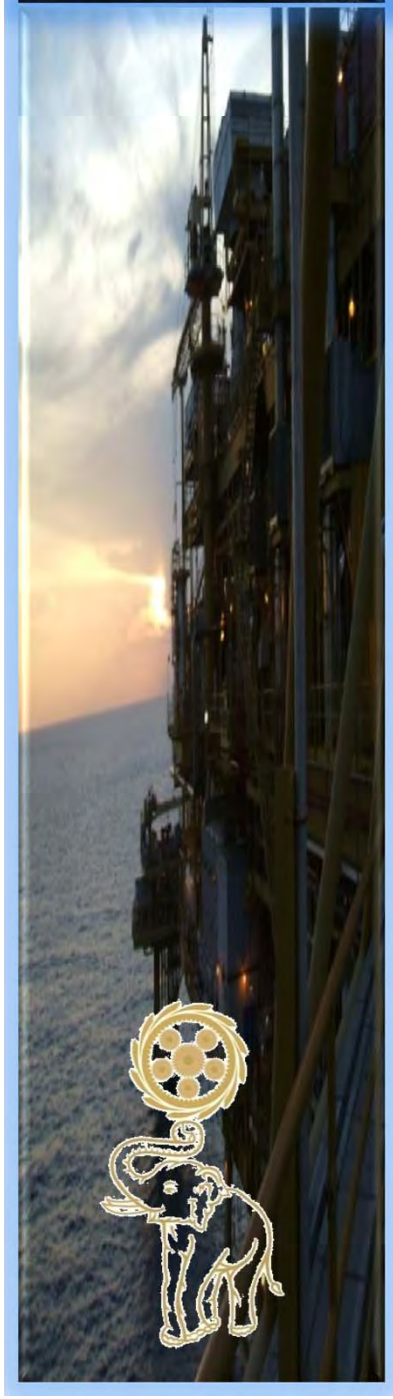
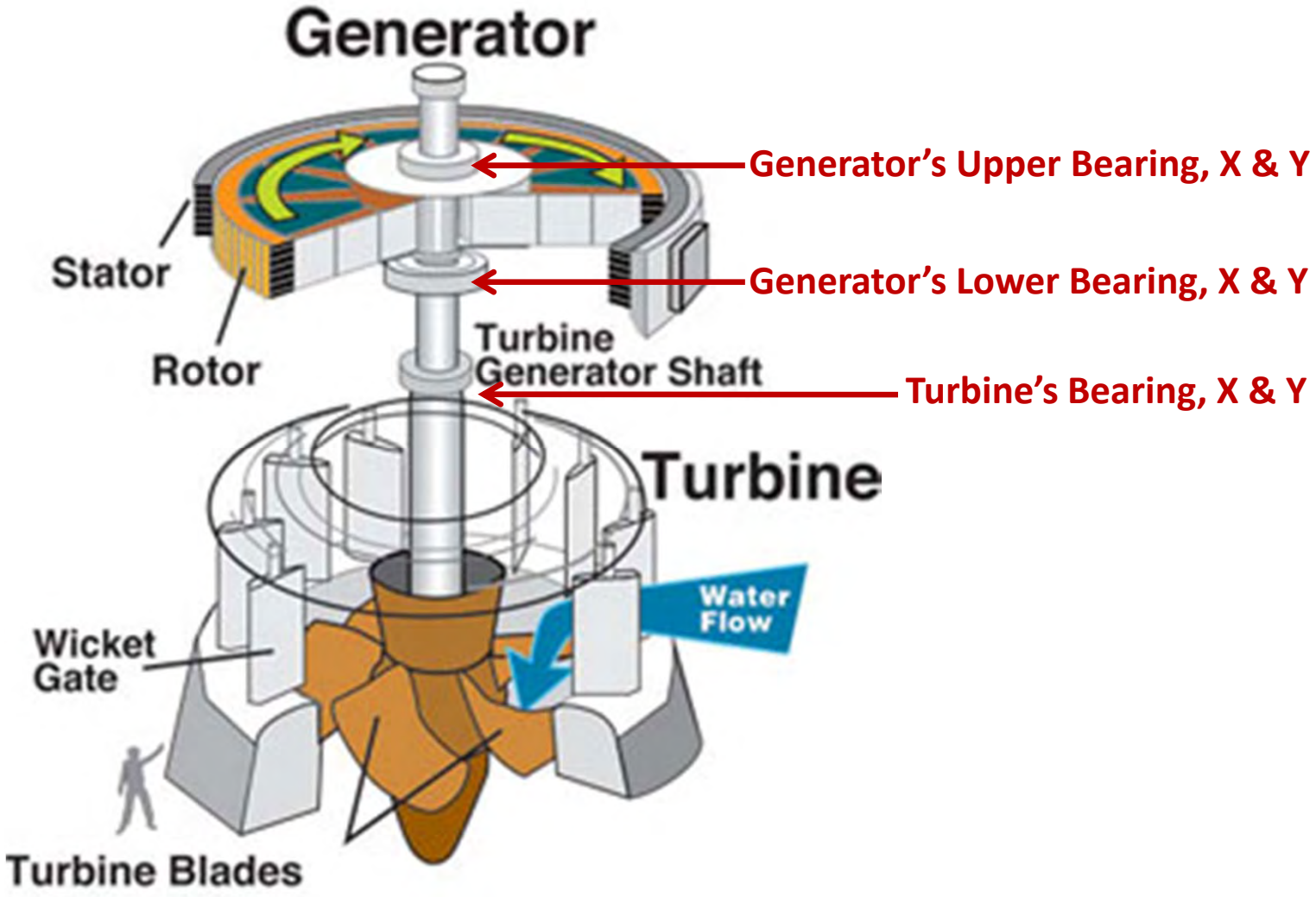


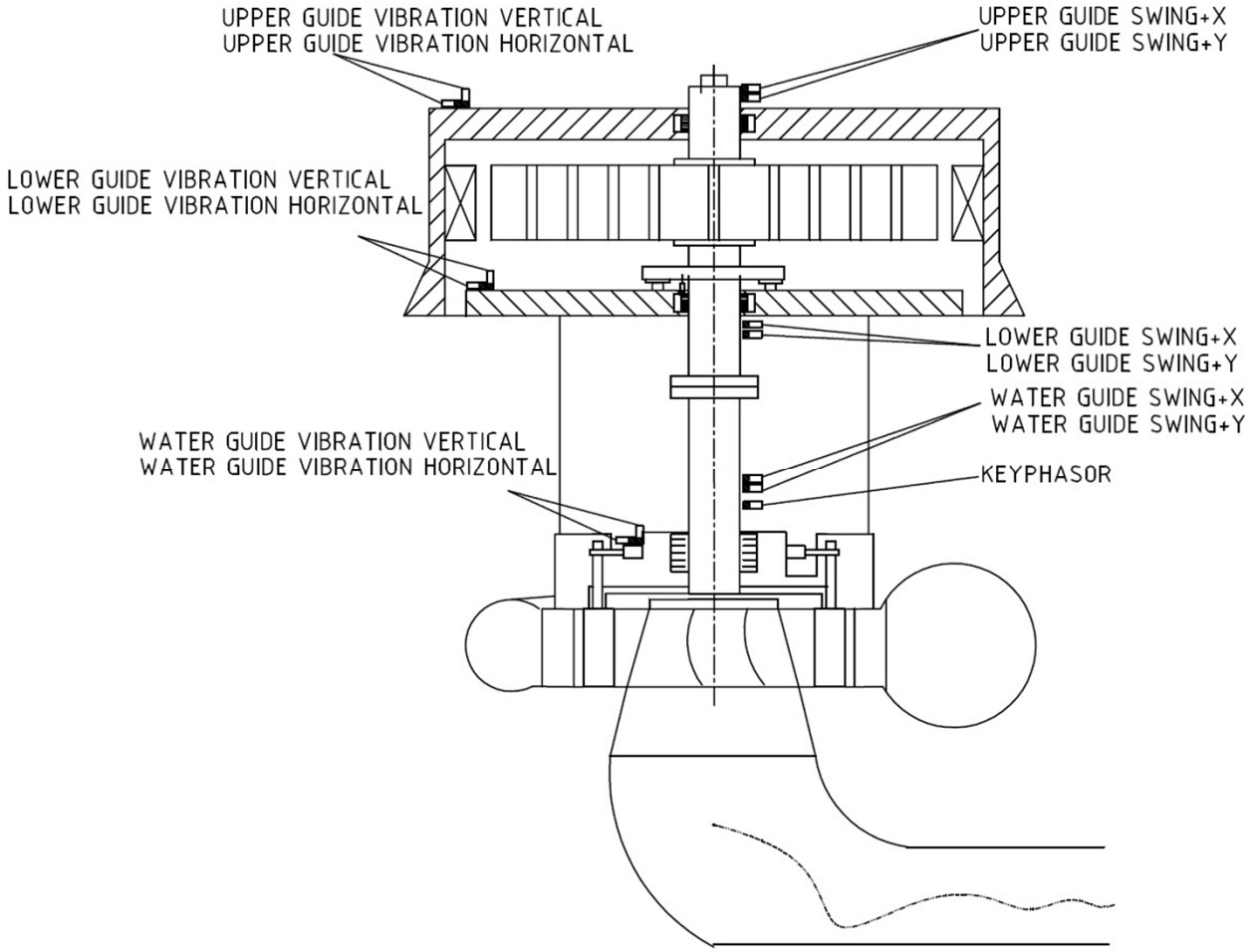
การไฟฟ้าฝ่ายผลิตแห่งประเทศไทย
โรงไฟฟ้าลำตะคองชลภาวัฒนา
Electricity Generating Authority of Thailand
Lamtakong Cholapa Wattana Hydro Power Plant

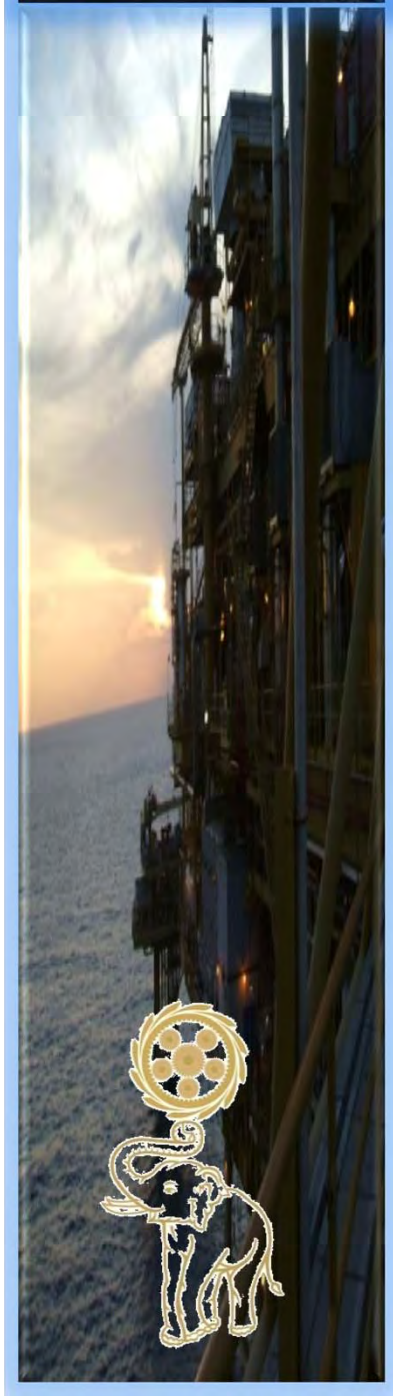
- The Machines are 2 Hydro Turbines.
- There are only 2-3 old and simple vibration transmitters per Turbine.
- The Vibration transmitter didn't work properly in some time.
- The customer contacted us to propose a full vibration system as well as other monitoring system to protect and monitor the Turbine/Generator health.
- We propose all Shaft Vibration, Casing Vibration, LVDT (Case Expansion) and Air Gap monitoring for Turbine's Rotor.
- The additional condition is the new system must be able to integrate with their existing control system.

Typical Turbine & Generator Vibration Installation



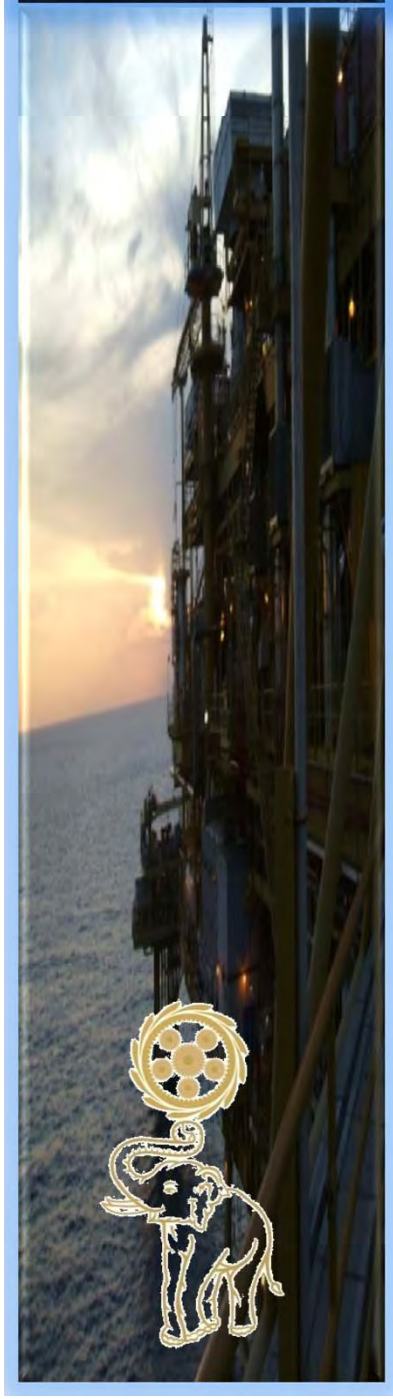
Typical Turbine & Generator Vibration Installation



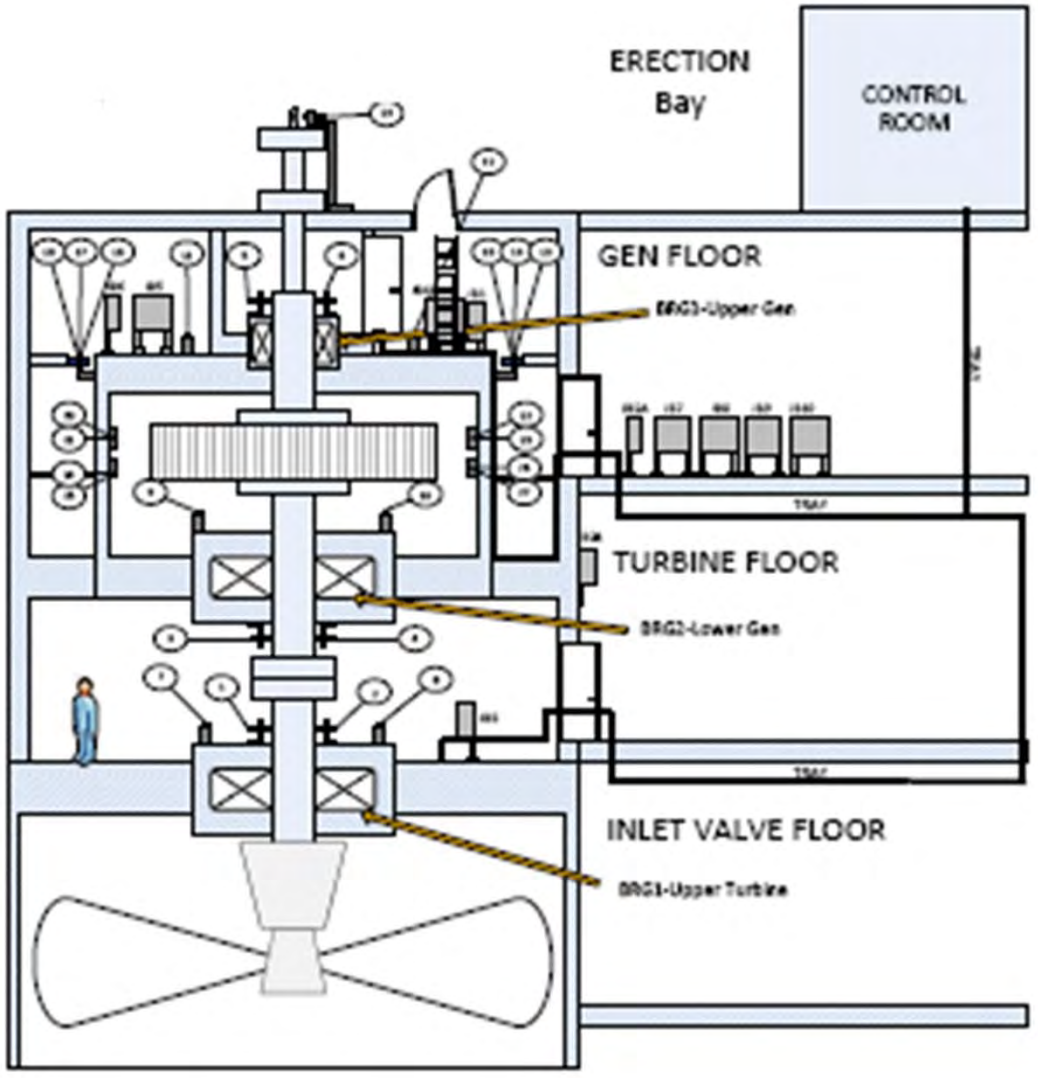


Turbine & Generator Vibration Location

Item	Description	Sensor Type	Sensor Series	Terminated on
1	Upper Turbine - Disp - X	Eddy Current Probe	PRS04	JB3
2	Upper Turbine - Disp - Y	Eddy Current Probe	PRS04	JB3
3	Lower Gen - Disp - X	Eddy Current Probe	PRS04	JB2B
4	Lower Gen - Disp - Y	Eddy Current Probe	PRS04	JB2B
5	Upper Gen - Disp - X	Eddy Current Probe	PRS04	JB1
6	Upper Gen - Disp - Y	Eddy Current Probe	PRS04	JB1
7	Upper Turbine - Vel - Horz	Piezo Velometer	PZV2	JB3
8	Upper Turbine - Vel - Vert	Piezo Velometer	PZV2	JB3
9	Lower Gen - Vel - Horz	Piezo Velometer	PZV2	JB2A
10	Lower Gen - Vel - Vert	Piezo Velometer	PZV2	JB2A
11	Upper Gen- Vel - Horz	Piezo Velometer	PZV2	JB1
12	Upper Gen - Vel - Vert	Piezo Velometer	PZV2	JB1
13	Upper Gen - Case Expansion 1	LVDT	SX20MECR	JB4
14	Upper Gen - Case Expansion 2	LVDT	SX20MECR	JB4
15	Upper Gen - Case Expansion 3	LVDT	SX20MECR	JB5
16	Upper Gen - Case Expansion 4	LVDT	SX20MECR	JB5
17	Upper Gen - Case Expansion 5	LVDT	SX20MECR	JB6
18	Upper Gen - Case Expansion 6	LVDT	SX20MECR	JB6
19	Key Phasor	Eddy Current Probe	PRS04	JB1
20	Gen Air Gap 1		AFT-550	JB7
21	Gen Air Gap 2		AFT-550	JB7
22	Gen Air Gap 3		AFT-550	JB8
23	Gen Air Gap 4		AFT-550	JB8
24	Gen Air Gap 5		AFT-550	JB9
25	Gen Air Gap 6		AFT-550	JB9
26	Gen Air Gap 7		AFT-550	JB10
27	Gen Air Gap 8		AFT-550	JB10



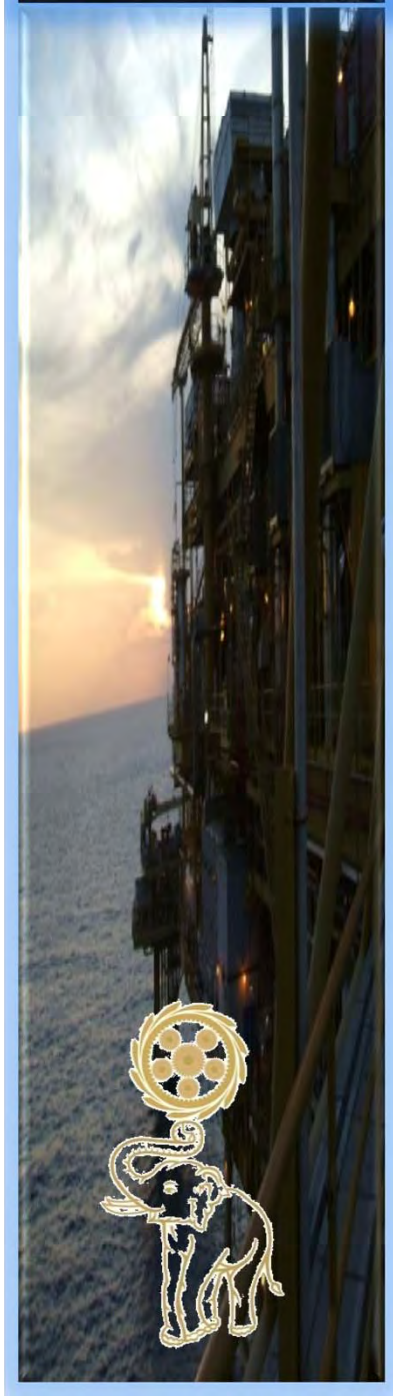
System Layout



AST







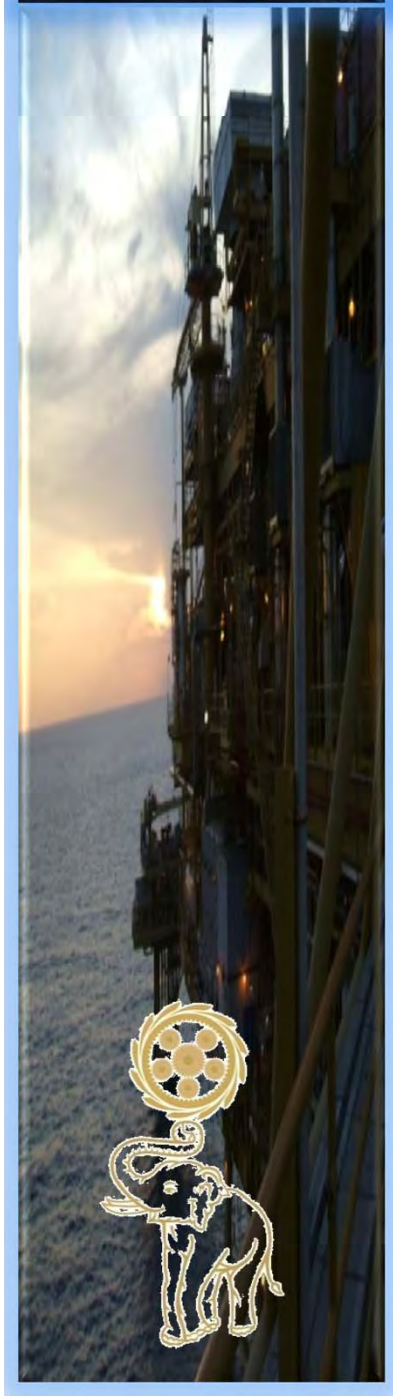
Installation point



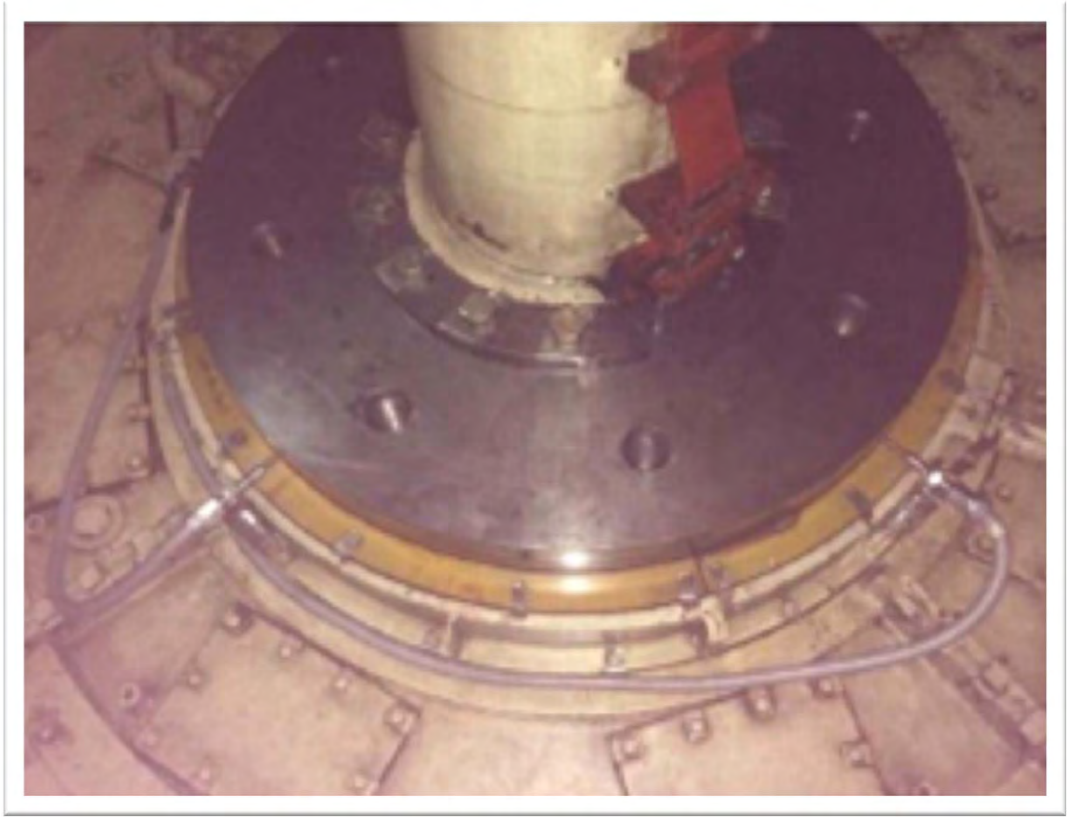
AST





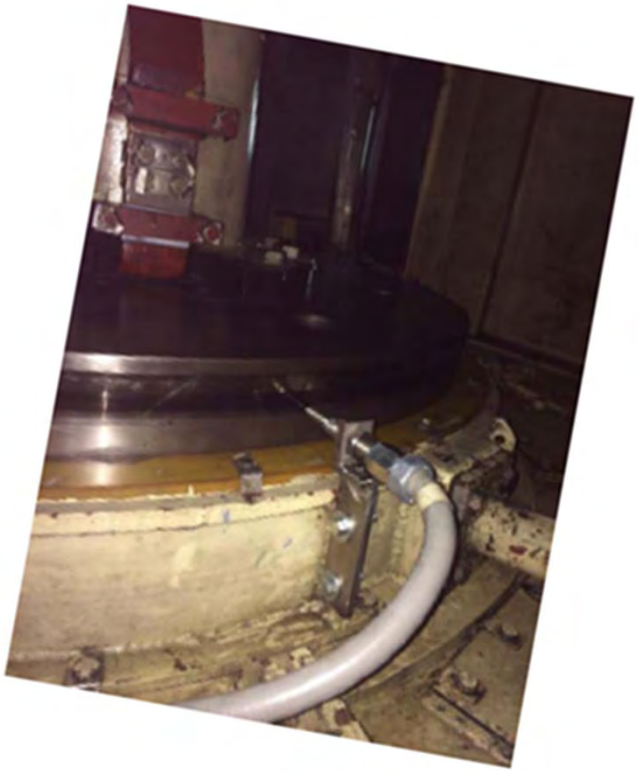


Key Phaser





Upper Gen – Displacement - Y

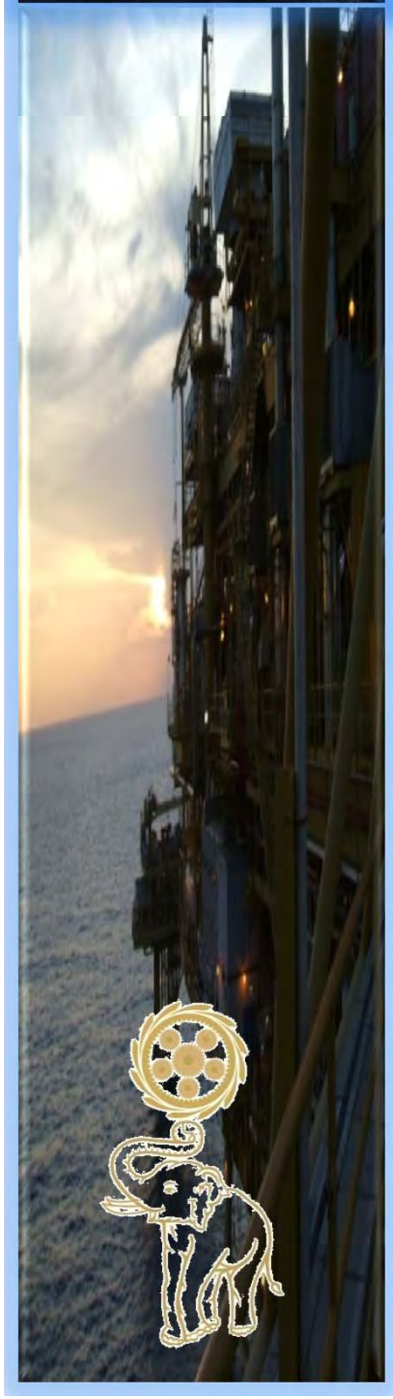


Upper Gen – Displacement - X

AST







Upper Gen – Velocity Vertical





Upper Gen – Velocity Horizontal

AST



Upper Gen
Case Expansion 1

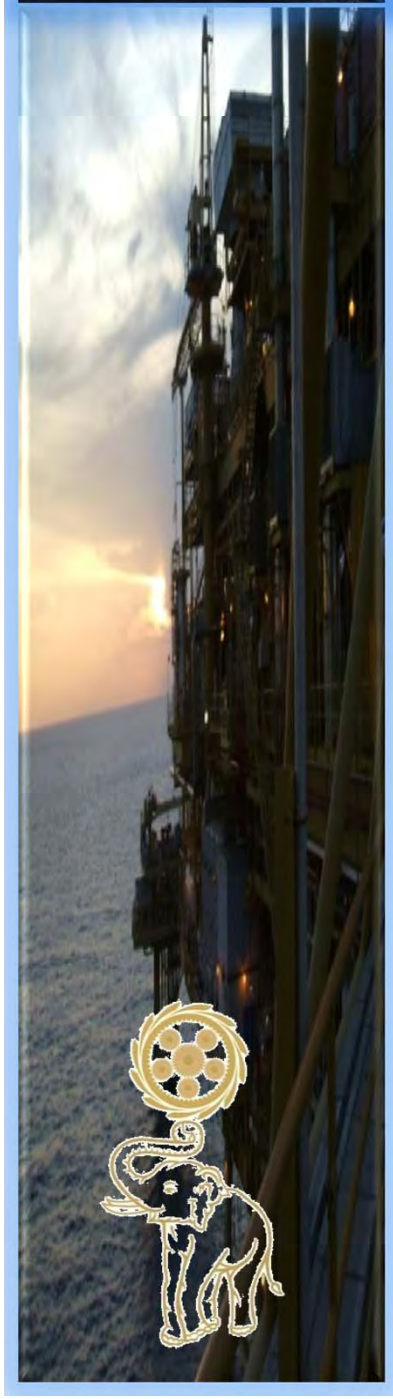
Upper Gen
Case Expansion 2



Most Valued Global Provider of Predictive Maintenance Solution







Upper Gen – Case
Expansion 3





Upper Gen – Case
Expansion 4

AST



Upper Gen
Case Expansion 5

Upper Gen
Case Expansion 6



AST



Lower Gen
Velocity
Horizontal

Lower Gen
Velocity
Vertical



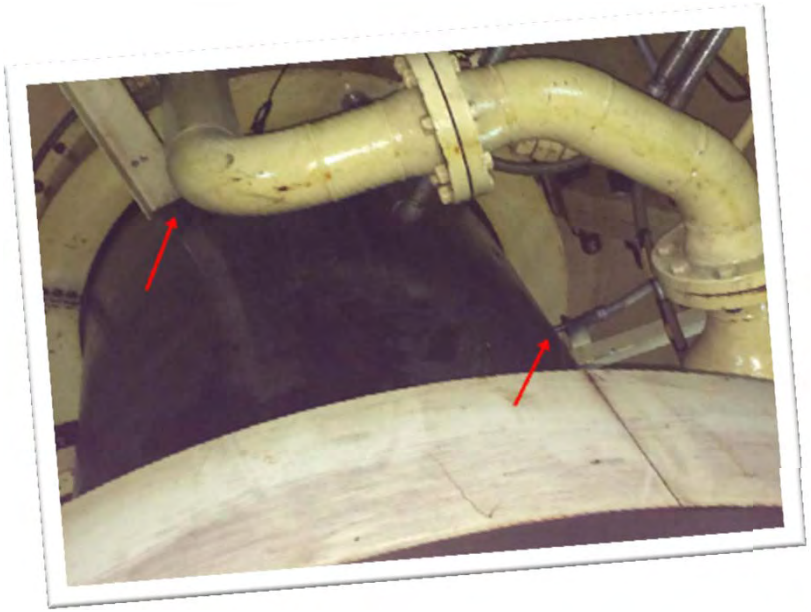
AST

Lower Gen Displacement X & Y





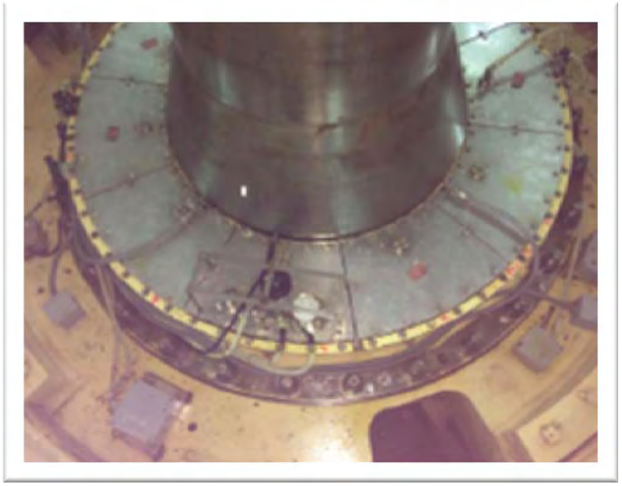
AST

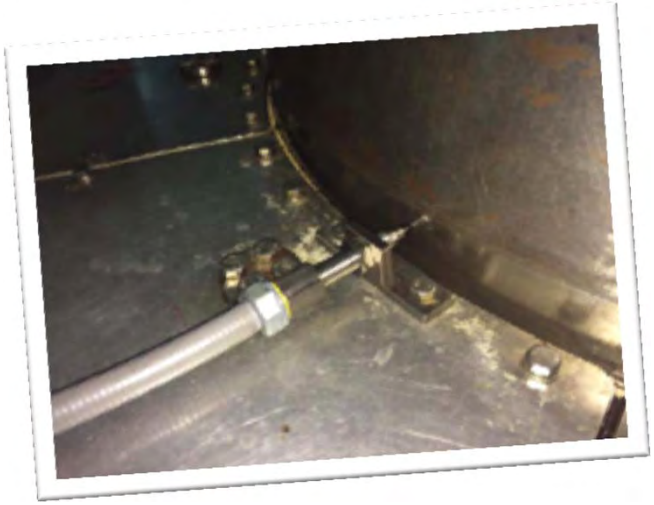


Lower Gen
Displacement
X & Y



AST





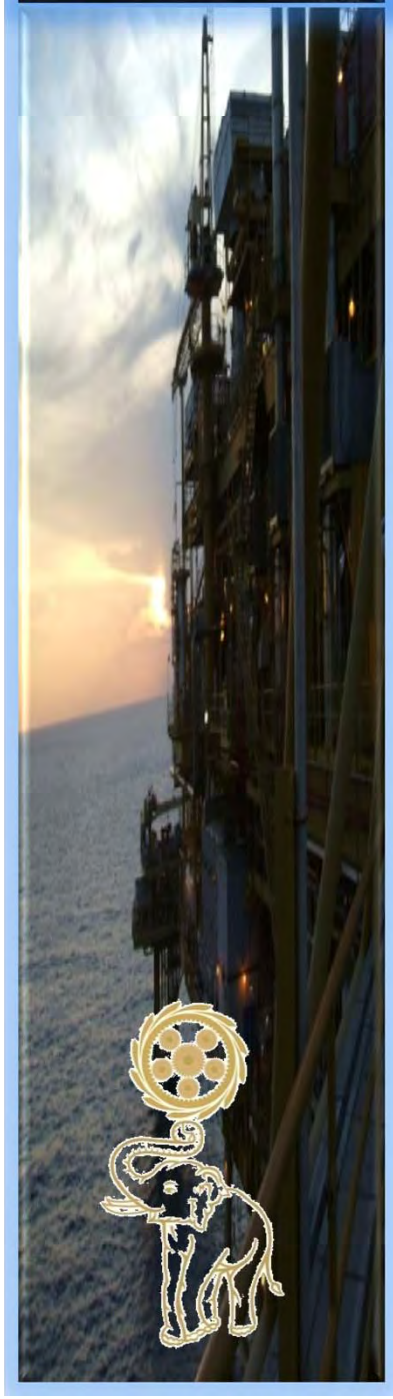


Upper Turbine – Displacement – X & Y

AST







Upper Turbine
Velocity
Vertical



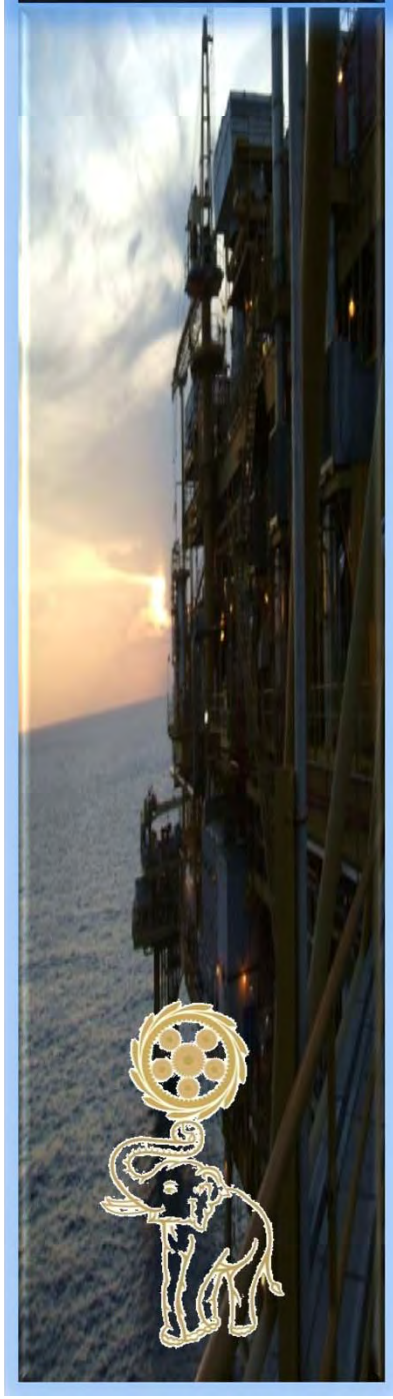


Upper Turbine
Velocity
Horizontal



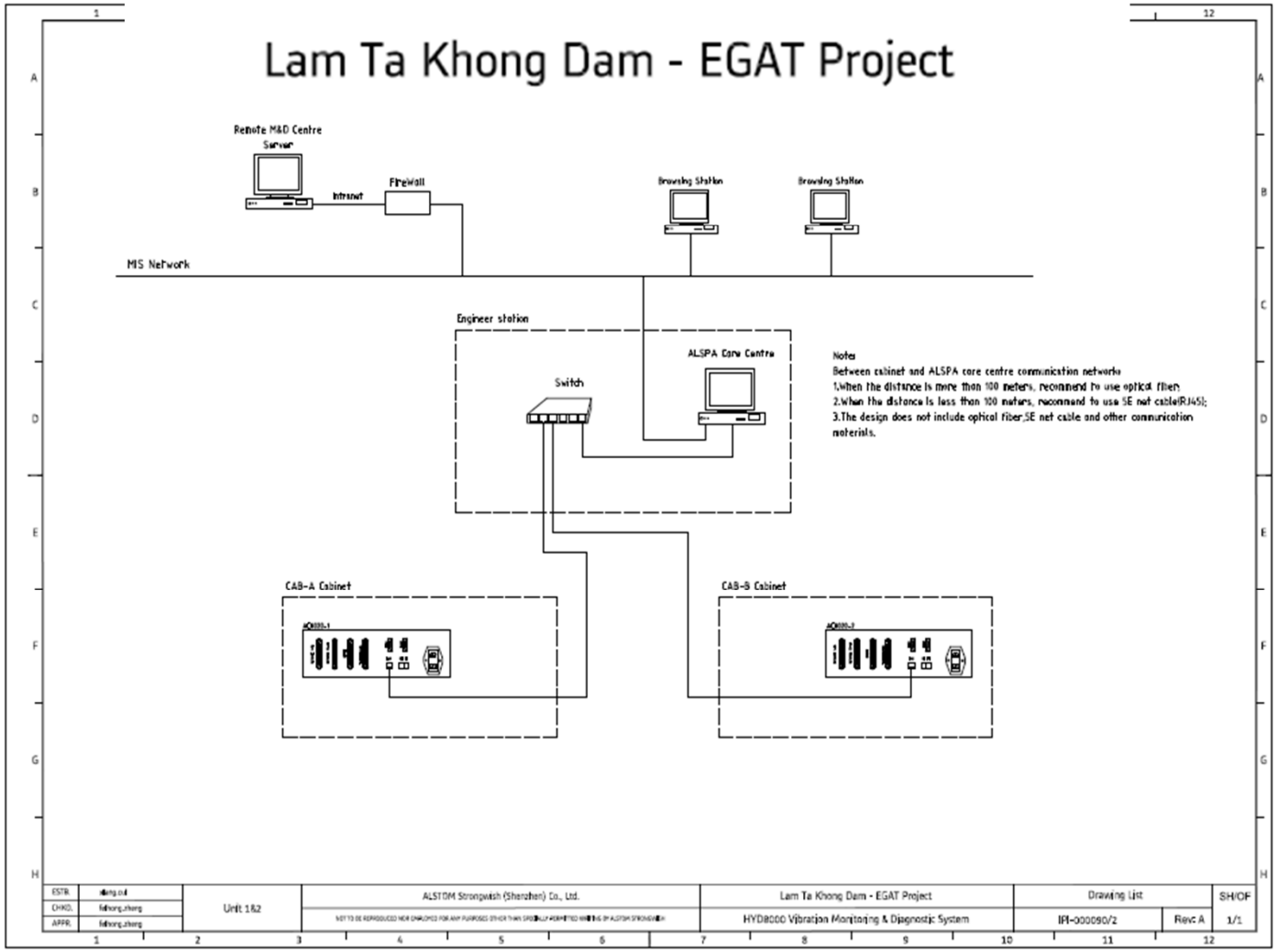




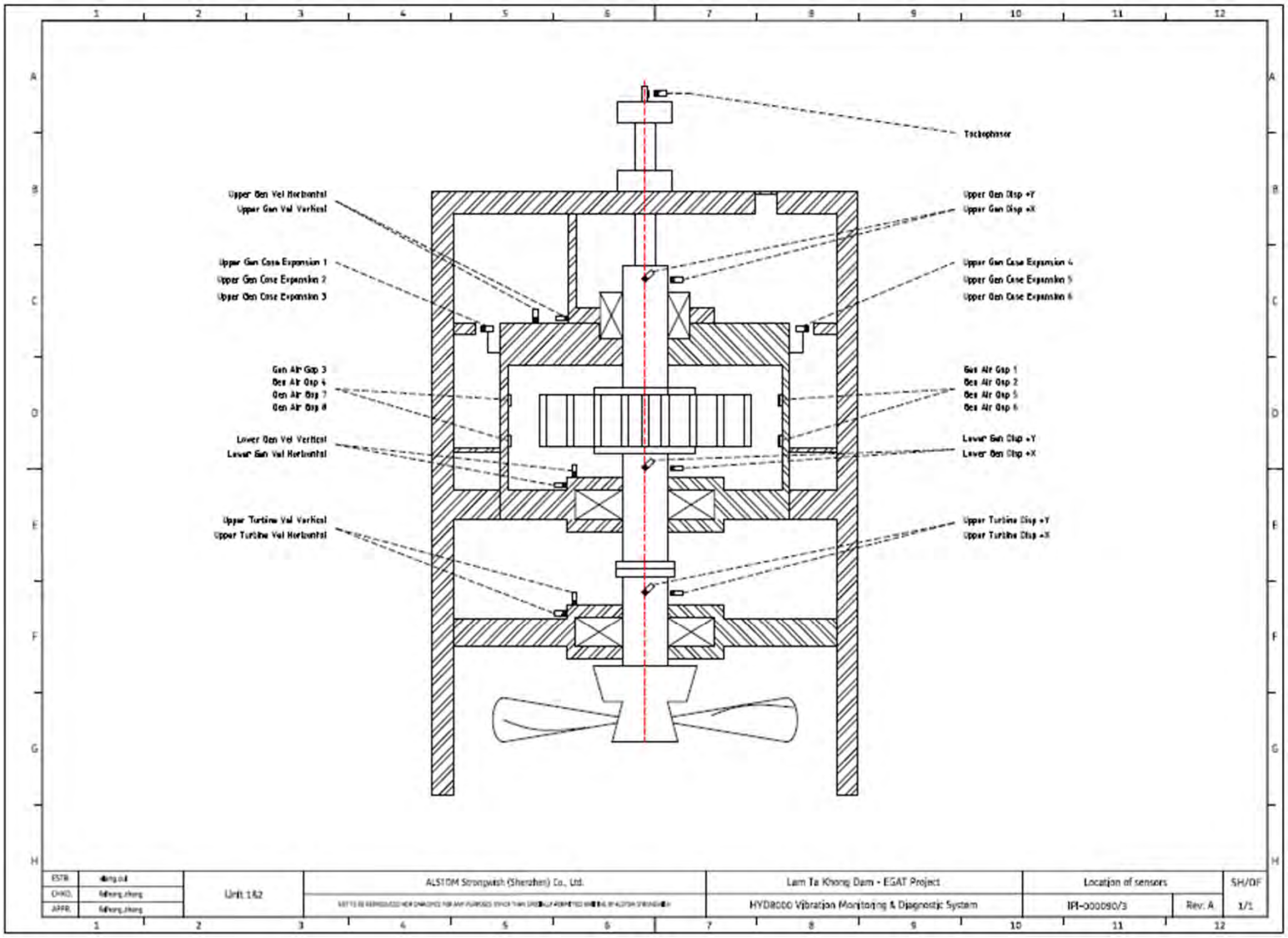


ALSPA Hydro Care HYD8000
Vibration Online Monitoring & Diagnostic System

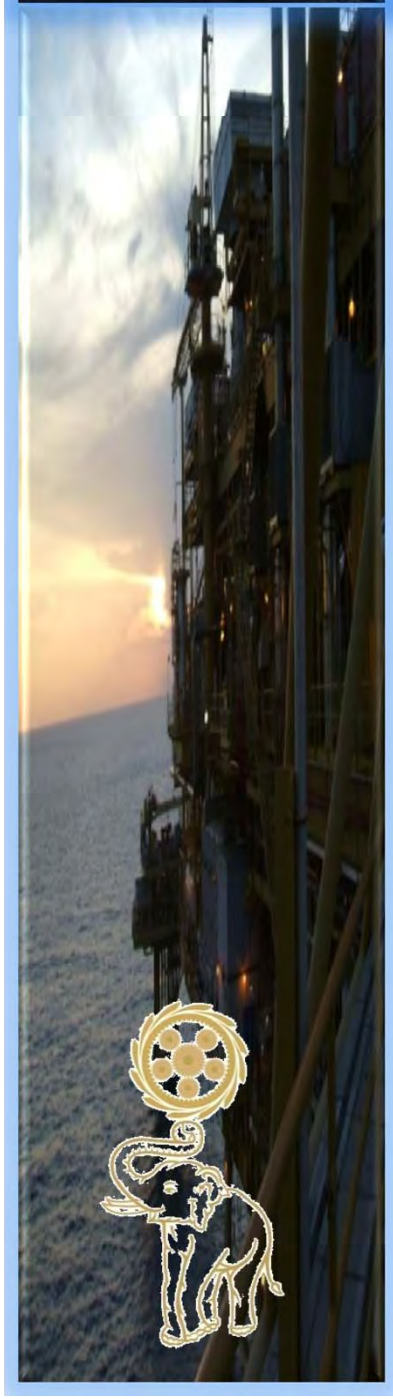
Lam Ta Khong Dam - EGAT Project



Most Valued Global Provider of Predictive Maintenance Solution

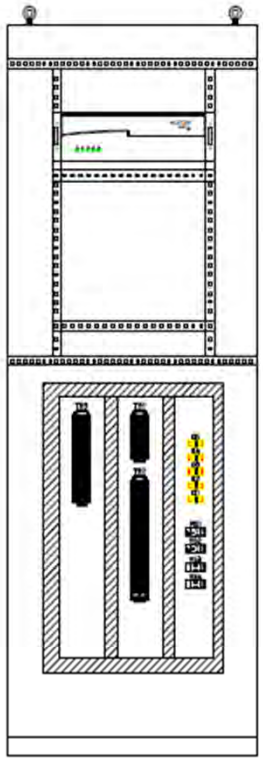


Most Valued Global Provider of Predictive Maintenance Solution

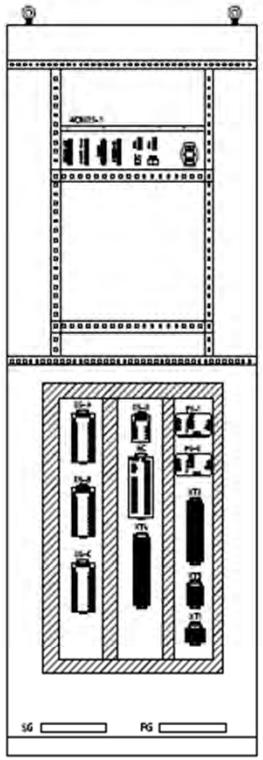




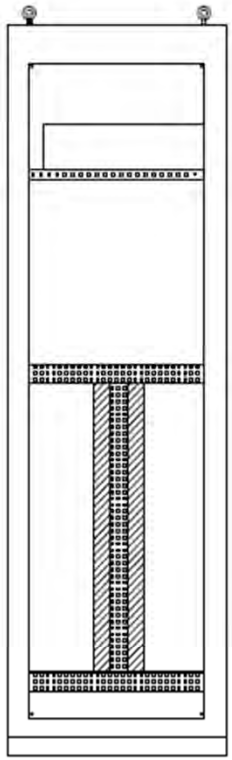
CAB-A



Front View



Rear View



Side View

Pos.	Tag	Name	Description	Amt.
21	AC	Acceleration Signal Connector Overview	SW-ACC12	1
20	PS-1/2	Power Supply	HR-100-24	2
19	PG	Cabinet Signal Grounding Busbar		1
18	SG	Cabinet Frame Grounding Busbar		1
17	Q2`Q5	Miniature AC Circuit Breakers/4A	ABB S202-C4	4
16	Q1	Miniature AC Circuit Breakers/16A	ABB S202-C16	1
15	MS3,MS4	Din-Rail Sockets	Meritk Gerin,2P	2
14	MS1,MS2	Din-Rail Sockets	Meritk Gerin,3P	2
13	TB3	Upper Cpt Cross Expansion signal terminals	UKSN	26
12	TB2	Air-gap signal terminals	UKSN	35
11	TB1	Tachophaser Signal Terminals	UKSTWIN	13
10	XT4	CPM power supply terminals	UKSTIN	22
9	XT3	-24v power supply terminals	ASK1	6
8	XT2	+24v power supply terminals	ASK1	19
7	XT1	AC220V Terminals	WDU2.5	6
6	DS-D	Tachophaser Signal Connector/Power Supply	AS-S05	1
5	DS-C	Process Signal Connector/Power Supply	AS-S01	1
4	DS-B	Vibration Signal Connector/Power Supply	AS-S01	1
3	DS-A	Vibration Signal Connector/Power Supply	AS-S01	1
2	ACM020-1	Data Acquisition Unit	ACM020	1
1	CAB-A	AC6020 cabinet		1

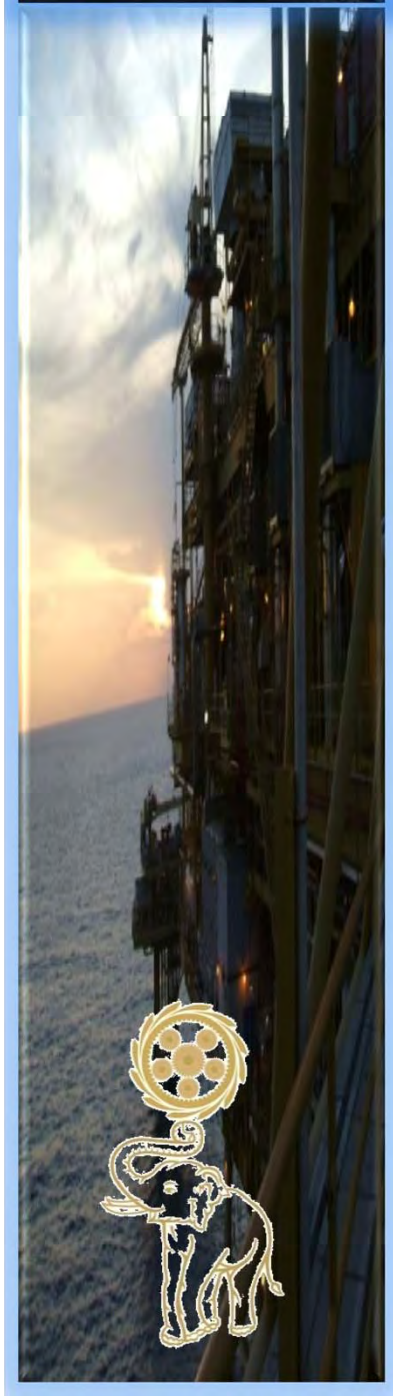
ESTR.	dlong.cd	Unit 1	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	Cabinet Layout
CHKD.	fdhong.zhong			HYDB000 Vibration Monitoring & Diagnostic System	IPI-000090/4 Rev: A
APPR.	fdhong.zhong				SH/DF 1/2

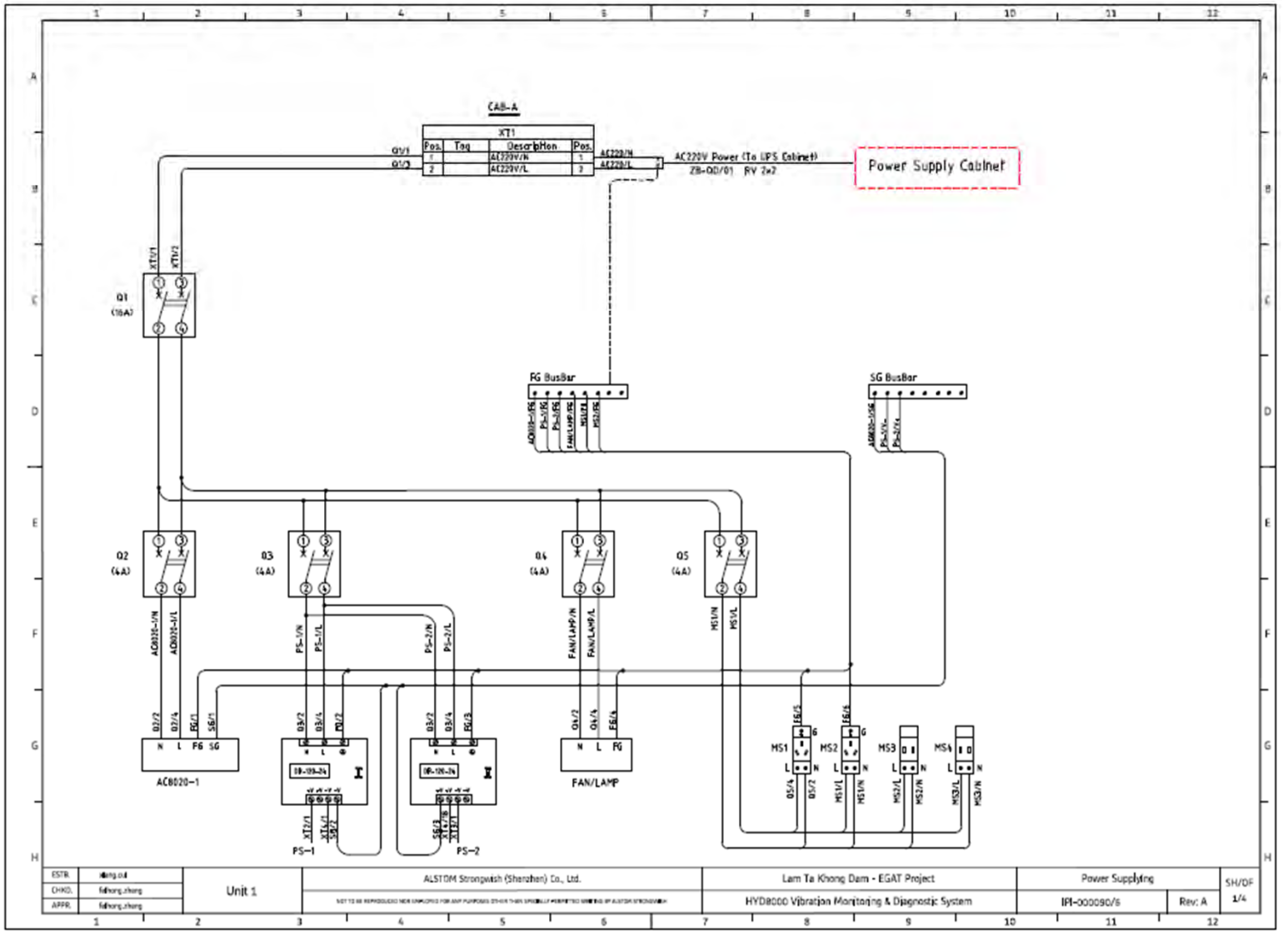
SET TO BE REPRODUCED NOR COPIED FOR ANY PURPOSES OTHER THAN SPECIALLY PERMITTED WRITING BY ALSTOM STRONGWISH



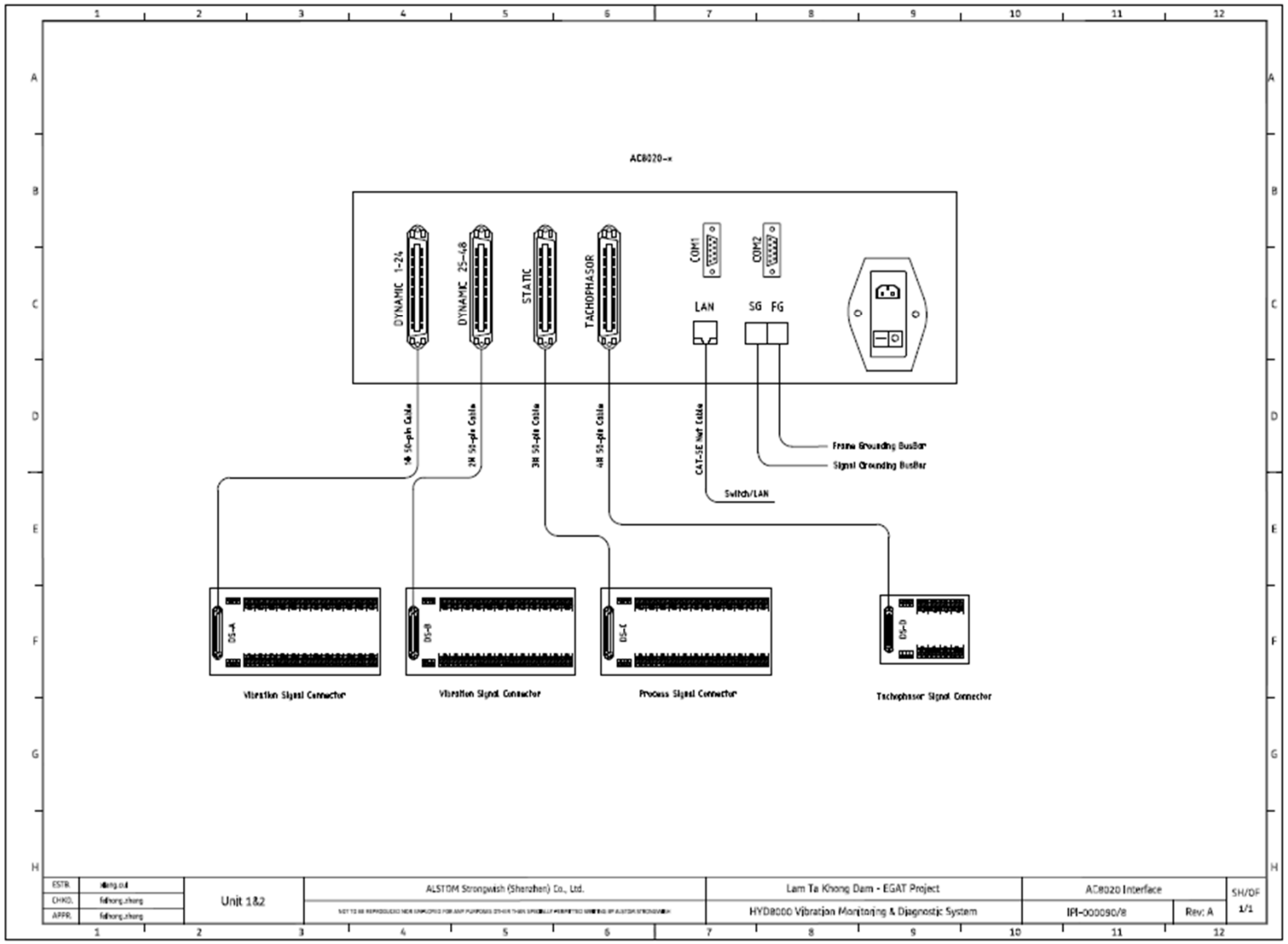




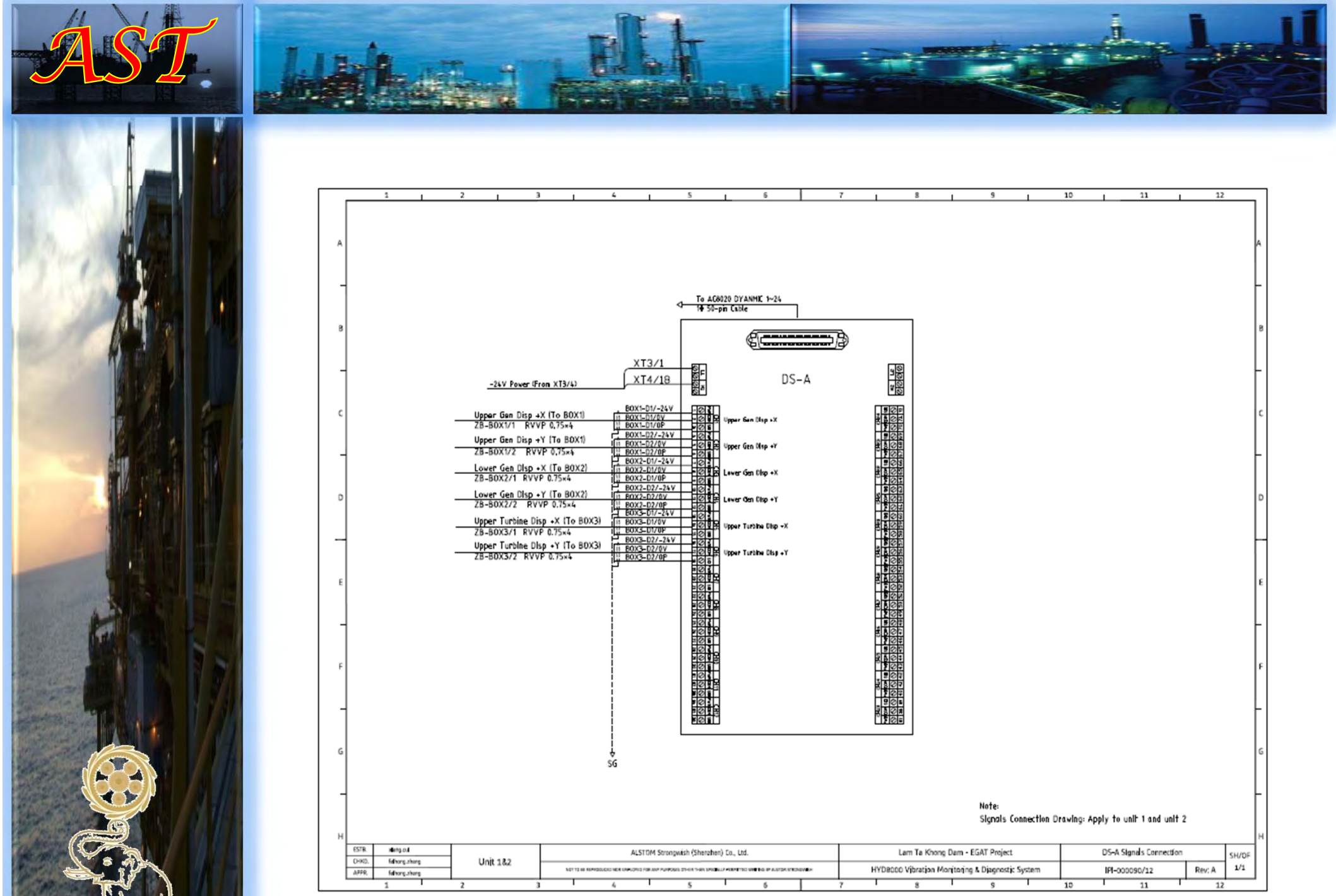




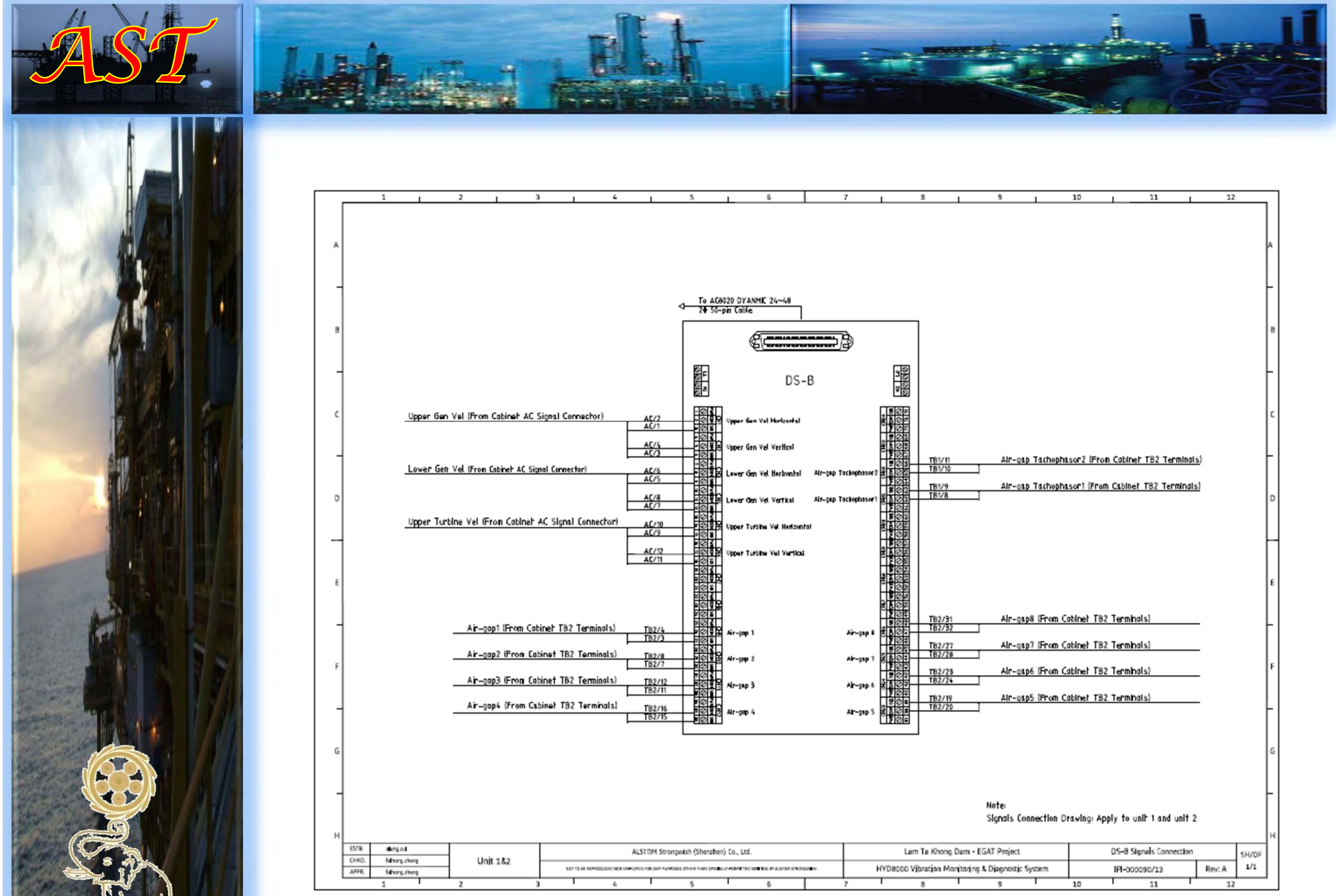
Most Valued Global Provider of Predictive Maintenance Solution



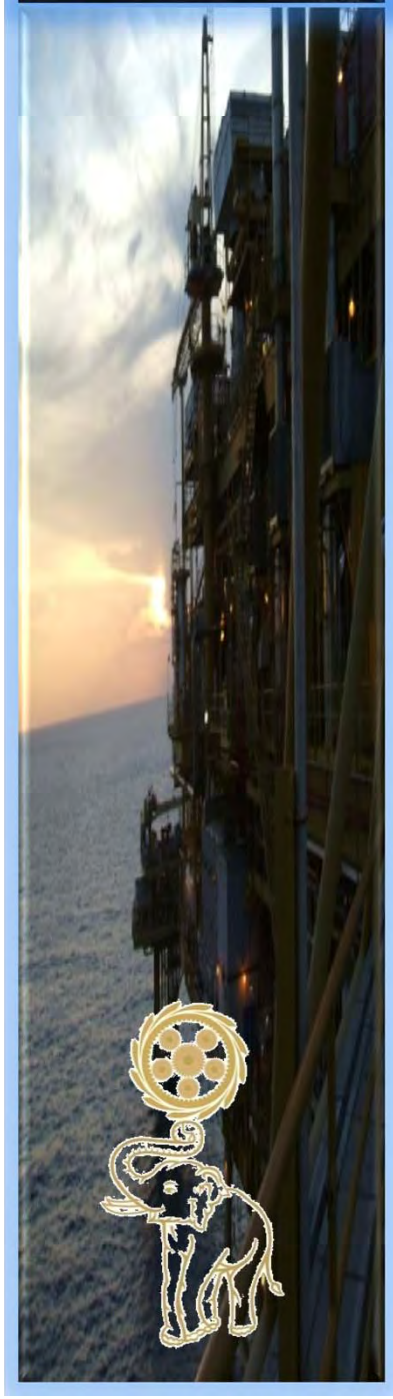
Most Valued Global Provider of Predictive Maintenance Solution

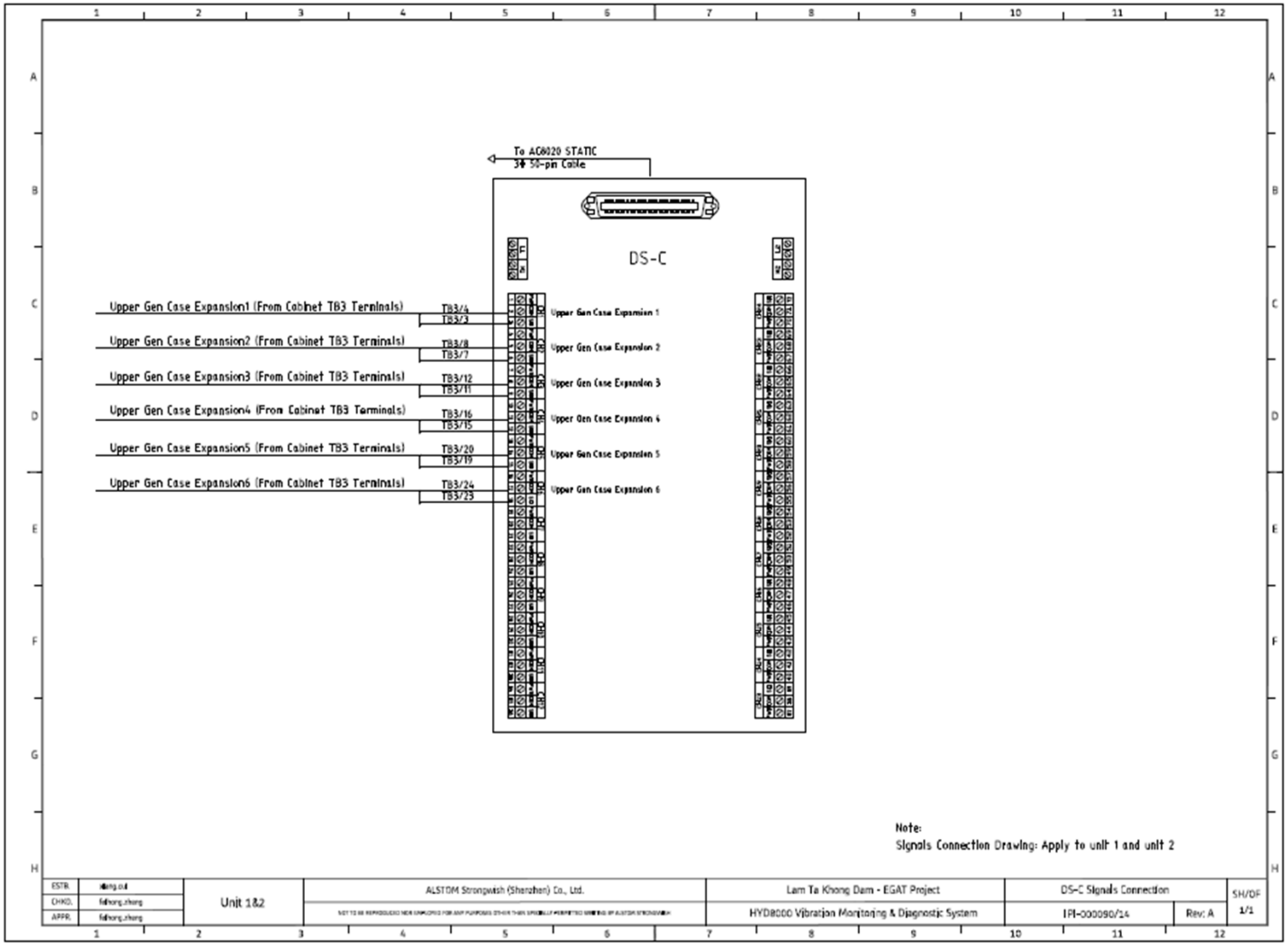


Most Valued Global Provider of Predictive Maintenance Solution

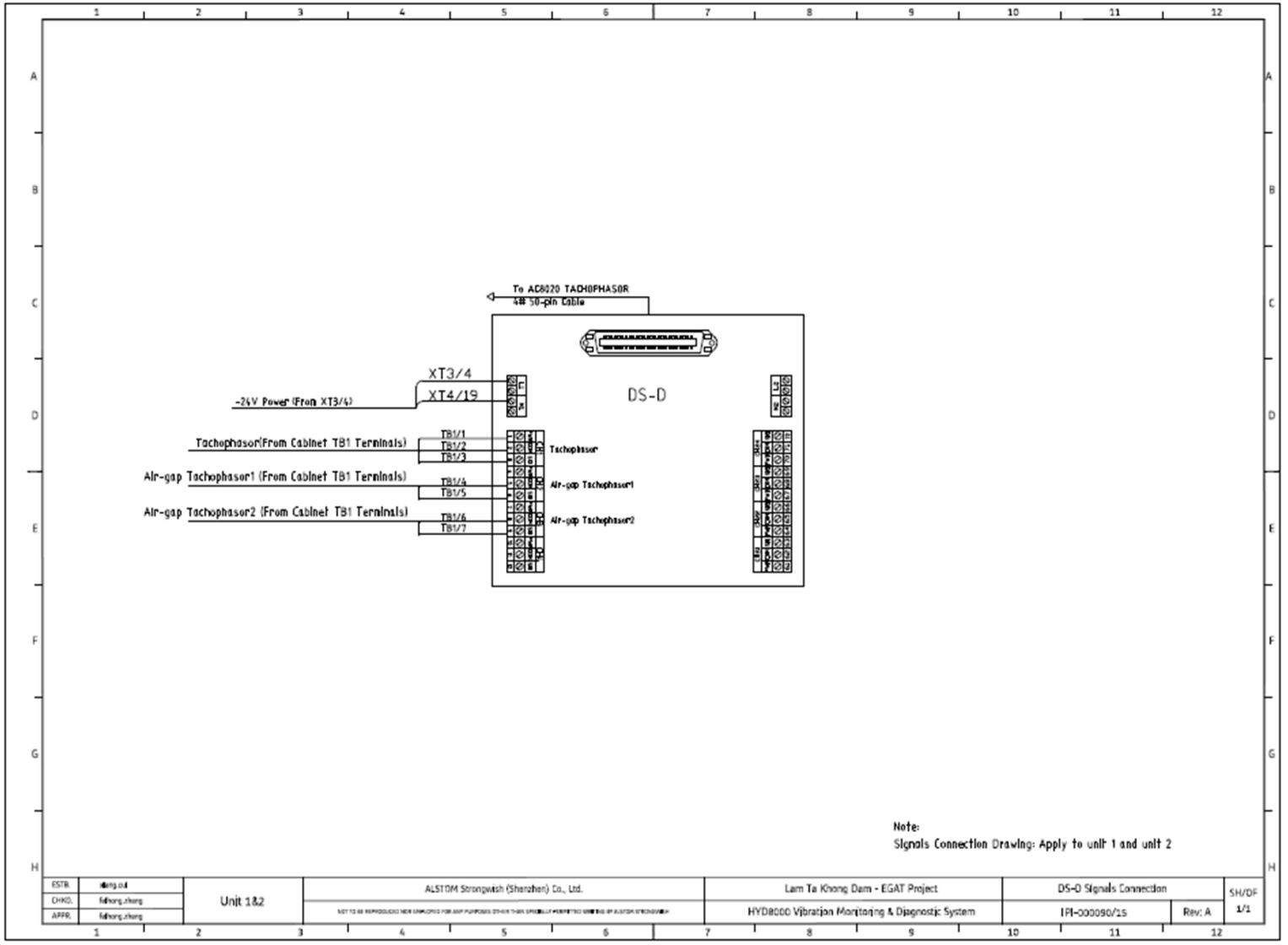


Most Valued Global Provider of Predictive Maintenance Solution

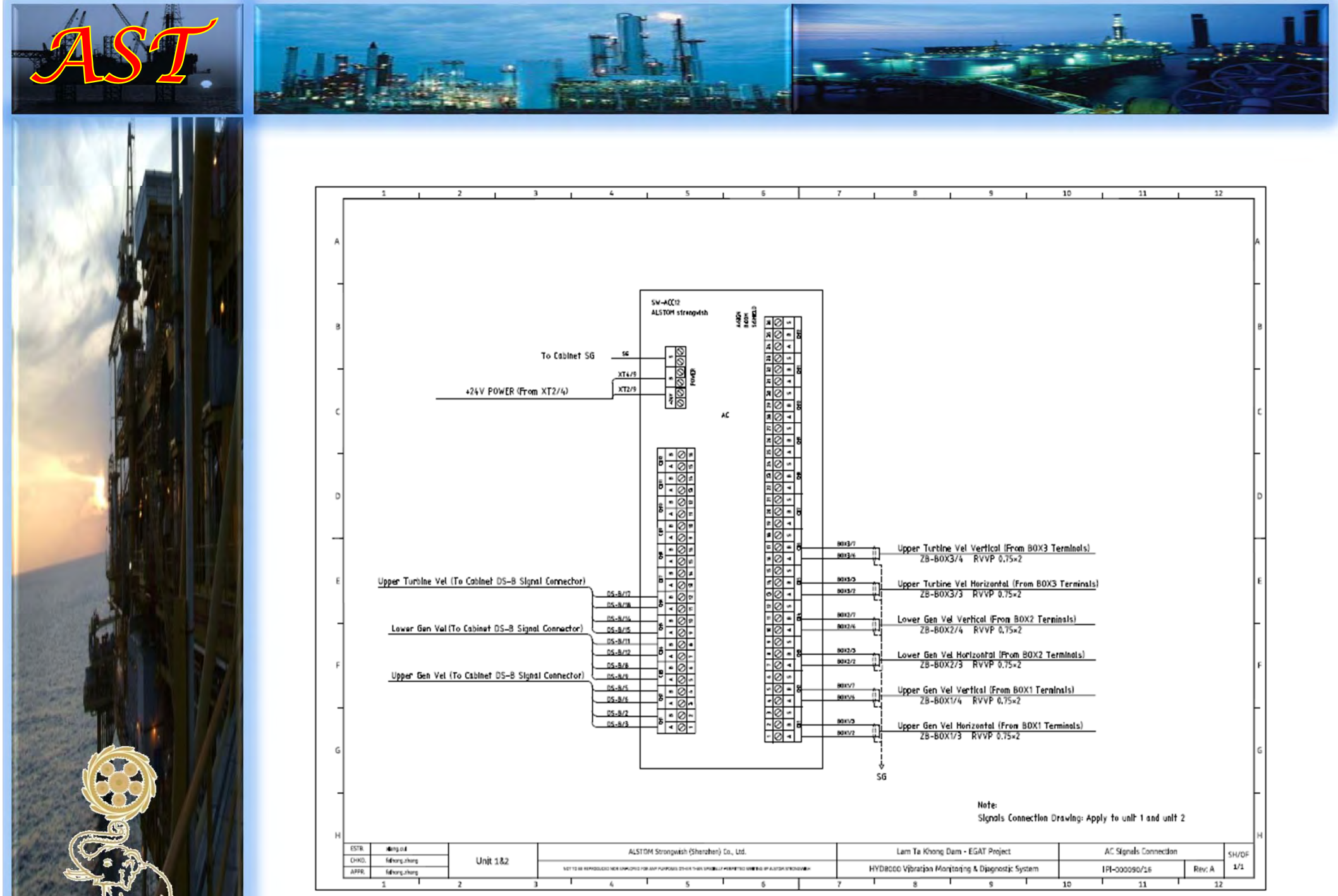




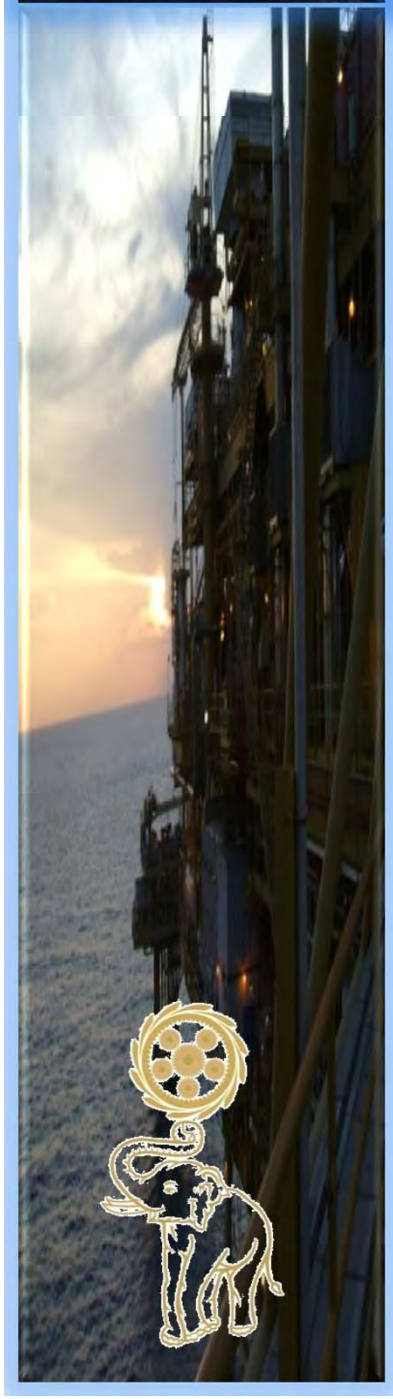
Most Valued Global Provider of Predictive Maintenance Solution



Most Valued Global Provider of Predictive Maintenance Solution



Most Valued Global Provider of Predictive Maintenance Solution





TB1						
		Pos	Tag	Description	Pos	
Tachophasor(To Cabinet DS-D Signal Connector)	DS-D/1	1		Tachophasor/-24V	1	BOX1-23/-24V
	DS-D/2	2		Tachophasor/COM	2	BOX1-28/0V
Air-gap Tachophasor1 (To Cabinet DS-D Signal Connector)	DS-D/3	3		Tachophasor/Sign	3	BOX1-24/VP
	DS-D/5	4		Tachophasor/COM	4	
Air-gap Tachophasor2 (To Cabinet DS-D Signal Connector)	DS-D/6	5		Tachophasor/Sign	5	
	DS-D/8	6		Tachophasor/COM	6	
Air-gap Tachophasor1 (To Cabinet DS-B Signal Connector)	DS-D/9	7		Tachophasor/Sign	7	
	DS-B/62	8		Tachophasor/COM	8	
Air-gap Tachophasor2 (To Cabinet DS-B Signal Connector)	DS-B/63	9		Tachophasor/Sign	9	
	DS-B/65	10		Tachophasor/COM	10	
	DS-B/66	11		Tachophasor/Sign	11	
		12		SPARE	12	
		13		SPARE	13	

Tachophasor\To BOX1)
ZB-BOX1/5 RVVP 0.75×4

TB2						
		Pos	Tag	Description	Pos	
Air-gap1 (To Cabinet XT2/4 Terminals)	XT2/1	1		Air-gap 1/+24V	1	Air-gap 1/PWR
	XT4/1	2		Air-gap 1/COM	2	Air-gap 1/COM
Air-gap1 (To Cabinet DS-B Signal Connector)	DS-B/27	3		Air-gap 1/Sign	3	Air-gap 1/V+
	DS-B/26	4		Air-gap 1/COM	4	Air-gap 1/V-
Air-gap2 (To Cabinet XT2/4 Terminals)	XT2/2	5		Air-gap 2/+24V	5	Air-gap 2/PWR
	XT4/2	6		Air-gap 2/COM	6	Air-gap 2/COM
Air-gap2 (To Cabinet DS-B Signal Connector)	DS-B/30	7		Air-gap 2/Sign	7	Air-gap 2/V+
	DS-B/29	8		Air-gap 2/COM	8	Air-gap 2/V-
Air-gap3 (To Cabinet XT2/4 Terminals)	XT2/3	9		Air-gap 3/+24V	9	Air-gap 3/PWR
	XT4/3	10		Air-gap 3/COM	10	Air-gap 3/COM
Air-gap3 (To Cabinet DS-B Signal Connector)	DS-B/33	11		Air-gap 3/Sign	11	Air-gap 3/V+
	DS-B/32	12		Air-gap 3/COM	12	Air-gap 3/V-
Air-gap4 (To Cabinet XT2/4 Terminals)	XT2/4	13		Air-gap 4/+24V	13	Air-gap 4/PWR
	XT4/4	14		Air-gap 4/COM	14	Air-gap 4/COM
Air-gap4 (To Cabinet DS-B Signal Connector)	DS-B/36	15		Air-gap 4/Sign	15	Air-gap 4/V+
	DS-B/35	16		Air-gap 4/COM	16	Air-gap 4/V-
		17		SPARE	17	
Air-gap5 (To Cabinet XT2/4 Terminals)	XT2/5	18		Air-gap 5/+24V	18	Air-gap 5/PWR
	XT4/5	19		Air-gap 5/COM	19	Air-gap 5/COM
Air-gap5 (To Cabinet DS-B Signal Connector)	DS-B/39	20		Air-gap 5/Sign	20	Air-gap 5/V+
	DS-B/38	21		Air-gap 5/COM	21	Air-gap 5/V-
Air-gap6 (To Cabinet XT2/4 Terminals)	XT2/6	22		Air-gap 6/+24V	22	Air-gap 6/PWR
	XT4/6	23		Air-gap 6/COM	23	Air-gap 6/COM
Air-gap6 (To Cabinet DS-B Signal Connector)	DS-B/42	24		Air-gap 6/Sign	24	Air-gap 6/V+
	DS-B/41	25		Air-gap 6/COM	25	Air-gap 6/V-
Air-gap7 (To Cabinet XT2/4 Terminals)	XT2/7	26		Air-gap 7/+24V	26	Air-gap 7/PWR
	XT4/7	27		Air-gap 7/COM	27	Air-gap 7/COM
Air-gap7 (To Cabinet DS-B Signal Connector)	DS-B/45	28		Air-gap 7/Sign	28	Air-gap 7/V+
	DS-B/44	29		Air-gap 7/COM	29	Air-gap 7/V-
Air-gap8 (To Cabinet XT2/4 Terminals)	XT2/8	30		Air-gap 8/+24V	30	Air-gap 8/PWR
	XT4/8	31		Air-gap 8/COM	31	Air-gap 8/COM
Air-gap8 (To Cabinet DS-B Signal Connector)	DS-B/48	32		Air-gap 8/Sign	32	Air-gap 8/V+
	DS-B/47	33		Air-gap 8/COM	33	Air-gap 8/V-
		34		SPARE	34	
		35		SPARE	35	

Air-gap1(To Air Gap Signal Conditioner1)
ZB-AGS/1 RVVP 0.75×4

Air-gap2(To Air Gap Signal Conditioner2)
ZB-AGS/2 RVVP 0.75×4

Air-gap3(To Air Gap Signal Conditioner3)
ZB-AGS/3 RVVP 0.75×4

Air-gap4(To Air Gap Signal Conditioner4)
ZB-AGS/4 RVVP 0.75×4

Air-gap5(To Air Gap Signal Conditioner5)
ZB-AGS/5 RVVP 0.75×4

Air-gap6(To Air Gap Signal Conditioner6)
ZB-AGS/6 RVVP 0.75×4

Air-gap7(To Air Gap Signal Conditioner7)
ZB-AGS/7 RVVP 0.75×4

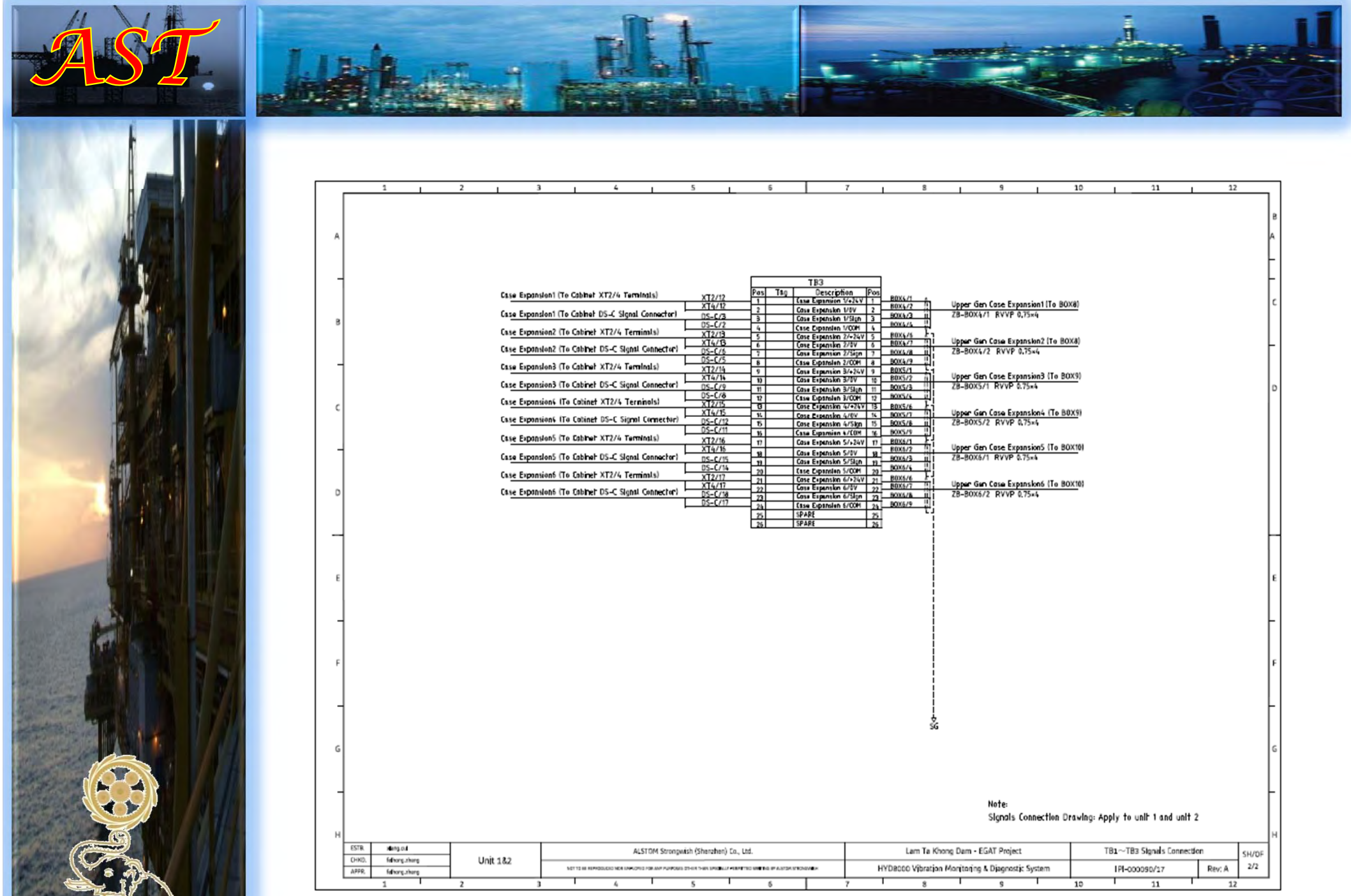
Air-gap8(To Air Gap Signal Conditioner8)
ZB-AGS/8 RVVP 0.75×4

SG

Note:
Signals Connection Drawing: Apply to unit 1 and unit 2

ESTR.		Unit 1&2	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	TB1~TB3 Signals Connection
CHKD.				HYDB000 Vibration Monitoring & Diagnostic System	IPI-000090/17 Rev: A
APPR.					SH/DF 1/2

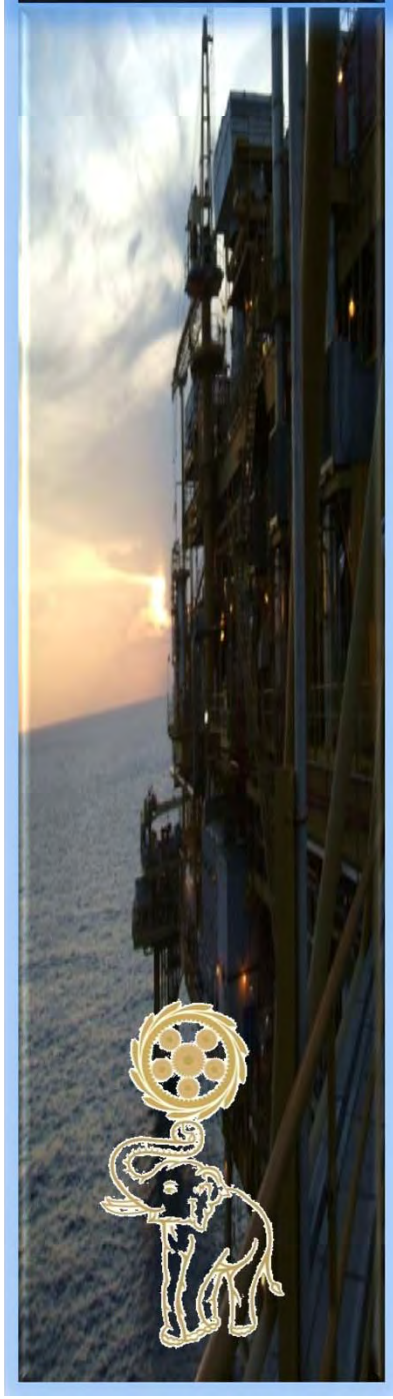
SOFTWARE REPRODUCED HEREIN SUPPLIED FOR GRIP PURPOSES ONLY AND THEIR SPECIALLY PERMITTED WRITTEN CONSENT OF ALSTOM STRONGWISH



Most Valued Global Provider of Predictive Maintenance Solution







Junction Box(hydro-generator side)

BOX1

Upper Gen Disp +X

Upper Gen Disp +X (From Cabinet DS-A Signal Connector)
ZB-BOX1/1 RVVP 0.75×4

DS-A/1 DS-A/2 DS-A/3 → -24V 0V P 0V → PRS04 Driver D1 → Upper Gen Disp +X (To Sensor) → PRS04 Sensor

Upper Gen Disp +Y

Upper Gen Disp +Y (From Cabinet DS-A Signal Connector)
ZB-BOX1/2 RVVP 0.75×4

DS-A/4 DS-A/5 DS-A/6 → -24V 0V P 0V → PRS04 Driver D2 → Upper Gen Disp +Y (To Sensor) → PRS04 Sensor

Tachophasor

Tachophasor (From Cabinet DS-D Signal Connector)
ZB-BOX1/5 RVVP 0.75×4

TB1/1 TB1/2 TB1/3 → -24V 0V P 0V → PRS04 Driver D3 → Tachophasor (To Sensor) → PRS04 Sensor

BOX1 Terminals

Pos.	Tag	Description	Pos.	
1		SPARE	1	
2		Upper Gen Vel Horizontal/Sign	2	BOX1/2
3		Upper Gen Vel Horizontal/COM	3	BOX1/3
4		Upper Gen Vel Horizontal/sHield	4	BOX1/4
5		SPARE	5	
6		Upper Gen Vel VerHcal/Sign	6	BOX1/6
7		Upper Gen Vel VerHcal/COM	7	BOX1/7
8		Upper Gen Vel VerHcal/sHield	8	BOX1/8

Upper Gen Vel Horizontal(From Cabinet AC Signal Connector)
ZB-BOX1/3 RVVP 0.75×2

AC/1 AC/2 Cabinet/SG → Upper Gen Vel Horizontal(To Sensor) → PZV2 Sensor

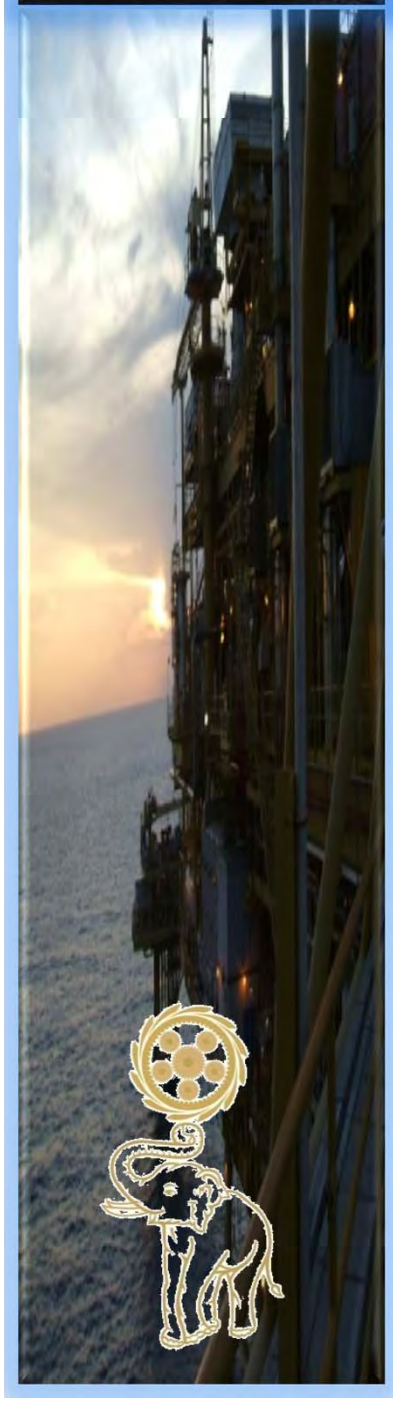
Upper Gen Vel Vertical(From Cabinet AC Signal Connector)
ZB-BOX1/4 RVVP 0.75×2

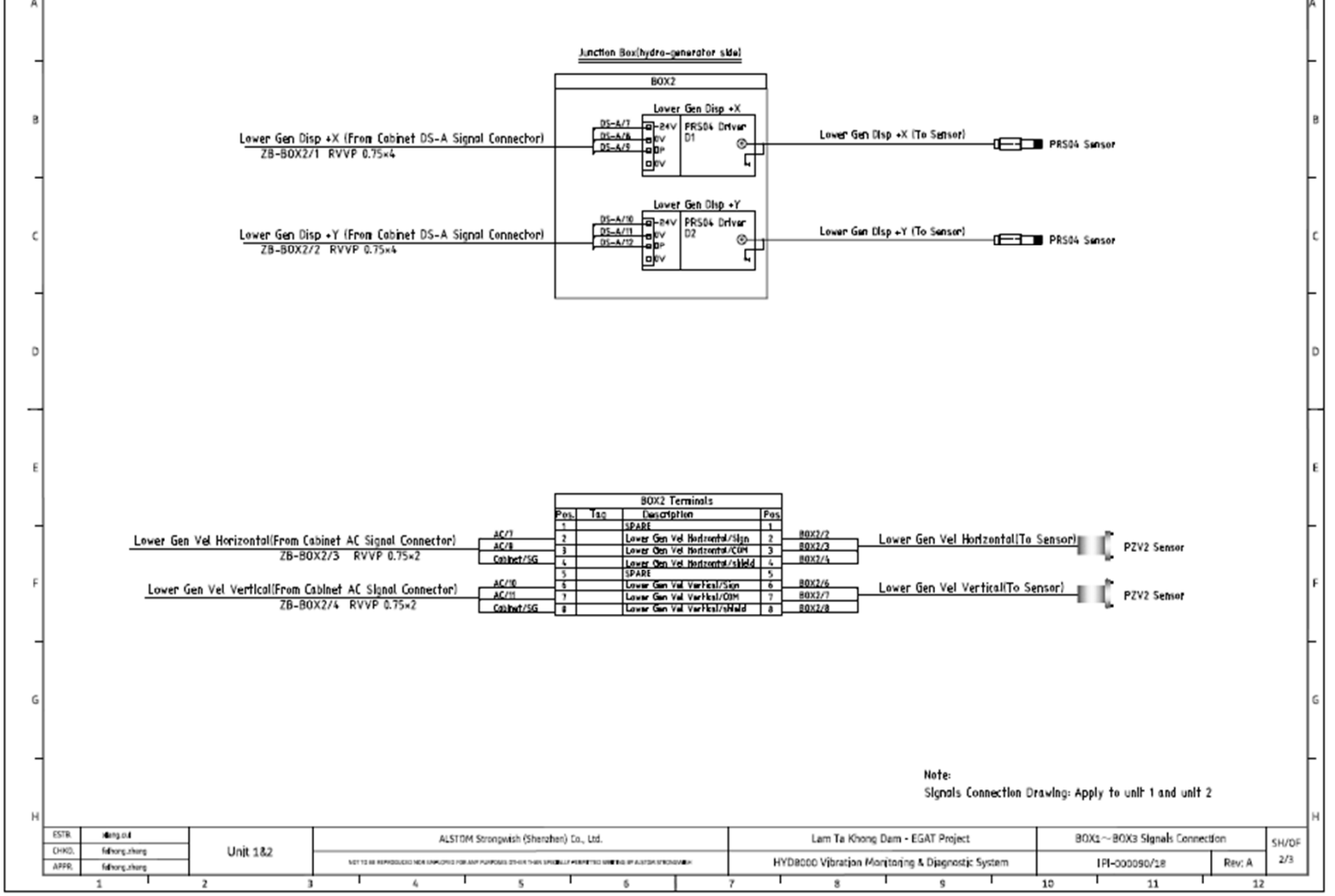
AC/4 AC/5 Cabinet/SG → Upper Gen Vel Vertical(To Sensor) → PZV2 Sensor

Note:
Signals Connection Drawing: Apply to unit 1 and unit 2

ESTR.	dbing.cai	Unit 1&2	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	BOX1~BOX3 Signals Connection	SH/DF 1/3
CHKD.	fdihong.zhang					
APPR.	fdihong.zhang			HYDB000 Vibration Monitoring & Diagnostic System	IPI-000090/18 Rev: A	

NOT TO BE REPRODUCED NOR DISCLOSED FOR ANY PURPOSES OTHER THAN SPECIFICALLY PERMITTED WITHOUT THE PRIOR WRITTEN CONSENT OF ALSTOM STRONGWISH



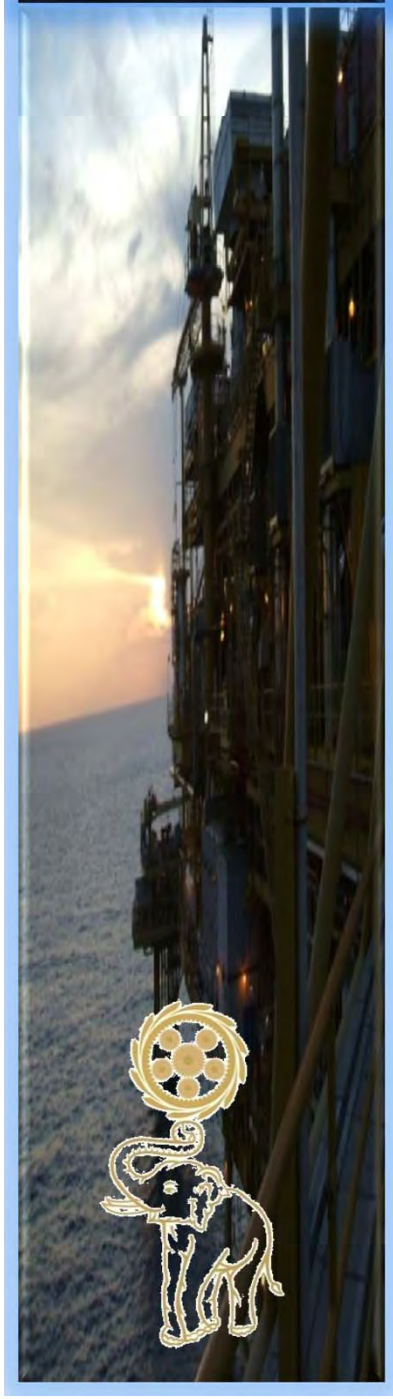


Most Valued Global Provider of Predictive Maintenance Solution

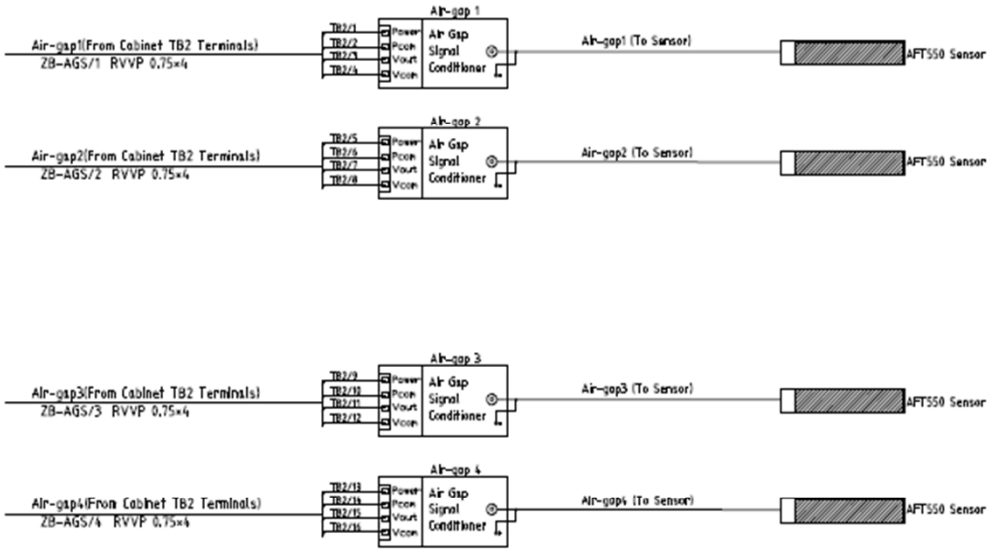








Air Gap Signal Conditioner(hydro-generator side)



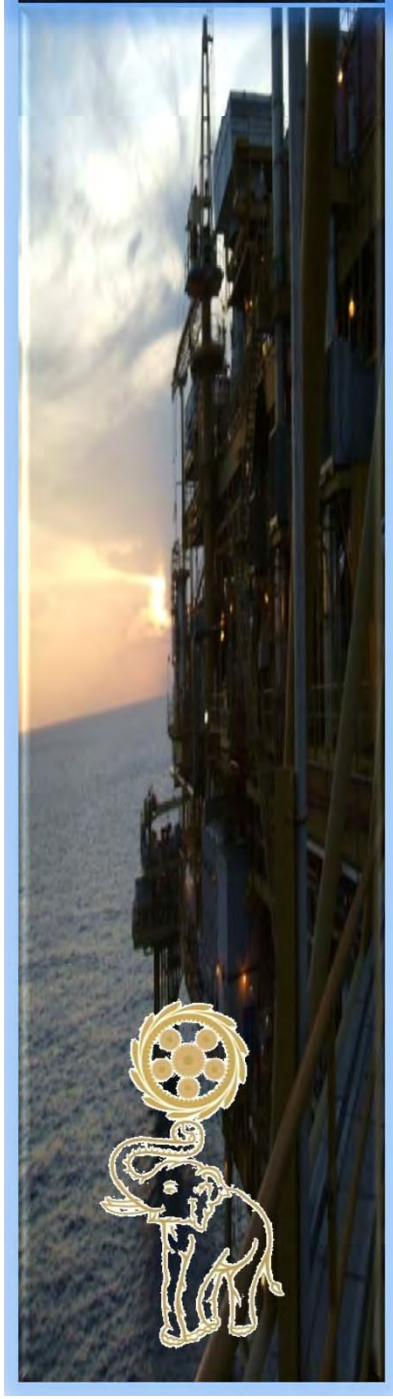
Note:
Signals Connection Drawing: Apply to unit 1 and unit 2

ESTR.	xiang.cui	Unit 1&2	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	Air Gap Signals Connection	SH/DF 1/2
CHKD.	fdhong.zhang			HYDRO000 Vibration Monitoring & Diagnostic System	IPI-000090/19 Rev: A	
APPR.	fdhong.zhang					

NOT TO BE REPRODUCED NOR DISCLOSED FOR ANY PURPOSES EXCEPT THOSE SPECIALLY PERMITTED WITHIN THE TERMS OF ALSTOM STRONGWISH







Junction Box(hydro-generator side)

BOX4 Terminals			
Pos.	Tag	Description	Pos.
1		Case Expansion 1/+24V	1
2		Case Expansion 1/0V	2
3		Case Expansion 1/Sign	3
4		Case Expansion 1/COM	4
5		Case Expansion 1/shield	5
6		Case Expansion 2/+24V	6
7		Case Expansion 2/0V	7
8		Case Expansion 2/Sign	8
9		Case Expansion 2/COM	9
10		Case Expansion 2/shield	10
11		SPARE	11
12		SPARE	12

Upper Gen Case Expansion1 (From Cabinet TB3 Terminals)
ZB-BOX4/1 RVVP 0.75×4
TB3/1 TB3/2 TB3/3 TB3/4 Cabinet/SG

Upper Gen Case Expansion2 (From Cabinet TB3 Terminals)
ZB-BOX4/2 RVVP 0.75×4
TB3/5 TB3/6 TB3/7 TB3/8 Cabinet/SG

Brown Blue White Grey shield Brown Blue White Grey shield

Upper Gen Case Expansion1 (To Sensor) SX20MECR Sensor
Upper Gen Case Expansion2 (To Sensor) SX20MECR Sensor

BOX5 Terminals			
Pos.	Tag	Description	Pos.
1		Case Expansion 3/+24V	1
2		Case Expansion 3/0V	2
3		Case Expansion 3/Sign	3
4		Case Expansion 3/COM	4
5		Case Expansion 3/shield	5
6		Case Expansion 4/+24V	6
7		Case Expansion 4/0V	7
8		Case Expansion 4/Sign	8
9		Case Expansion 4/COM	9
10		Case Expansion 4/shield	10
11		SPARE	11
12		SPARE	12

Upper Gen Case Expansion3 (From Cabinet TB3 Terminals)
ZB-BOX5/1 RVVP 0.75×4
TB3/9 TB3/10 TB3/11 TB3/12 Cabinet/SG

Upper Gen Case Expansion4 (From Cabinet TB3 Terminals)
ZB-BOX5/2 RVVP 0.75×4
TB3/13 TB3/14 TB3/15 TB3/16 Cabinet/SG

Brown Blue White Grey shield Brown Blue White Grey shield

Upper Gen Case Expansion3 (To Sensor) SX20MECR Sensor
Upper Gen Case Expansion4 (To Sensor) SX20MECR Sensor

BOX6 Terminals			
Pos.	Tag	Description	Pos.
1		Case Expansion 5/+24V	1
2		Case Expansion 5/0V	2
3		Case Expansion 5/Sign	3
4		Case Expansion 5/COM	4
5		Case Expansion 5/shield	5
6		Case Expansion 6/+24V	6
7		Case Expansion 6/0V	7
8		Case Expansion 6/Sign	8
9		Case Expansion 6/COM	9
10		Case Expansion 6/shield	10
11		SPARE	11
12		SPARE	12

Upper Gen Case Expansion5 (From Cabinet TB3 Terminals)
ZB-BOX6/1 RVVP 0.75×4
TB3/17 TB3/18 TB3/19 TB3/20 Cabinet/SG

Upper Gen Case Expansion6 (From Cabinet TB3 Terminals)
ZB-BOX6/2 RVVP 0.75×4
TB3/21 TB3/22 TB3/23 TB3/24 Cabinet/SG

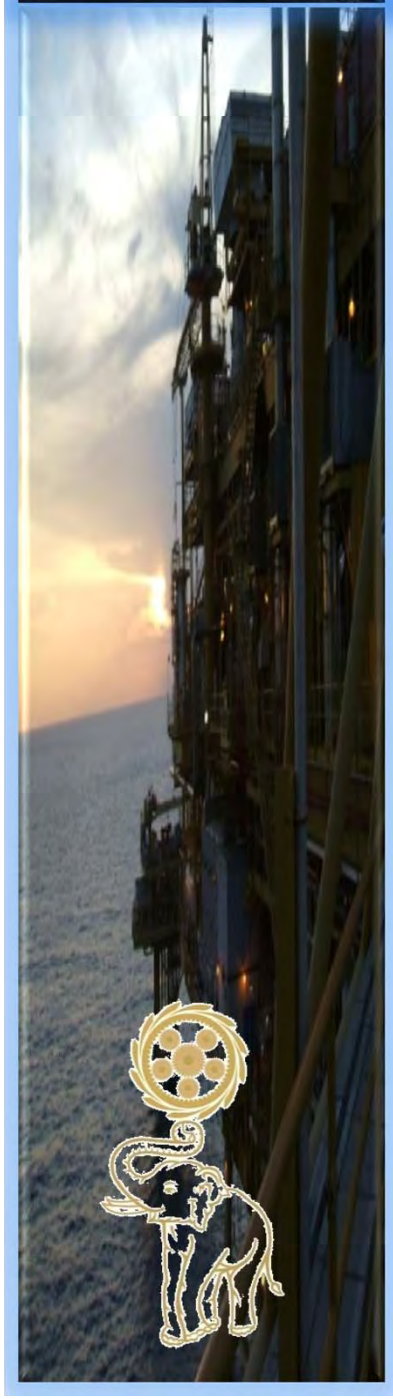
Brown Blue White Grey shield Brown Blue White Grey shield

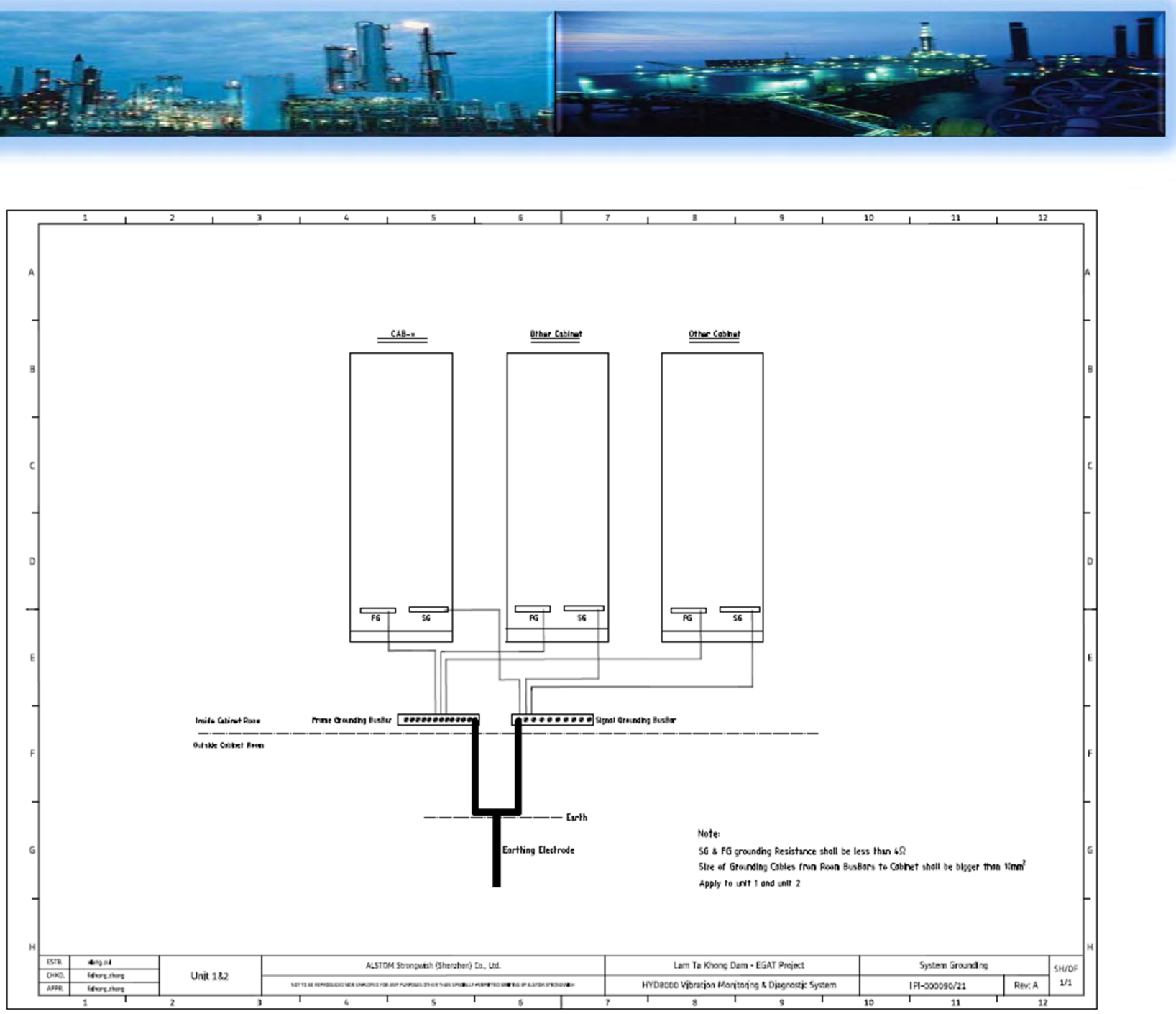
Upper Gen Case Expansion5 (To Sensor) SX20MECR Sensor
Upper Gen Case Expansion6 (To Sensor) SX20MECR Sensor

Note:
Signals Connection Drawing: Apply to unit 1 and unit 2

ESTR.	dlong.cui	Unit 1&2	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	BOX4~BOX6 Signals Connection	SH/DF 1/1
CHKD.	fdlhong.zhang			HYD8000 Vibration Monitoring & Diagnostic System	IPI-000090/20 Rev: A	
APPR.	fdlhong.zhang					

NOT TO BE REPRODUCED NOR UNLOCKED FOR ANY PURPOSES OTHER THAN SPECIALLY PERMITTED WITHOUT THE WRITTEN CONSENT OF ALSTOM STRONGWISH



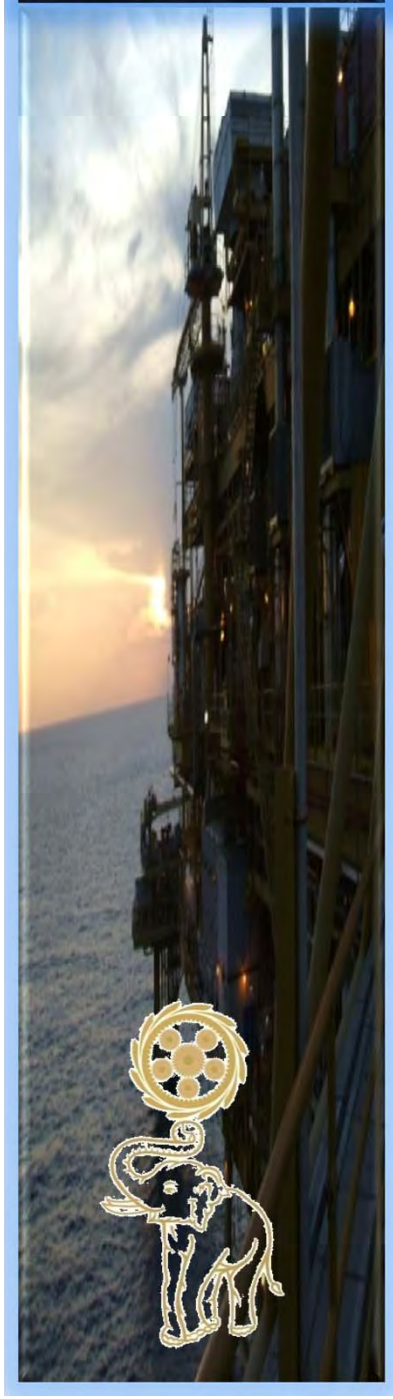


Most Valued Global Provider of Predictive Maintenance Solution









Pos.	Cable No.	Start Position	Final Position	Cable Type	Monitoring Point
01	ZB-QD/xx	System Cabinet	Power Supply Cabinet	RV 2×2	System Working Power
02	ZB-BOX1/1	System Cabinet	BOX1	RVVP 4X0.75	Upper Gen Disp +X
03	ZB-BOX1/2	System Cabinet	BOX1	RVVP 4X0.75	Upper Gen Disp +Y
04	ZB-BOX1/3	System Cabinet	BOX1	RVVP 4X0.75	Upper Gen Vel Horizontal
05	ZB-BOX1/4	System Cabinet	BOX1	RVVP 4X0.75	Upper Gen Vel Vertical
06	ZB-BOX1/5	System Cabinet	BOX1	RVVP 4X0.75	Tachophasor
07	ZB-BOX2/1	System Cabinet	BOX2	RVVP 4X0.75	Lower Gen Disp +X
08	ZB-BOX2/2	System Cabinet	BOX2	RVVP 4X0.75	Lower Gen Disp +Y
09	ZB-BOX2/3	System Cabinet	BOX2	RVVP 4X0.75	Lower Gen Vel Horizontal
10	ZB-BOX2/4	System Cabinet	BOX2	RVVP 4X0.75	Lower Gen Vel Vertical
11	ZB-BOX3/1	System Cabinet	BOX3	RVVP 4X0.75	Upper Turbine Disp +X
12	ZB-BOX3/2	System Cabinet	BOX3	RVVP 4X0.75	Upper Turbine Disp +Y
13	ZB-BOX3/3	System Cabinet	BOX3	RVVP 4X0.75	Upper Turbine Vel Horizontal
14	ZB-BOX3/4	System Cabinet	BOX3	RVVP 4X0.75	Upper Turbine Vel Vertical
15	ZB-AGS/1	System Cabinet	Air Gap Signal Conditioner1	RVVP 4X0.75	Air-gap 1
16	ZB-AGS/2	System Cabinet	Air Gap Signal Conditioner2	RVVP 4X0.75	Air-gap 2
17	ZB-AGS/3	System Cabinet	Air Gap Signal Conditioner3	RVVP 4X0.75	Air-gap 3
18	ZB-AGS/4	System Cabinet	Air Gap Signal Conditioner4	RVVP 4X0.75	Air-gap 4
19	ZB-AGS/5	System Cabinet	Air Gap Signal Conditioner5	RVVP 4X0.75	Air-gap 5
20	ZB-AGS/6	System Cabinet	Air Gap Signal Conditioner6	RVVP 4X0.75	Air-gap 6
21	ZB-AGS/7	System Cabinet	Air Gap Signal Conditioner7	RVVP 4X0.75	Air-gap 7
22	ZB-AGS/8	System Cabinet	Air Gap Signal Conditioner8	RVVP 4X0.75	Air-gap 8
23	ZB-BOX4/1	System Cabinet	BOX4	RVVP 4X0.75	Upper Gen Case Expansion1
24	ZB-BOX4/2	System Cabinet	BOX4	RVVP 4X0.75	Upper Gen Case Expansion2
25	ZB-BOX5/1	System Cabinet	BOX5	RVVP 4X0.75	Upper Gen Case Expansion3
26	ZB-BOX5/2	System Cabinet	BOX5	RVVP 4X0.75	Upper Gen Case Expansion4
27	ZB-BOX6/1	System Cabinet	BOX6	RVVP 4X0.75	Upper Gen Case Expansion5
28	ZB-BOX6/2	System Cabinet	BOX6	RVVP 4X0.75	Upper Gen Case Expansion6
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					

Note:
System Cable Laying List Apply to unit 1 and unit 2

ESTR.	xlong.cui	Unit 1&2	ALSTOM Strongwish (Shenzhen) Co., Ltd.	Lam Ta Khong Dam - EGAT Project	System Cable Laying List	SH/DF 1/1
CHKD.	fdhong.zhang					
APPR.	fdhong.zhang			HYDB000 Vibration Monitoring & Diagnostic System	IFI-000090/22 Rev: A	

Most Valued Global Provider of Predictive Maintenance Solution

AST





Most Valued *Global Provider of Predictive Maintenance Solution*

AST





Most Valued *Global Provider of Predictive Maintenance Solution*

AST





Most Valued Global Provider of Predictive Maintenance Solution