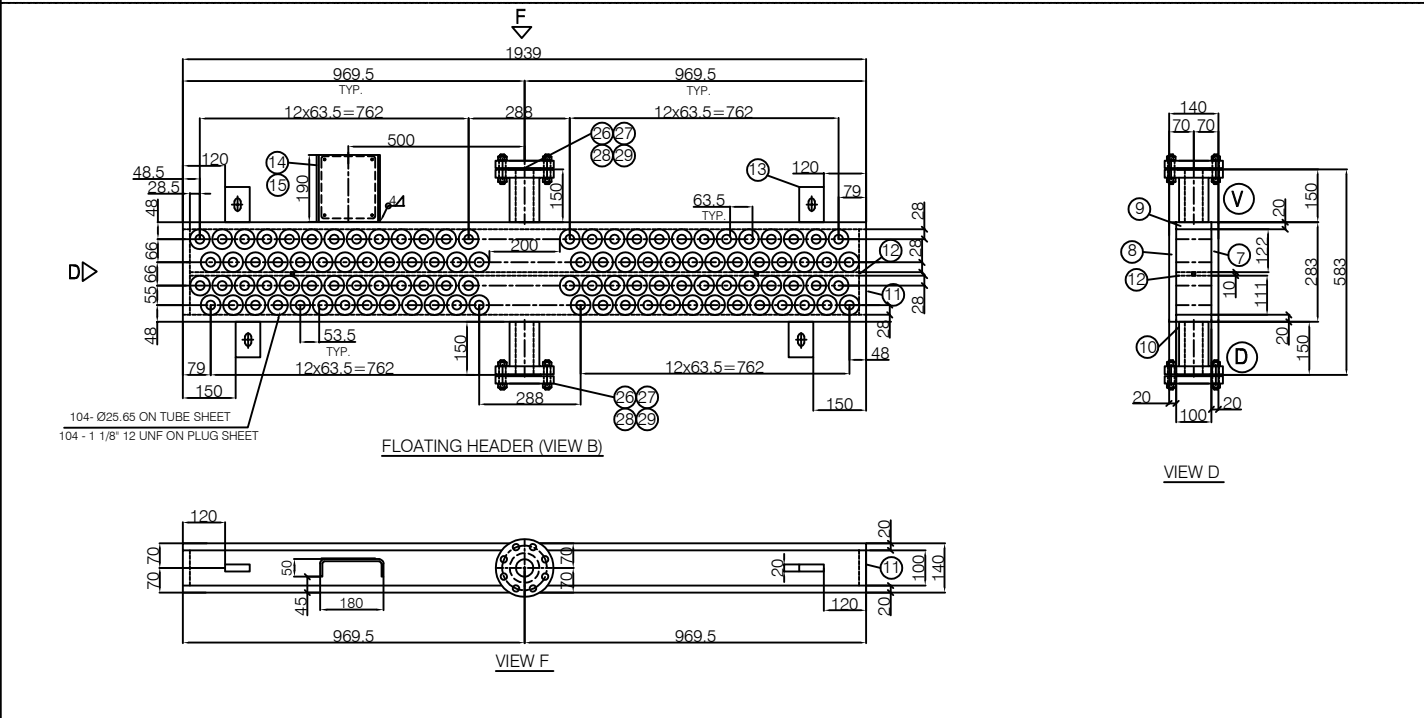
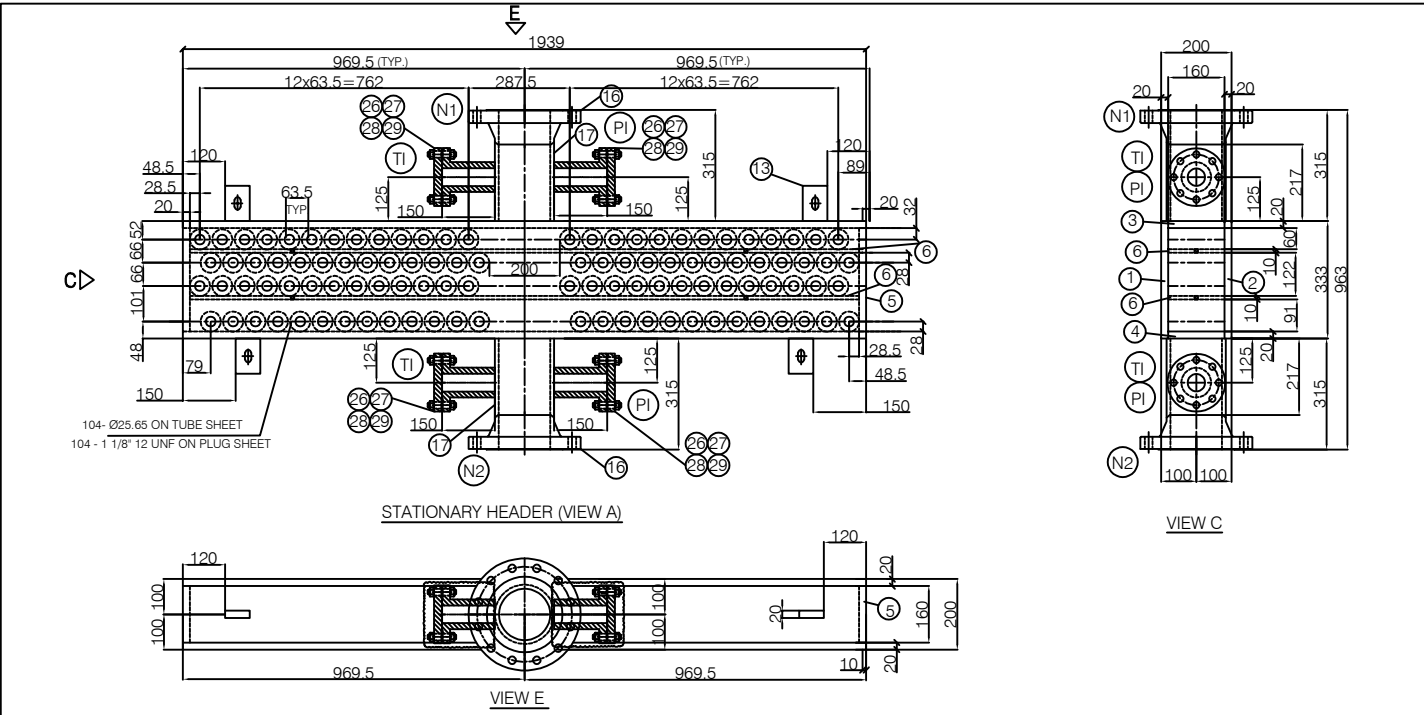
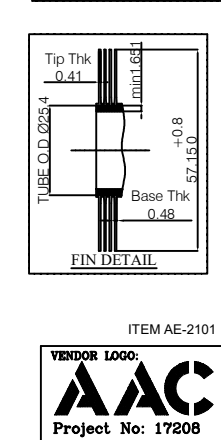
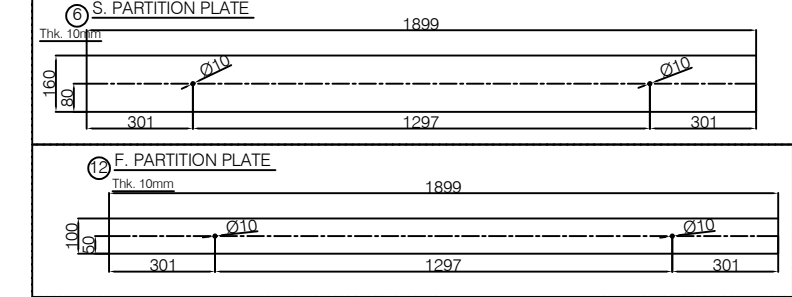
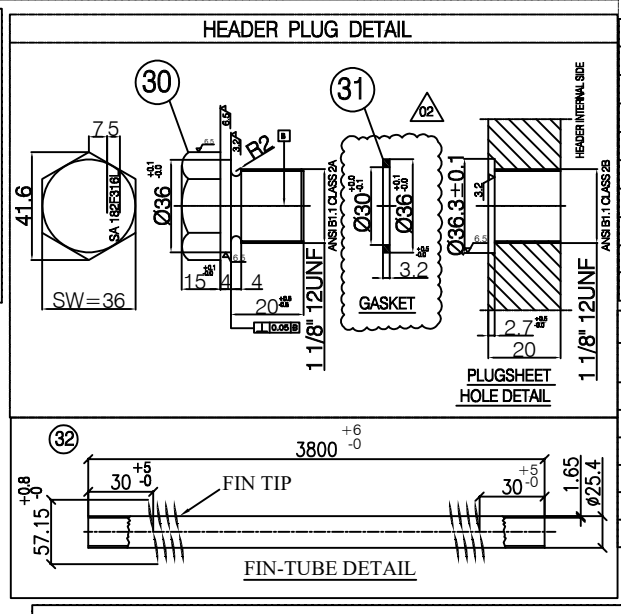




MATERIALS & PART LIST FOR ONE BUNDLE (AE-2101)					
NO	DESCRIPTION	MATERIAL	QTY	REMARK	WEIGHT
1	S. TUBESHEET	20x333x1959	1	NACE MR 0175	94
2	S. PLUGSHEET	20x333x1959	1	NACE MR 0175	92
3	S. TOP PLATE	20x160x1959	1	NACE MR 0175	49
4	S. BOTTOM PLATE	20x160x1959	1	NACE MR 0175	49
5	S. END PLATES	20x160x293	2	NACE MR 0175	15.5
6	S. PARTITION PLATE	10x160x1899	2	NACE MR 0175	48
7	F. TUBESHEET	20x283x1959	1	NACE MR 0175	81
8	F. PLUGSHEET	20x283x1959	1	NACE MR 0175	79.5
9	F. TOP PLATE	20x100x1959	1	NACE MR 0175	31
10	F. BOTTOM PLATE	20x100x1959	1	NACE MR 0175	31
11	F. END PLATES	20x100x243	2	NACE MR 0175	8
12	F. PARTITION PLATE	10x100x1899	1	NACE MR 0175	15
13	STOPPER	20x70x100	8	NACE MR 0175	9
14	NAME PLATE	176x152x2	1		-
15	NAME PLATE SUPPORT	264x190x4	1		2
16	FLANGE 2" W.N., RF, #300, SCH. 80S	SA 182F316L-NACE MR0175	2	ASME B16.5	38
17	NOZZLE PIPE 6", SCH 80S x 217 L	SA312TP316L-NACE MR0175	2	ASME B36.19	18.5
18	DELETED	-	-	-	-
19	DELETED	-	-	-	-
20	DELETED	-	-	-	-
21	DELETED	-	-	-	-
22	DELETED	-	-	-	-
23	DELETED	-	-	-	-
24	DELETED	-	-	-	-
25	DELETED	-	-	-	-
26	FLANGE 2" LWN, RF, #300 L=150, THK=16.6	SA 182F316L-NACE MR0175	6	ASME B16.5	42
27	GASKET FOR FLG 2" RF #300	SS S. TP316 SPIRAL WOUND WITH SS316 INNER & OUTER RINGS	6	ASME B16.20	-
28	BLIND FLANGE 2", RF, #300	SA 182F316L-NACE MR0175	6	ASME B16.5	8
29	STUD BOLT & 2HEX NUTS 5/8" UNC x 90 Lg.	SA 193-88W/ SA194-8M	48 Set	ASME B18.2	7
30	HEXAGONAL PLUG 1 1/8" 12UNFX 20 L (SHOULDER TYPE)	SA 182F316L-NACE MR0175	208	ASME B1.1	55
31	PLUG GASKET THK 3.2	FLAT SOLID METAL, SS316L	208	Hardness HRC 2	-
32	FINNED TUBE, 1", Thk = 1.651, TYPE: EXTRUDED NACE MR0175	SA-213 TP316L NACE MR0175 ALUMINIUM 1090-O	104	SEAMLESS TUBE S8221 FOR AL FIN	836



DESIGN DATA			
		API 661 2013/ASME SEC.VII DIV.1 2017	
		INDUCED	
barg		22	
°C		155	
barg		28.6	
mm		0	
		NO	
		0.85 SEE NOTE 13	
FOR STIFFENER/STAY PLATE		0.6	

NOZZLE DATA				
FLANGE		SCH/THK	SERVICE	
FACE	TYPE			
#	RF/SMOOTH	ANSI B16.5 W.N.	80S	INLET
#	RF/SMOOTH	ANSI B16.5 W.N.	80S	OUTLET
#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	TI (WITH BLIND)
#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	PI (WITH BLIND)
#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	VENT (WITH BLIND)
#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	DRAIN (WITH BLIND)

REFERENCE DOCUMENT		DOCUMENT No.	
Name Plate Drawing		BK-GCS-AA-120-ME-DW-0011	
General Arrangement Drawing		BK-GCS-AA-120-ME-DW-0001	
Side Frame Drawing		BK-GCS-AA-120-ME-DW-0003	
NDE Procedure		BK-GCS-AA-120-QC-PR-0005	
PROCESS DATA SHEET FOR AE-2101 (A/B/C)		BK-GCS-AA-120-PR-DS-0001	
WPS & POR		BK-GCS-AA-120-QC-PR-0003	

Maximum Dimensional Tolerance
for Rotation of Nozzle Flanges
as per EN 13480 :



NOZZLE SIZE	Up to 6 inch	Over 6 inch
Tol. for Dim.(a)	±2 mm	±3 mm

PROJECT INFORMATION					
PROJECT NAME:	BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES				
PROJECT NO.:	971020				
EPC CONTRACTOR:	HURGAN ENERGY - DESIGN & INSPECTION COMPANIES				
EPD/EPC CONTRACTOR (GC):	PETROIRAN DEVELOPMENT COMPANY				
DRAWING TITLE:	Tube Bundle Drawing				
SCALE	SIZE	DRAWING NO.	SHEET NO.	REV.	
*****	AS	BK-GCS-AA-120-ME-DW-0002	1 OF 2	V02	

CONSTRUCTION PERMITTED UNLESS DRAWING APPROVED					
APPROVED FOR CONSTRUCTION	BY:	DATE:			
BUDGET REF.	LOCATION	SIZE	CLASS	SERIAL NO.	SHEET
					REVISION

