

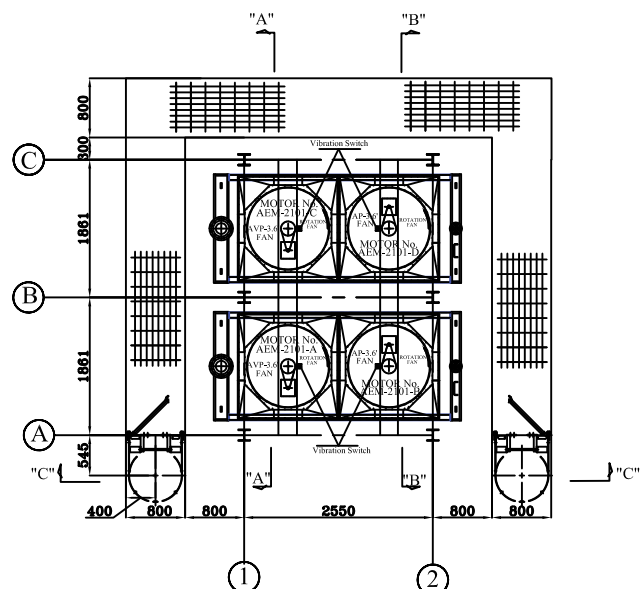


Figure 1 is an elevation view of the test facility. It shows a cross-section of a structure with two main vertical sections, A and B. Section A has a height of 2500 and a width of 1861. Section B has a height of 2200 and a width of 1861. The total height is 4000. The diagram includes various dimensions and labels: (BUNDLE FRAME DIM.) 200, (IN/OUTLET NOZZLE LOCATION) 930.5, 1481, 200, 200, 1481, 200. The diagram also shows a LOUVER, a T.O.S. 4000, and a 300 800 dimension. The diagram is labeled with A, B, and C at the bottom.

PEDESTAL (BY OTHERS)

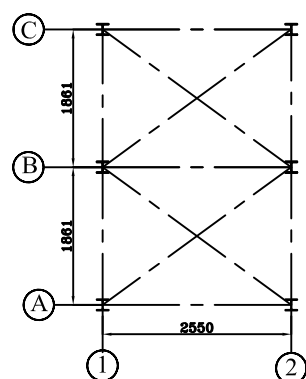
300

EXPANSION BOLT M16

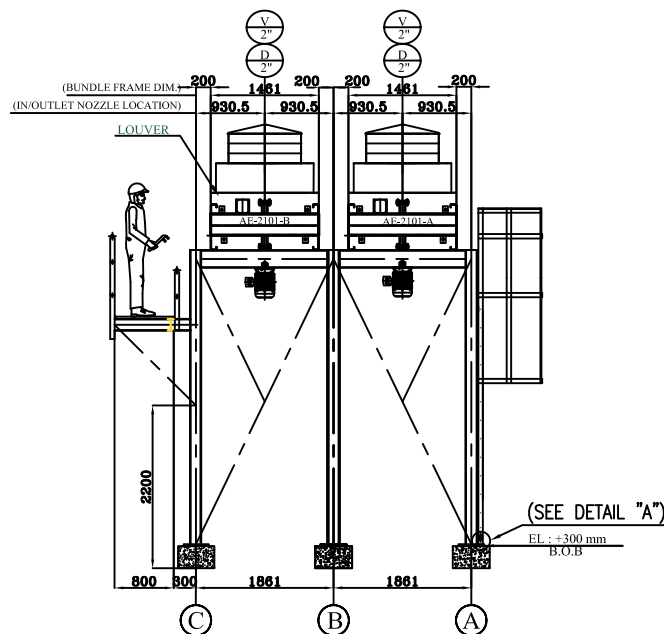
EXPANSION BOLT M16

DETAIL "A"

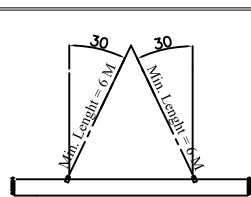
The image contains two technical drawings. The left drawing, titled "EARTH LUG DETAIL ON A1- C2", shows a cross-section of a vertical post (TH6x1/4) passing through a base plate. The base plate has a thickness of 25mm and a width of 200mm. A hole with a diameter of 12mm (HOLE Ø12) is shown. The distance from the top of the base plate to the center of the hole is 25mm. The distance from the bottom of the base plate to the center of the hole is 150mm. The right drawing, titled "BASE PLATE DETAIL (TYP.)", shows a top view of the base plate. It is a square plate with a side length of 320mm. It has four holes with a diameter of 27mm (4 HOLES Ø27) for setting bolt M24 A307. The distance between the centers of the holes is 210mm. The plate is labeled "PLATE 25mm ST37-2" and "HEA 160". An "Earth lug" is indicated on the top right corner.



MOBILE MOTOR ACCESS PLATFORME

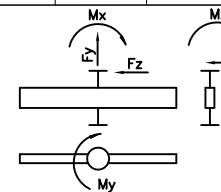


DESIGN DATA TABLE				GENERAL DATA		AE-2101
WIND DATA		SEISMIC DATA		DRAFT TYPE :	INDUCED	
CODE	ASCE7-10	CODE	ASCE 7-10	NUMBER OF BAY/UNIT	2	
WIND SPEED	34 m/s	ZONE/SOIL TYPE	D	NUMBER OF BUNDLE / BAY	1	
EXPOSURE	C	SD _s /SD ₁ / R / S _s /S	0.83/0.58/3.51/25.5/28.58	STRUCTURAL MONITORING	Ground	
IMPORTANCE FACTOR	1.0	IMPORTANCE FACTOR	1.4	DESIGN PRESSURE	130.29 / 1.4 @ 22 (barg)	
				TEST PRESSURE	28.60 (barg)	
				DESIGN TEMPERATURE	155 °C	
				FLUID NAME	Hydrocarbon	
				TEMPERATURE IN / OUT	129 / 60 °C	
				FOUILLING RESIST.	0.0002 (mm ² /k.w)	
				MATERIAL OF TUBE	SA-213 TP316L	
				OUTSIDE DIAMETER OF TUBE	25.4 mm	
				Min. Wall Thickness OF TUBE	1.651 mm	
				TUBE TO TUBESHEET JOINT TYPE	Expanded- Strength weld	
				NUMBER OF TUBES / BUNDLE	66	
				TYPE OF FIN	Extruded	
				MATERIAL OF FIN	ALUMINUM ALLOY 1060- O	
				OUTSIDE DIAMETER OF FIN	57.15 mm	
				STOCK / TIP THK.	0.48 / 0.48 mm	
				FPIs	10	
				BARE / FINNED SURFACE PER UNIT	33.078 / 691.54 m ²	
				TYPE OF HEADER	PLUG	
				MATERIAL OF HEADER	SA-240 TP316L	
				PLUG MATERIAL	SA-182 F316L	
				GASKET MATERIAL	Spiral wound +S.S 316 inner ring	
				CORROSION ALLOWANCE	0 mm	
				FAN SPECIFICATION - RPM / DIAMETER	7853 / 3.6 FT	
				FAN ABSORBED POWER	2.30kw	
				NUMBER OF BLADE/BLADE MATERIAL	4-ALUMINIUM	
				ANG QUANTITY / FAN	8.728 m3/s	
				STATIC PRESSURE	126.29 Pa	
				AIR TEMPERATURE IN/OUT	58.26 / 50.63 °C	
				Fan inlet level @ 1m from fan in any direction	< 85 [dBi]	
				ELECTRIC MOTOR	Eesd IIB T3 Jp55	
				VOLTS / CYCLES / PHASE	400-50-3	
				RPM / MOTOR POWER (kw)	1500/3.5	
				SPEED REDUCER TYPE	V-BELT	
				REDUCTION RATIO	1.91	
				STEAM COIL	NO	
				LOUVER	YES	
				IP CONVERTER	YES (Zone 2, IIC, IEx, IP45)	
				VIBRATION SWITCH/NUMBER	YES - Eesd IIB T3 Jp55	
				FIREPROOFING	YES	



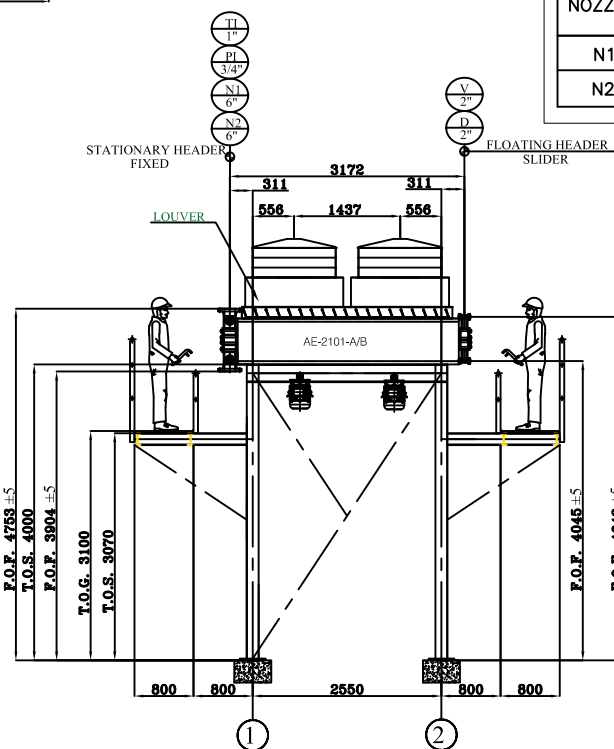
BUNDLE LIFTING ARRANGEMENT
(BUNDLE ONLY)

NOZZLE DATA							
MARK	QTY.	SIZE	FLANGE			SCH/THK	SERVICE
			RATING	FACE	TYPE		
کامنت های صف					ANSI B16.5 W.N.	80S	INLET
					ANSI B16.5 W.N.	80S	OUTLET
					ANSI B16.5 L.W.N.	14.25	TI (WITH BLIND)
PI	2	3/4"	300#	RF/SMOOTH	ANSI B16.5 L.W.N.	14.3	PI (WITH BLIND)
V	1	2"	300#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	VENT (WITH BLIND)
D	1	2"	300#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	DRAIN (WITH BLIND)



Max. Allowable Nozzle Loads (api 661)

NOZZLE	FORCES (N)			Moments (N.M)		
	F _x	F _y	F _z	M _x	M _y	M _z
N1	4000	5030	5030	2140	3050	1630
N2	4000	5030	5030	2140	3050	1630



FIRE PROOFING DETAIL
FOR COLUMNS & BEAMS

USE Ø20 mm. STEEL BAR SPACER WELDED TO STRUCTURAL STEEL SHAPES LENGTH 50 mm

V00	FEB.2024	IFI	MC	M.PAKHARIAN	S.FARMAZPOUR				
REV.	DATE	P.O.I.S	PREP.	CHK.	APP.	AUT.			
PROJECT NAME: BINAK OILFIELD DEVELOPMENT/SURFACE FACILITIES GAS & GAS-CONDENSATE PIPELINES									
PROJECT NO.:						971020			
EPC CONTRACTOR:						EPD/EPC CONTRACTOR (GC):			
  HIRGAN ENERGY - DESIGN & INSPECTION COMPANIES						 PETROIRAN DEVELOPMENT COMPANY			
DRAWING TITLE:									
General Arrangement Drawings									
SCALE		SIZE		DRAWING NO.			SHEET NO.		RE
NC		A3		BK-GCS-AA-120-ME-DW-0001			1 OF 4		VO

NOTES

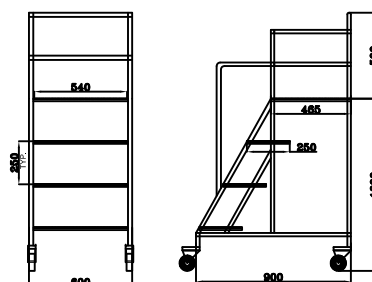
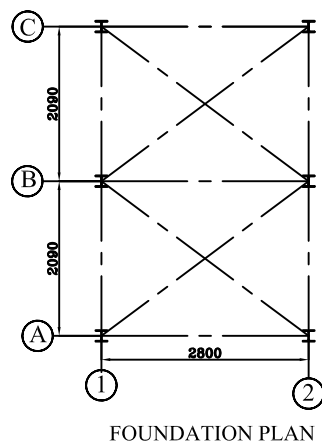
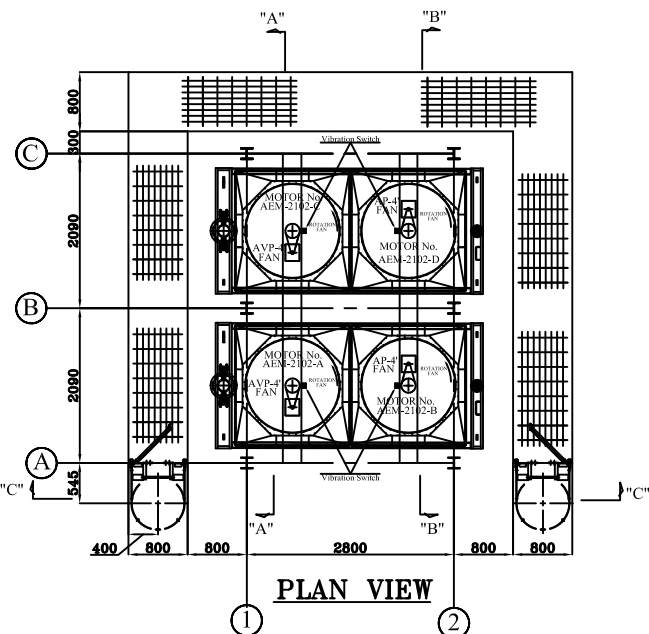
1. ALL DIMENSIONS AND COORDINATES ARE IN MILLIMETER.
1. ALL ELEVATIONS ARE IN MILLIMETER.
3. DESIGNED PER API-661 SEVENTH ED. 2013 AND ASME SEC. VIII, DIV. I, Ed.2017.
OVERALL TOLERANCES PER API-661, FIG.10 AND APPLICABLE SPECIFICATION.
4. SURFACE PROTECTION : PAINTING ACCORDING TO BK-GCS-AA-120-QC-PR-0003
5. BUNDLE ARE FITTED WITH SLIDING PAD AND INLET HEADERS ARE FIXED IN FINITUBE DIRECTION .
6. MECHANICAL EQUIPMENT : FAN-MANUALLY ADJUSTABLE BLADE PITCH (AP) 50%
 AUTO VARIABLE ADJUSTABLE PITCH (AVP) 50%
 SPEED REDUCER V Belts
7. FAN BLADE ANGLES : ACCORDING TO FAN DATA SHEET: BK-GCS-AA-120-ME-D8-0001
8. TRANSPORTATION BOLTS SHALL BE REMOVED AFTER INSTALLATION.

9. ABBREVIATIONS:	T.O.S. : Top Of Steel	B.O.B. Pl.: Bottom of Base Plate
	T.O.G. : Top Of Grating	F.O.F. : Face Of Flange
	C.O.P. : Center Of Pipe	

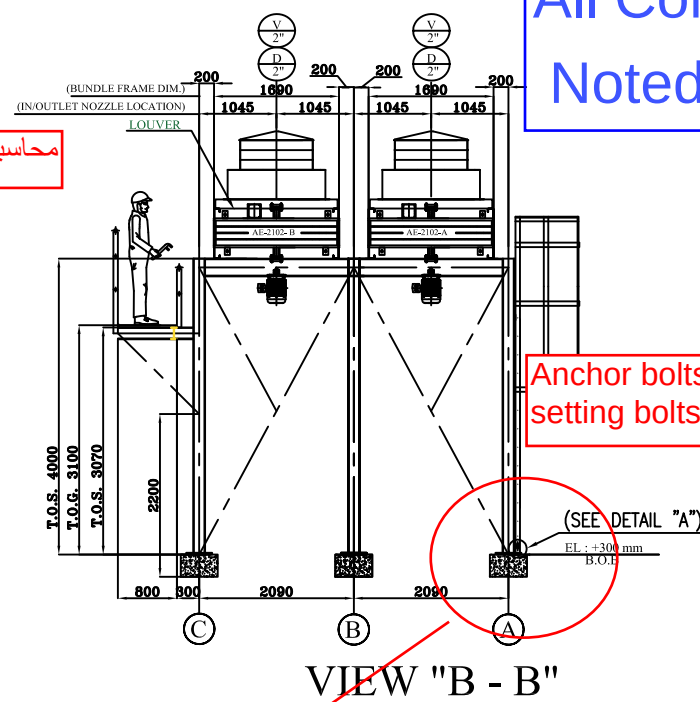
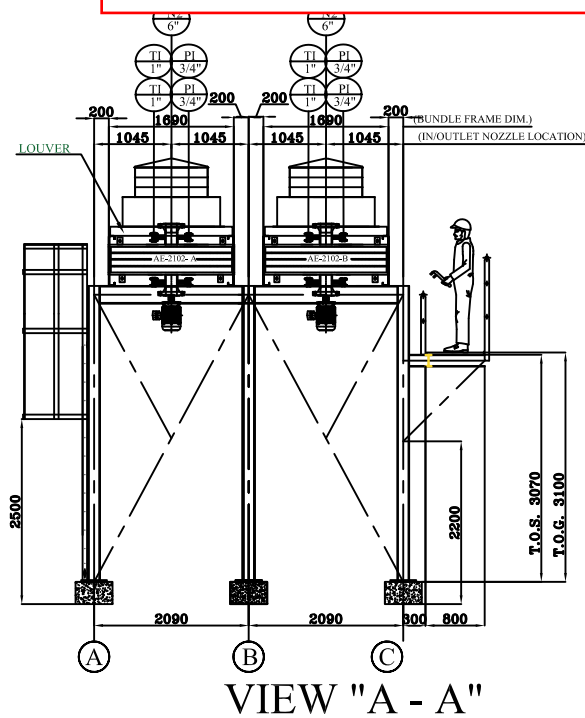
LEGEND

REFERENCE DRAWING	DRG. No.
Process Data Sheet for AE-2101 (A/B/C)	BK-GCS-AA-120-PR-DS-0001
Bundle Frame Drawing	
Fan Data Sheets	BK-GCS-AA-120-ME-DS-0001
Steel Structure Calculation Books	BK-GCS-AA-120-ST-CN-0001
Motor Data Sheets	BK-GCS-AA-120-EL-DS-0001

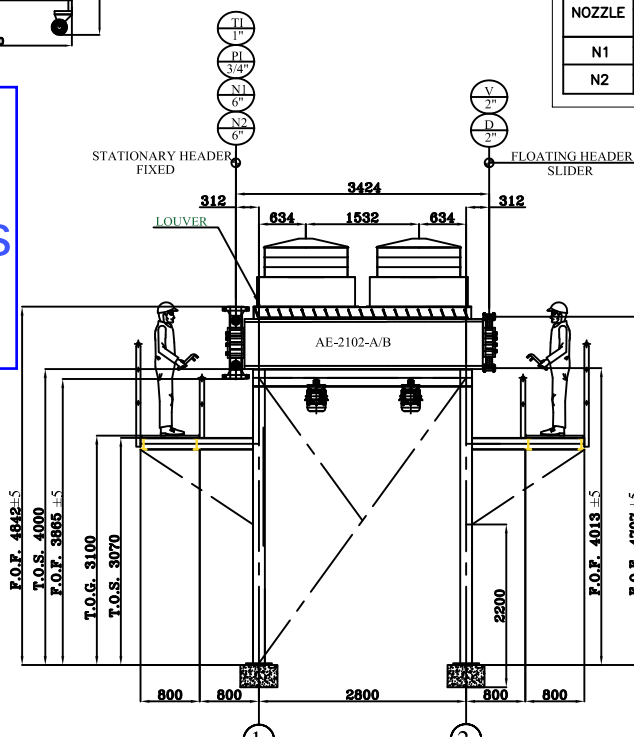
KEY PLAN



محاسبات استراکچر فلزی و اتصالات و بیس یلیت ها ارائه شود



(SEE DETAIL "A")

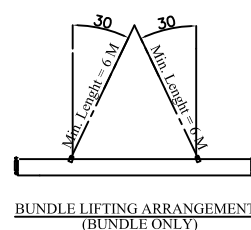
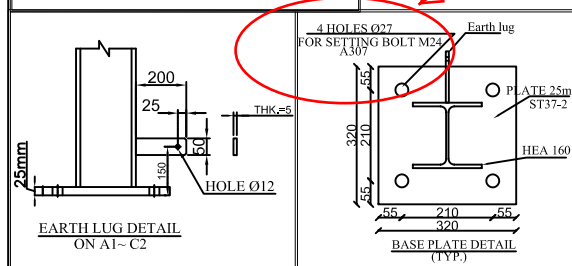
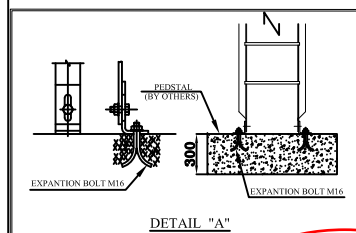


FIRE PROOFING DETAIL
EDGE COLUMNS & BRACE

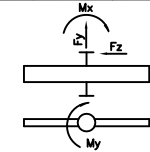
FIRE PROOFING DETAIL
FOR DECK

USE $\phi 20$ mm. STEEL BAR SPACER WELDED TO STRUCTURAL STEEL SHAPES LENGTH 50 mm

DESIGN DATA TABLE				GENERAL DATA		AE-2102	
WIND DATA		SEISMIC DATA		DRAFT TYPE :		INDUCED	
CODE	ASCE7-10	CODE	ASCE 7-10	NUMBER OF BAY/UNIT		2	
WIND SPEED	34 m/s	ZONE/SOIL TYPE	D	NUMBER OF BUNDLE / BAY		1	
EXPOSURE	C	$S_Ds / S_D1 / R / S_e / S_0$	0.83/0.58/3.5/1.25/0.5	STRUCTURAL MOUNTING		Ground	
IMPORTANCE FACTOR	1.0	IMPORTANCE FACTOR	1.4	DESIGN PRESSURE		62 F/V @ 22 (Harg)	
				TEST PRESSURE		7% (Harg)	
				DESIGN TEMPERATURE		175 °C	
				FLUID NAME		Hydrocarbon	
				TEMPERATURE IN / OUT		147 / 60 °C	
				FOUILLING RESIST.		0.0002 (m2/k.w)	
				MATERIAL OF TUBE		SA-313 TP316L	
				OUTSIDE DIAMETER OF TUBE		25.4 mm	
				Min. Wall Thickness OF TUBE		1.65 mm	
				BUSHET JOINT TYPE		Expanded / Strength weld	
				TUBES / BUNDLE		1X / 90	
				F TFIN		ALUMINIUM ALLOY 1060 - O	
				AMETER OF FIN		57.15 mm	
				THK.		0.48 / 0.48 mm	
						10	
				D SURFACE PER UNIT		47.399 / 988.27 m2	
				TYPE OF HEADER		PLUG	
				MATERIAL OF HEADER		SA-240 TP316L	
				TUBES MATERIAL		SA-313 TP316	
				SPIRAL WOUND		Spiral wound / 516 S16 inner ring	
				CORROSION ALLOWANCE		0 mm	
				FIN SPECIFICATION - RPM / DIAMETER		3/5 / 41T	
				FAN ABSORBED POWER		4 (Kw)	
				NUMBER OF BLADE/BLADE MATERIAL		5/ALUMINIUM	
				AIR QUANTITY / FAN		11.266 m3/s	
				STATIC PRESSURE		167.22 Pa	
				AIR TEMPERATURE IN/OUT		50.26 / 62.63 °C	
				Tubes level @ 1m from fan in any direction		± 5 LMM	
				ELECTRIC MOTOR		E44 HB T2 ,JPS5	
				VOLTS / CYCLES / PHASE		400-50/3	
				RPM / MOTOR POWER (Kw)		1500/5.5	
				SHEED REDUCER TYPE		V-BELT	
				REDUCTION RATIO		2.13	
				STREAM COIL		NO	
				T/OVER		YES	
				T/O CONVERTER		Y15 (Zone 2 , IIC, Exia, II 6)	
				RELATION SWITCH/NUMBER		Y15 - Exia HB T3 ,JPS5	
				THERDROPPING		YES	



NOZZLE DATA							
MARK	QTY.	SIZE	FLANGE			SCH/THK	SERVICE
			RATING	FACE	TYPE		
N1	1	6"	600#	RF/SMOOTH	ANSI B16.5 W.N.	80S	INLET
N2	1	6"	600#	RF/SMOOTH	ANSI B16.5 W.N.	80S	OUTLET
TI	2	1"	600#	RF/SMOOTH	ANSI B16.5 L.W.N.	14.3	TI (WITH BLIND)
PI	2	3/4"	600#	RF/SMOOTH	ANSI B16.5 L.W.N.	14.5	PI (WITH BLIND)
V	1	2"	600#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	VENT (WITH BLIND)
D	1	2"	600#	RF/SMOOTH	ANSI B16.5 L.W.N.	16.6	DRAIN (WITH BLIND)



NOZZLE	FORCES (N)			Moments (N.M)		
	Fx	Fy	Fz	Mx	My	Mz
N1	12000	15090	15090	6420	9150	4890
N2	12000	15090	15090	6420	9150	4890

NOTES	
1.	ALL DIMENSIONS AND COORDINATES ARE IN MILLIMETER.
2.	ALL ELEVATIONS ARE IN MILLIMETER.
3.	DESIGNED PER API-661 SEVENTH EDITION. 2013 AND ASME SEC. VIII, Div. 1, Ed.2017. OVERALL TOLERANCES PER API-661, FIG.10 AND APPLICABLE SPECIFICATION.
4.	SURFACE PROTECTION : PAINTING ACCORDING TO BG-GCS-AA-120-QC-PR-0003
5.	BUNDLE ARE FITTED WITH SLIDING PAD AND INLET HEADERS ARE FIXED IN FINITUBE DIRECTION.
6.	MECHANICAL EQUIPMENT : FAN-MANUALLY ADJUSTABLE BLADE PITCH (AP) 50% AUTO VARIABLE ADJUSTABLE PITCH (AVP) 50% SPEED REDUCER V Belt
7.	FAN BLADE ANGLES: ACCORDING TO FAN DATA SHEET. BG-GCS-AA-120-ME-DS-0001
8.	TRANSPORTATION BOLTS SHALL BE REMOVED AFTER INSTALLATION.

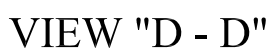
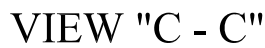
T.O.S. : Top Of Steel B.O.B. PL: Bottom of Base Plate
T.O.G. : Top Of Grating F.O.F. : Face Of Flange
C.O.F. : Center Of Flange

LEGEND

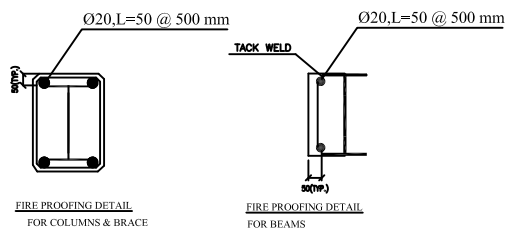
REFERENCE DRAWING	DRG. No.
Process Data Sheet for AE-2101 (A/B/C)	BK-GCS-AA-120-PR-DS-0002
Bundle Frame Drawing	
Fan Data Sheets	BK-GCS-AA-120-ME-DS-0001
Steel Structure Calculation Books	BK-GCS-AA-120-ST-CN-0001
Motor Data Sheets	BK-GCS-AA-120-EL-DS-0001

KEY PLAN

[illegible]



Max. Allowable Nozzle Loads (api 661)						
NOZZLE	FORCES (N)			Moments (N.M)		
	Fx	Fy	Fz	Mx	My	Mz
N1	4000	5030	5030	2140	3050	1630
N2	4000	5030	5030	2140	3050	1630

[illegible]

USE $\phi 20$ mm. STEEL BAR SPACER WELDED TO STRUCTURAL STEEL SHAPES LENGTH 50 mm

