OIL & GAS DEVELOPMENT COMPANY LIMITED

UCH GAS FIELD, DERA BUGTI-BALOCHISTAN

Annexure-A

Schedule of Requirement

Tender Enquiry No. PROC (L)-WT/UCH-II (COOLING TOWER)/MECH-001/2022

"SUPPLY OF COOLING TOWER SHEETS & SERVICES"

Sr.#	Item Description	UOM	Reqd. Qty.
01	**Supply of Cooling Tower Casing Sheets:** Material/Type: Fiberglass (FRP) Corrugated/Ribbed Sheets (Machine Made Homogeneous finish both side): Thickness of Sheet = 2mm, Color: Grey i- 1750mm (5.74ft) x 7250mm (23.78ft); Qty: 32 Nos. ii- 1750mm (5.74ft) x 2050mm (6.72ft); Qty: 32 Nos. Total Area of 01 Cell: 61ft x 5.74 ft = 350 Sq.Ft No. of Cell x No. of Cooling Towers: 08x02 = 16	Square Feet	5,600
02	**Supply of Services:** Services for Replacement/Installation of Casing Sheets of Cooling Tower at OGDCL UCH-II Gas Plant No. of Cooling Towers: 02, No. of Cell/Cooling Tower: 08	Lump sum	01 Job

TERMS AND CONDITIONS (TECHNICAL):-

1. Bidder must have minimum 05 years of experience in manufacturing/supply of similar sheets and must provide the evidence that offered sheets are being used in the different organizations for the same application.
2. GA Drawing of Cooling Tower is attached for technical/dimensional detail. If the bidder finds any ambiguity in specification, dimension or any technical detail / data, it should be clarified prior to bid submission. If needed, Bidders can visit UCH Gas Field via proper requisition well before bid submission deadlines.
3. Bidder to confirm that Sheets will be packed in secured and Transport worthy robust packing.
4. Material will be delivered at Uch Gas Field-OGDCL.
5. Inspection of material will be carried out by the OGDCL rep. at Uch Gas Field.
6. In case supplier fail to comply any of the above requirement the consignment may be deemed as rejected.
7. OGDCL, Uch Gas Field will provide fasteners/self-drill screws for fixing/installation of sheets.
8. OGDCL, Uch Gas Field will provide only accommodation to the manpower of successful bidder at Uch Gas Field site, provision of food will be contractor/supplier responsibility.
9. Provision of tools, consumables & PPE's will be the responsibility of contractor/supplier for execution of job at site.
10. Bids evaluation criteria will be full consignment wise.
11. The master set of tender documents (Local) available on OGDCL website (www.ogdcl.com) is the integral part of this tender.

ANNEXURE-A-1

GENERAL TERMS AND CONDITIONS:

A. BIDS MUST BE SUBMITTED UNDER **SINGLE STAGE TWO ENVELOPES BIDDING SYSTEM** i.e. TECHNICAL & FINANCIAL BID SEPARATELY ON DUE DATE.

B. FINANCIAL BIDS OF ONLY TECHNICALLY RESPONSIVE BIDDERS WILL BE OPENED PUBLICLY.

C. AFTER TENDER OPENING "TECHNICAL BIDS" WILL BE REVIEWED. THE BIDS WILL BE BROUGHT TECHNICALLY AT PAR BY SEEKING CLARIFICATIONS. THE BIDDERS WILL **NOT** BE ASKED FOR ANY PRICE CHANGE IN THEIR FINANCIAL BIDS DUE TO CERTAIN CLARIFICATIONS AND SUBSEQUENT CHANGE IN THEIR TECHNICAL PROPOSALS. THE BIDDERS WILL **NOT** BE ALLOWED TO SUBMIT SUPPLEMENTARY PRICE PROPOSALS IN A SEPARATE SEALED ENVELOPE TO MAKE IT A PART OF THE ALREADY SUBMITTED UNOPENED FINANCIAL BIDS AND TO ADJUST THEIR QUOTED PRICE SUBSEQUENTLY AFFECTED DUE TO CHANGE IN TECHNICAL PROPOSALS.

D. SEALED FINANCIAL BIDS OF TECHNICALLY NON-RESPONSIVE BIDDERS WILL BE RETURNED UN-OPENED.

E. OGDCL RESERVES THE RIGHT TO REJECT ANY OR ALL THE BIDS WITHOUT ASSIGNING ANY REASON.

F. PRICES MUST BE QUOTED IN PKR INCLUSIVE OF ALL TAXES AND DUTIES, INDICATING UNIT PRICE AND TOTAL BID PRICES. GST MUST BE QUOTED SEPARATELY ALONG WITH COPY OF GST CERTIFICATE.

G. QUOTED PRICES SHALL BE VALID FOR **90 DAYS** FROM THE OPENING DATE OF THE TECHNICAL BID.

H. OGDCL RESERVES THE RIGHT TO EVALUATE THE BID(S) EITHER ITEM-WISE OR FULL PASKAGE BASIS WITHOUT ASSIGNING ANY REASON. TO QOUTE COMPETITIVE PRICES FOR ALL OR ANY ITEMS ENABLE COMPANY TO DECIDE PURCHASE**.**

I. THE MAXIMUM DELIVERY TIME FOR SUPPLY ITEMS INCLUDING JOB COMPLETION AT SITE IS 4**0 DAYS** FROM THE DATE OF RECEIPT OF FIRM PURCHASE ORDER.

J. BIDDERS TO SUBMIT THEIR COMPANY PROFILES, EXPERIENCE OF SIMILAR SUPPLIES IN PAKISTAN ALONG WITH TECHNICAL BIDS.

K. THE SUCCESSFUL BIDDER WILL HAVE TO SUBMIT A PERFORMANCE BOND IN THE SHAPE OF EITHER BANK GUARANTEE EQUAL TO 10% OF TOTAL VALUE OF PURCHASE/SERVICE ORDER EXCLUSIVE OF GST/PST/ICT WITHIN FIFTEEN DAYS AFTER ISSUANCE OF PURCHASE/SERVICE ORDER. (Refer clause 10 of master set of tender documents).

L. THE MASTER SET OF TENDER DOCUMENTS (LOCAL) AVAILABLE ON OGDCL WEBSITE (WWW.OGDCL.COM) IS THE INTEGRAL PART OF THIS TENDER.

OIL & GAS DEVELOPMENT COMPANY LIMITED

PROCUREMENT DEPARTMENT (LOCAL), ISLAMABAD

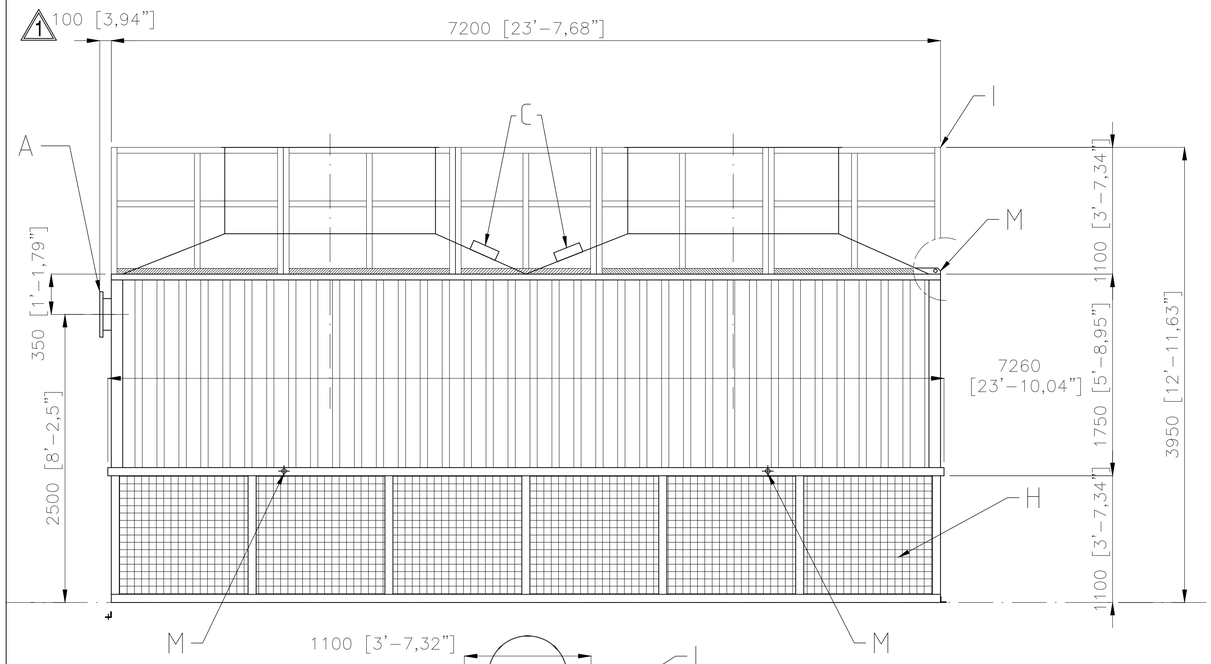
SCHEDULE OF REQUIREMENT

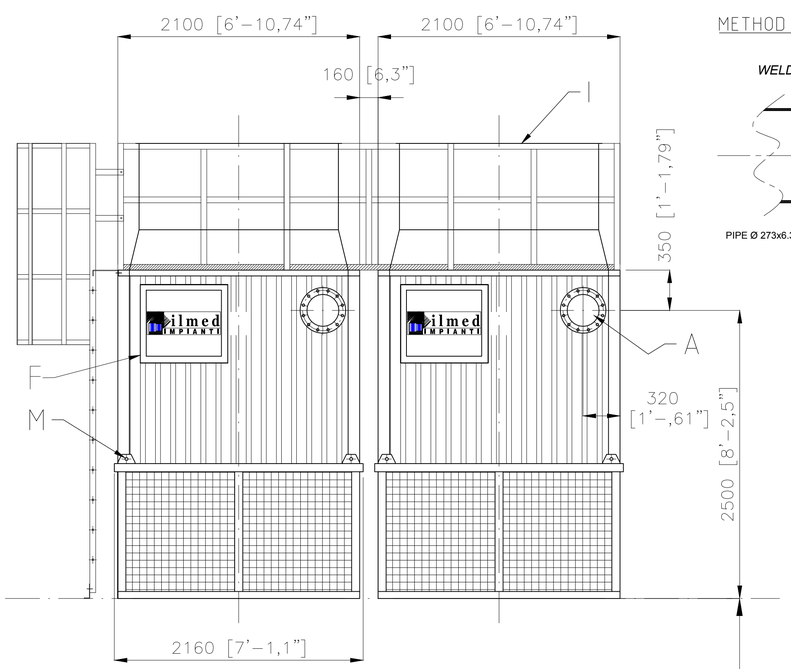
Mandatory Checklist

Please confirm the compliance of the following mandatory information along with the bid(s) failing which bid(s) will not be accepted.

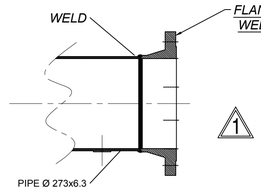
Documents	**To be attached with the Technical / Financial Bids**	**Compliance**	
Original Bid Bond	Technical Bid	Yes ☐	No ☐
Copy of NTN Certificate	Technical Bid	Yes ☐	No ☐
Copy of GST Certificate	Technical Bid	Yes ☐	No ☐
Confirmation that the Firm is appearing FBR's Active Taxpayer List	Technical Bid	Yes ☐	No ☐
Duly Signed and Stamped Annexure-A (Un-priced)	Technical Bid	Yes ☐	No ☐
Duly filled, signed and stamped Annexure-B	Technical Bid	Yes ☐	No ☐
Duly filled, signed and stamped Annexure-D	Technical Bid	Yes ☐	No ☐
Duly signed and stamped Annexure-L on Company's Letter Head	Technical Bid	Yes ☐	No ☐
Duly signed and stamped Annexure-M on Company's Letter Head	Technical Bid	Yes ☐	No ☐
Duly signed and stamped Annexure-N on Non-Judicial Stamp paper duly attested by Notary Public	Technical Bid	Yes ☐	No ☐
Duly Filled, signed and stamped Annexure-A (Priced)	Financial Bid	Yes ☐	No ☐
Duly Filled, signed and stamped Annexure-C	Financial Bid	Yes ☐	No ☐
Duly Filled, signed and stamped Annexure-E	Financial Bid	Yes ☐	No ☐

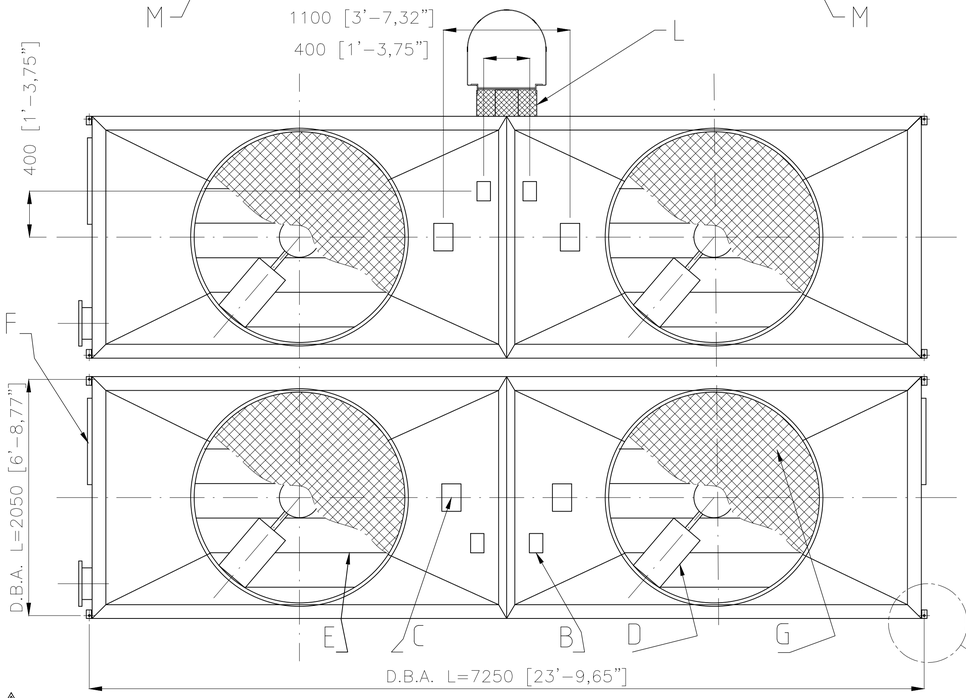
The above Annexures are available in MASTER SET OF TENDER DOCUMENTS (LOCAL) that can be downloaded from OGDCL website (www.ogdcl.com).



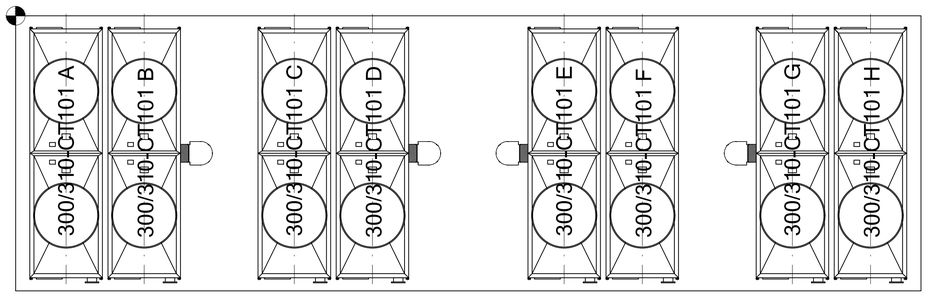


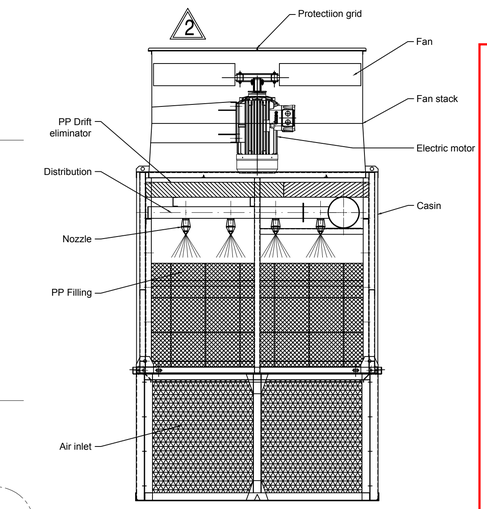
METHOD OF WELDING FLANGE TO PIPE





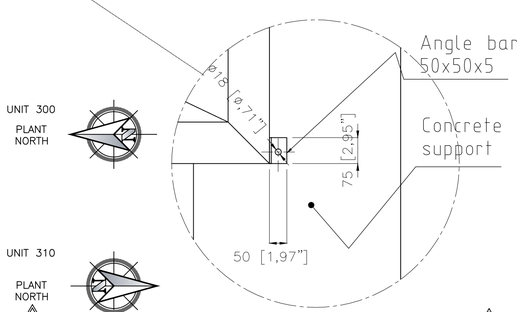
4 FOR SKID COORDINATES REFER TO FOUNDATION LAYOUT AND LOADS DOC. 3-PU101-ME-DW-106





PERFORMANCE	
Unit water flow rate	1096.1 US gpm
Inlet water Temperature	114.5 °F
Outlet water Temperature	90.0 °F
Wet bulb Temperature	82.9 °F
MATERIALS	
Structural elements	HDGS (mat.al S235JR)
Casing	HDGS (mat.al S235JR)
Fan Stack	HDGS (mat.al S235JR)
Water dispersion system	HDGS (mat.al S235JR)
Nozzles	polyprop. glass reinforced
Drift eliminators	polypropylene
Filling system	polypropylene
Filling system supports	HDGS (mat.al S235JR)
Louvers	HDGS (see above)+polyprop.
ELECTRIC MOTOR	
Power	14.75 hp
Voltage	400 ± 10% V
Frequency	50 ± 2% Hz
FAN	
Tipe	ALU/32n/03n/CA1/1800/AP
Rotation speed	720 rot/min
Pitch angle	15.5°

ANCHORING DETAIL



A	Water inlet flange 10' ANSI 150 WELDING NECK RF (1)
B	Vibraswitch: cable connection 3/4' NPT (2)
C	Junction box: motor cable M40 + PTC cable M20
D	Fan
E	Drift eliminators
F	Inspection door
G	Protection grid
H	Louvers
I	Handrail
L	Caged ladder
M	Lifting hooks

1

REV	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
10	GENERAL REVISION	N.M.	CONTR.	A.V.	05/04/2013
REV. Rev.	DESCRIZIONE REVISIONI Revisions Descriptions	DIS. Dwg.	CONTR. Check.	APPR. Appr.	DATA Date
09	GENERAL REVISION	N.M.	CONTR.	A.V.	08/03/2013
08	GENERAL REVISION	N.M.	CONTR.	A.V.	27/02/2013
07	GENERAL REVISION	N.M.	CONTR.	A.V.	26/02/2013
REV. Rev.	DESCRIZIONE REVISIONI Revisions Descriptions	DIS. Dwg.	CONTR. Check.	APPR. Appr.	DATA Date
06	GENERAL REVISION	N.M.	CONTR.	A.V.	22/02/2013
05	GENERAL REVISION	N.M.	CONTR.	A.V.	15/02/2013
04	GENERAL REVISION	N.M.	CONTR.	A.V.	12/02/2013
REV. Rev.	DESCRIZIONE REVISIONI Revisions Descriptions	DIS. Dwg.	CONTR. Check.	APPR. Appr.	DATA Date
03	GENERAL REVISION	N.M.	A.V.	A.V.	31/01/2013
02	GENERAL REVISION	N.M.	A.V.	A.V.	11-12-2012
01	GENERAL REVISION	N.M.	CONTR.	A.V.	
REV. Rev.	DESCRIZIONE REVISIONI Revisions Descriptions	DIS. Dwg.	CONTR. Check.	APPR. Appr.	DATA Date

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ILMED IMPIANTI S.r.l. Viale dei Mareschi,15 10051 Avigliana (TO) Tel.+39 011 9325.555 www.ilmed.it

APPROVATO / APPROVED : A.V.
CONTROLLATO / CHECKED : N.M.
DISEGNATO / DRAWN : N.M.
SCALA / SCALE : 1:-
FORMATO / FORMAT : A 1
DATA / DATE : 31/11/2012
FOGLIO / SHEET : 1/3
DISEGNO N° / DRAWING N° : 12T5567_5618
ORDINE N° / ORDER N° : 12999 IMPI

CLIENTE / CLIENT : BELLELLI ENGINEERING S.p.A.
OGGETTO / SUBJECT : COOLING TOWER TYPE TG/Q2/43/HT/S/CONT
TITOLO / TITLE : OVERALL DIMENSIONS

PART NAME : AUTOCAD / TG/Q2/43/HT/S/CONT

REFERENCE DOCUMENTS

DOCUMENT TYPE	DOCUMENT NUMBER
DATASH. FOR COOLING TOWER	3-CT101-PR-DS-018
COOLING WATER SYSTEM P&ID	3-PU501-PR-DI-003
ERECTION INSTALLATION ASSEMBLY INSTRUCTION OF COOLING TOWER	3-CT101-ME-DW-025
FOUNDATION LAYOUT AND LOADS	3-PU101-ME-DW-106 (3)

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND INCHES.
2. COOLING TOWER DIMENSIONS ARE SPECIFIC FOR 40' HIGH CUBE CONTAINER

ENAR A COMPANY OF

ENAR PETROTECH SERVICES (PRIVATE) LTD.
TEL:5062791 FAX:5067522 KARACHI-PAKISTAN

Job No. **14-4985**

OIL &GAS DEVELOPMENT COMPANY LTD.

REV	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
04	AS BUILT	NM	NM	AV	18.09.2013
03	REVISION AFTER COMMENTS	NM	NM	AV	05.04.2013
02	REVISION AFTER COMMENTS	NM	NM	AV	08.03.2013
01	GENERAL REVISION	NM	NM	AV	22.02.2013
00	ISSUED FOR APPROVAL	NM	NM	AV	20.12.2012

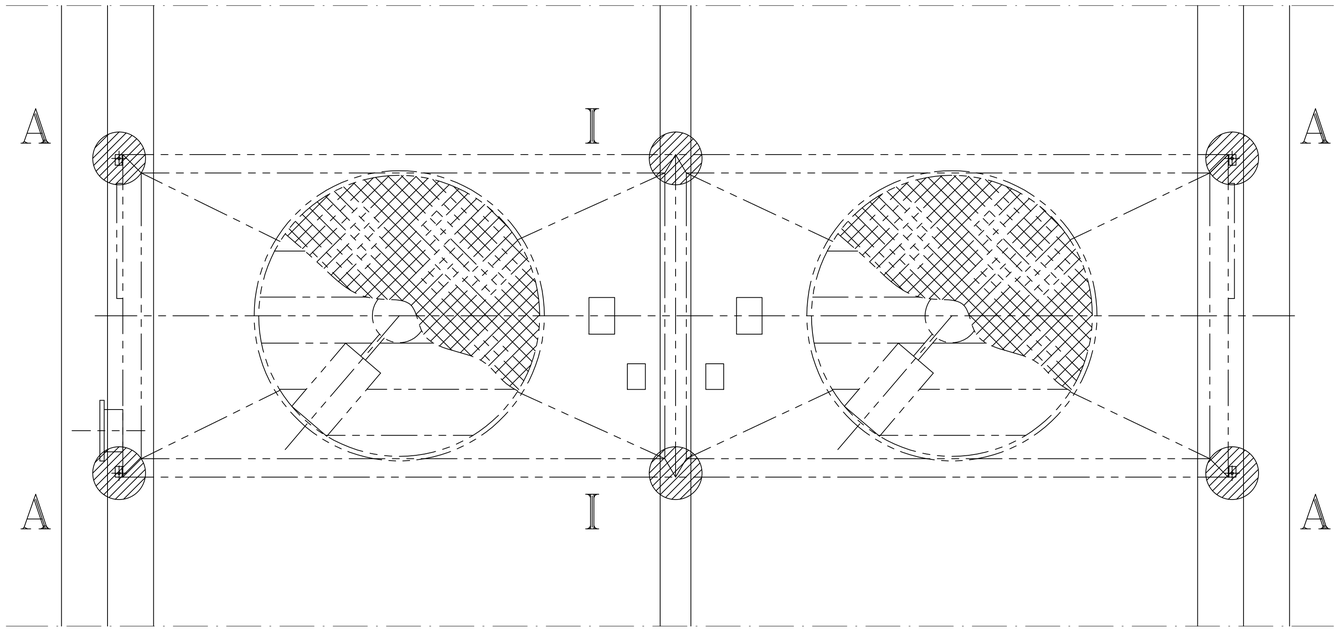
BELLELLI ENGINEERING S.p.A.
Via Antonio Meucci 232 - 45021 BADIA POLESINE (RO)
Tel. 0039.0425.595.074 - Fax. 0039.0425.590.372
www.bellelleng.com / info@bellelleng.com

UCH-II DEVELOPMENT PROJECT

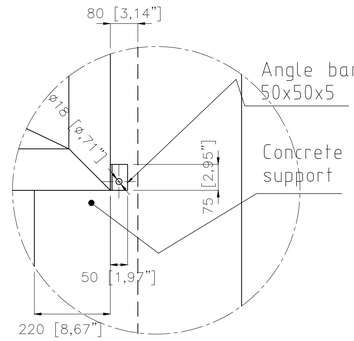
DOCUMENTTYPE	DOCUMENT NUMBER
GENERAL ARRANGEMENT OF COOLING TOWERS 300/310 CT101	3-CT101-ME-DW-017

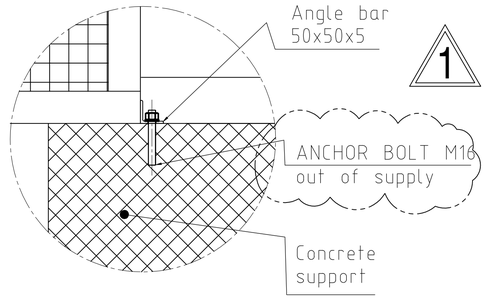
BELLELLI PROJECT CODE	LOCATION	PLANT	SCALE	SHEET	REV No.
1896-12	PAKISTAN	AMINE GAS SWEETENING UNIT	-	1 of 3	04

FORMAT A1



ANCHORING DETAIL





REV.	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
10	GENERAL REVISION	N.M.	A.V.		05/04/2013
09	GENERAL REVISION	N.M.	A.V.		08/03/2013
08	GENERAL REVISION	N.M.	A.V.		27/02/2013
07	GENERAL REVISION	N.M.	A.V.		26/02/2013
06	GENERAL REVISION	N.M.	A.V.		22/02/2013
05	GENERAL REVISION	N.M.	A.V.		15/02/2013
04	GENERAL REVISION	N.M.	A.V.		12/02/2013
03	GENERAL REVISION	N.M.	A.V.		31-01-2013
02	GENERAL REVISION	N.M.	A.V.		11-12-2012
01					
REV.	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE

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ILMED IMPIANTI S.r.l.
Viale dei Mareschi n° 15
10051 AVIGLIANA (TO)
tel. +39011 9325555
WWW.ILMED.IT

TORRE REFRIGERANTE D'ACQUA / WATER COOLING TOWER

Modello / Model :	TG/Q2/43/EX/HT/S/CONT
Targa / Serial N° :	12T107941
Portata / Flow Rate:	248.9 mc/h 1096.1 US gpm
Anno / Year :	2013
Item / Rif. :	300-CT101 A

CE

See Note 3

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Viale dei Mareschi, 15
10051 AVIGLIANA (Torino) Italy

TORRE MOD. TG/Q2/43/EX/HT/S/CONT
N°. Serie 12T107941 Anno 2013
Rif. Cliente 300-CT101-A

CE Ex II 3G T3

Apparecchiatura in accordo alla direttiva 94/9/CE

WEIGHT FOR ONE MODULE TG/Q2/43/HT/S/CONT:
SHIPPING Kg. 3400
OPERATING Kg. 5100

ITEM		M / T / Q		ERECTION (FULL WIND)	OPERATING (SEISMIC)	HYDROTEST (PARTIAL WIND)
I (intermediate support)	SHEAR (T)		kN	/	/	/
			lb	/	/	/
	MOMENT (M)		kN*m	/	/	/
			lb*feet	/	/	/
	VERTICAL (Q)		kN	35,0	25,0	20,0
			lb	77,2	55,1	44,1
A (corner support)	SHEAR (T)	Longitudinal load	kN	± 5,0	± 5,0	± 2,5
			lb	11,0	11,0	5,5
		Transversal load	kN	± 10	± 10	± 5
			lb	22,0	22,0	11,0
	MOMENT (M)	Transversal load	kN	/	/	/
			lb*feet	/	/	/
	VERTICAL (Q)		kN	25,0	15,0	10,0
			lb	55,0	33,1	22,0

WIND VELOCITY 120 Mph
SEISMIC ZONE FACTOR 0,1 g

3

Loads listed in the above table are calculated by means of structural calculation software: for details refer to mechanical calculation sheet .

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APPROVED : A.V.
CONTROLLER / DESIGN : N.M.
DESIGN BY : N.M.
SCALE : 1:- FORMAT : A1
DATE : 31/11/2012
SHEET : 2/3
DOCUMENT CLASS / CUSTOMER NO. : 12T5567_5618
ORDER N° : 12999 IMPI

CLIENT : BELLELLI ENGINEERING S.p.A.
PLANT : COOLING TOWER TYPE TG/Q2/43/HT/S/CONT
TITLE : OVERALL DIMENSIONS

PART NAME : AUTOCAD / TG/Q2/43/HT/S/CONT

REFERENCE DOCUMENTS

DOCUMENT TYPE	DOCUMENT NUMBER
ERECTION INSTALLATION ASSEMBLY INSTRUCTION OF COOLING TOWER	3-CT101-ME-DW-025
FOUNDATION LAYOUT AND LOADS	3-PU101-ME-DW-106
-	-
-	-

3

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND INCHES.
2. COOLING TOWER DIMENSIONS ARE SPECIFIC FOR 40' HIGH CUBE CONTAINER
3. TAG FOR COOLING TOWER ARE: 300-CT101 A, 310-CT101 A, 300-CT101 B, 310-CT101 B, 300-CT101 C, 310-CT101 C, 300-CT101 D, 310-CT101 D, 300-CT101 E, 310-CT101 E, 300-CT101 F, 310-CT101 F, 300-CT101 G, 310-CT101 G, 300-CT101 H, 310-CT101 H

ENAR A COMPANY OF — ENAR PETROTECH SERVICES (PRIVATE) LTD.
TEL:5062791 FAX:5067522 KARACHI-PAKISTAN

Job No. 14-4985

OIL &GAS DEVELOPMENT COMPANY LTD.

REV	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
04	AS BUILT	NM	NM	AV	18.09.2013
03	REVISION AFTER COMMENTS	NM	NM	AV	05.04.2013
02	REVISION AFTER COMMENTS	NM	NM	AV	08.03.2013
01	GENERAL REVISION	NM	NM	AV	22.02.2013
00	ISSUED FOR APPROVAL	NM	NM	AV	20.12.2012

BELLELLI ENGINEERING S.p.A.
Via Antonio Meucci 232 - 45021 BADIA POLESINE (RO)
Tel. 0039.0425.595.074 - Fax. 0039.0425.590.372
www.bellelleng.com / info@bellelleng.com

UCH-II DEVELOPMENT PROJECT

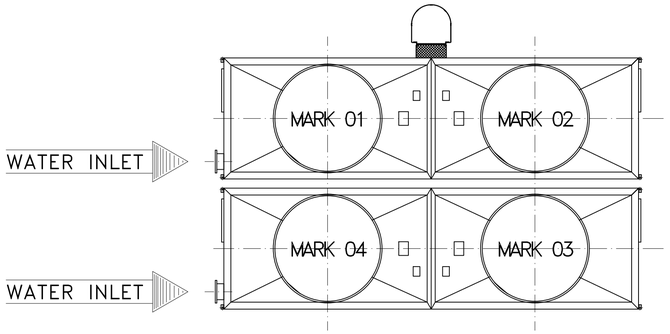
DOCUMENT TYPE	DOCUMENT NUMBER
GENERAL ARRANGEMENT AND LAYOUT OF COOLING TOWERS (300/310-CT101)	3-CT101-ME-DW-017

BELLELLI PROJECT CODE	LOCATION	PLANT	SCALE	SHEET	REV No.
1896-12	PAKISTAN	AMINE GAS SWEETENING UNIT	-	2 of 3	04

FORMAT A1

Identification of fan ducts, caged ladder and handrails position

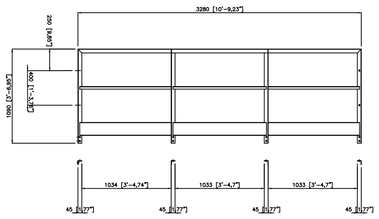
Identify all supplied items and their position on the cooling towers according to present drawing. Components are all itemized with same identification tag hereby reported.



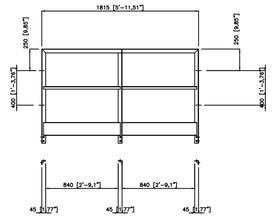
item

01 = fan duct
02 = fan duct
03 = fan duct
04 = fan duct

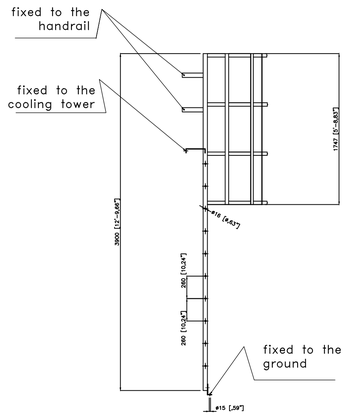
Handrail Type "A"



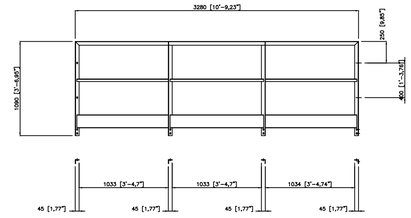
Handrail Type "B"



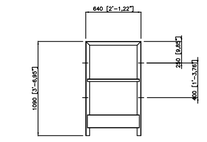
Caged ladder

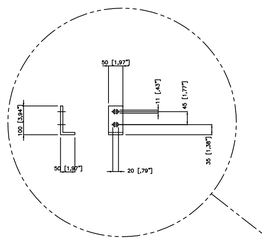


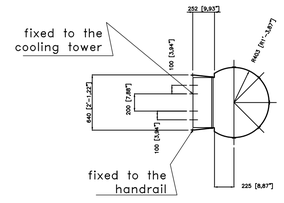
Handrail Type "D"



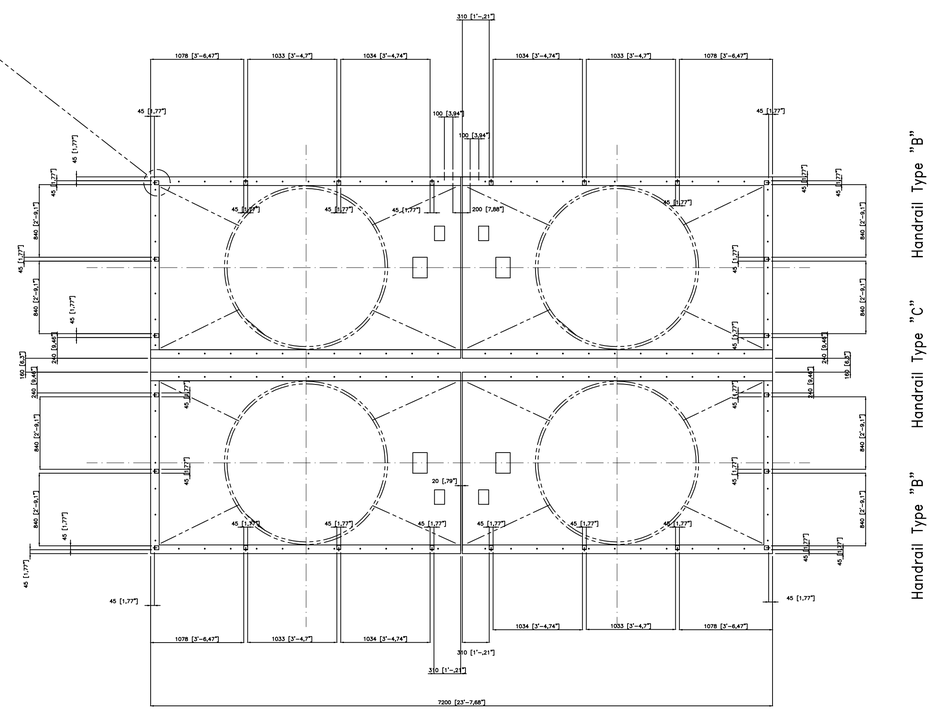
Handrail Type "C"







Handrail Type "A" Caged ladder Handrail Type "D"



Handrail Type "D" Handrail Type "C" Handrail Type "A"

BOQ about typical installation of two moduls (2)

ITEM	QUANTITY	Material
Type "A"	2	S235JR
Type "B"	4	S235JR
Type "C"	3	S235JR
Type "D"	2	S235JR
Caged ladder	1	S235JR
01	1	S235JR
02	1	S235JR
03	1	S235JR
04	1	S235JR

item

Type "A" = handrail
Type "B" = handrail
Type "C" = handrail
Type "D" = handrail

For assembly and lifting refer to the drawing
3-CT101-ME-DW-025 / 13124 IMPS

REFERENCE DOCUMENTS

DOCUMENT TYPE	DOCUMENT NUMBER
ERECTION INSTALLATION ASSEMBLY INSTRUCTION OF COOLING TOWER	3-CT101-ME-DW-025
FOUNDATION LAYOUT AND LOADS (3)	3-PU101-ME-DW-106
-	-
-	-

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETERS AND INCHES.
2. COOLING TOWER DIMENSIONS ARE SPECIFIC FOR 40' HIGH CUBE CONTAINER

ENAR — A COMPANY OF — ENAR PETROTECH SERVICES (PRIVATE) LTD.
TEL:5062791 FAX:5067522 KARACHI-PAKISTAN

Job No. 14-4985

OIL &GAS DEVELOPMENT COMPANY LTD.

REV	DESCRIPTION	DRAWN	CHECKED	APPROVED	DATE
04	AS BUILT	NM	NM	AV	18.09.2013
03	REVISION AFTER COMMENTS	NM	NM	AV	05.04.2013
02	REVISION AFTER COMMENTS	NM	NM	AV	08.03.2013
01	GENERAL REVISION	NM	NM	AV	25.02.2013
00	ISSUED FOR APPROVAL	NM	NM	AV	20.12.2012

BELLELLI ENGINEERING S.p.A.
Via Antonio Meucci 232 - 45021 BADIA POLESINE (RO)
Tel. 0039.0425.595.074 - Fax. 0039.0425.590.372
www.bellelleng.com / info@bellelleng.com

UCH-II DEVELOPMENT PROJECT

DOCUMENT TYPE: GENERAL ARRANGEMENT OF COOLING TOWERS 300/310 CT101
DOCUMENT NUMBER: 3-CT101-ME-DW-017

BELLELLI PROJECT CODE	LOCATION	PLANT	SCALE	SHEET	REV No.
1896-12	PAKISTAN	AMINE GAS SWEETENING UNIT	-	3 of 3	04

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BELLELLI ENGINEERING S.p.A.
COOLING TOWER TYPE TG/Q2/43/HT/S/CONT
OVERALL DIMENSIONS
PART NAME : AUTOCAD / TG/Q2/43/HT/S/CONT

APPROVED: A.V. | CONTROLLED: N.M. | DESIGNED: N.M. | SCALE: 1:- | FORMAT: A1 | DATE: 31/11/2012 | WEIGHT: 3.3 | DRAWING No.: 12T5567.5618 | REVISION No.: 12899 IMPI

FORMAT A1