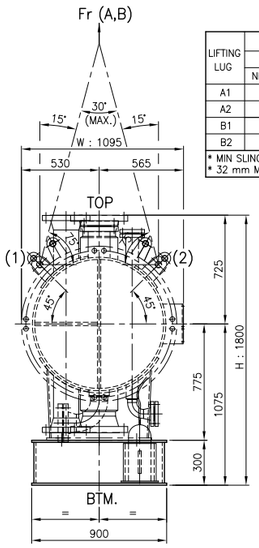
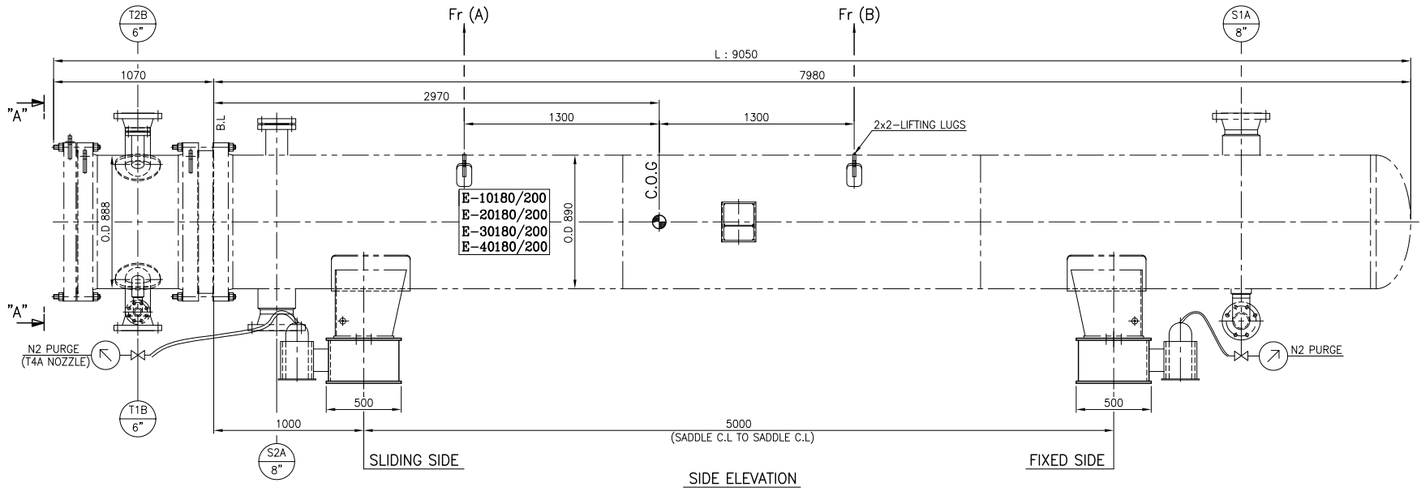


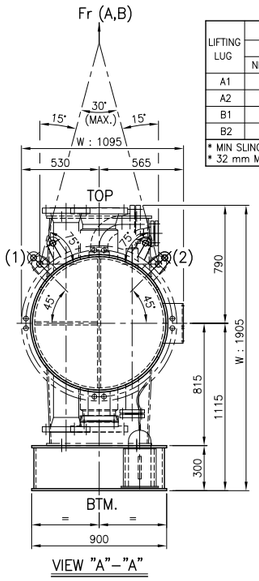
VIEW "A"–"A"

LIFTING LUG	SLIDING LOAD (DEG. FROM VERTICAL)			
	0°		75°	
	NET (kg)	GROSS (kg)	NET (kg)	GROSS (kg)
A1	2784	2866	2882	2967
A2	2784	2866	2882	2967
B1	2784	2866	2882	2967
B2	2784	2866	2882	2967

* MIN SLING LENGTH FOR 15° = 1530 mm
* 32 mm MINIMUM SHACKLE PIN DIAMETER



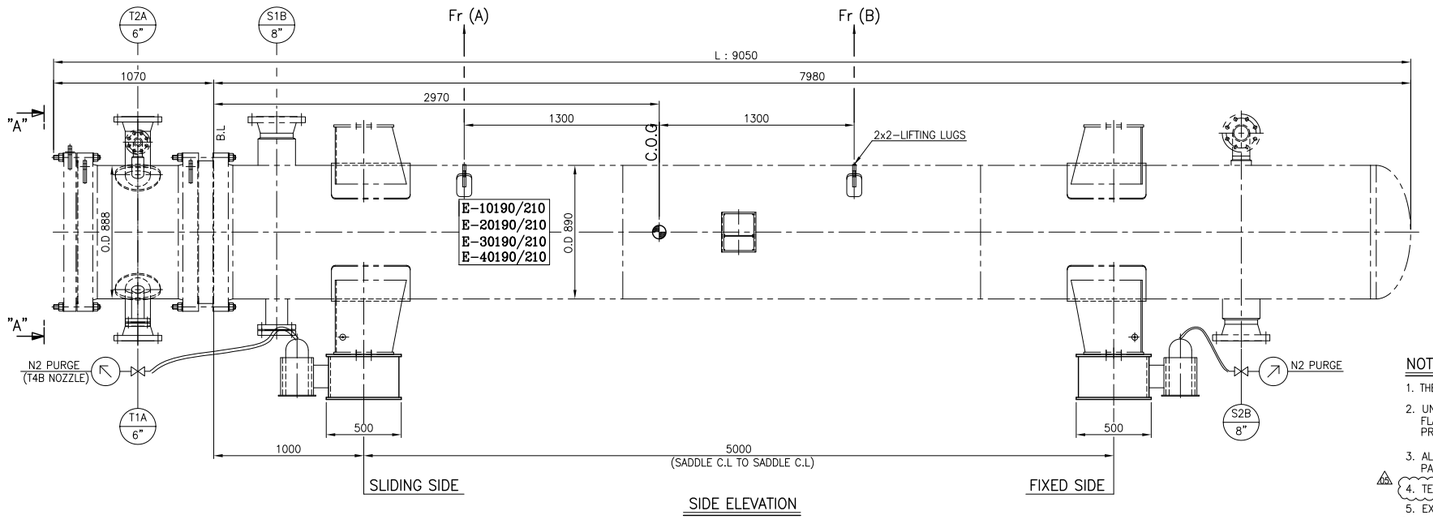
SIDE ELEVATION



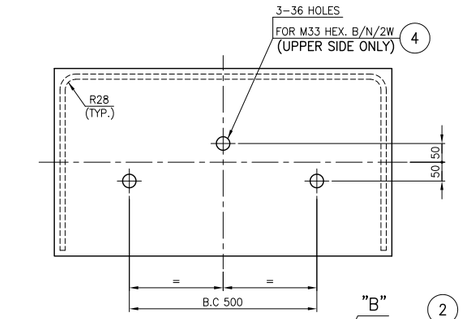
VIEW "A"–"A"

LIFTING LUG	SLIDING LOAD (DEG. FROM VERTICAL)			
	0°		75°	
	NET (kg)	GROSS (kg)	NET (kg)	GROSS (kg)
A1	2864	2946	2965	3050
A2	2864	2946	2965	3050
B1	2864	2946	2965	3050
B2	2864	2946	2965	3050

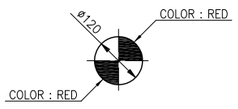
* MIN SLING LENGTH FOR 15° = 1530 mm
* 32 mm MINIMUM SHACKLE PIN DIAMETER



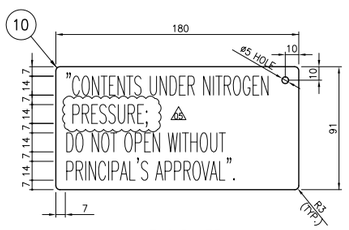
SIDE ELEVATION



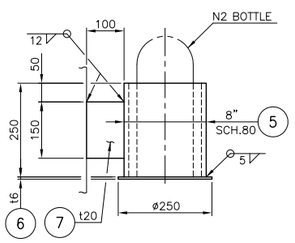
DETAIL OF SHIPPING SKID



C.O.G. MARK

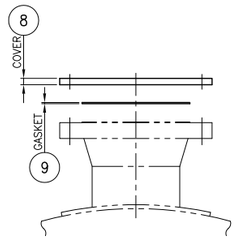


TAG PLATE



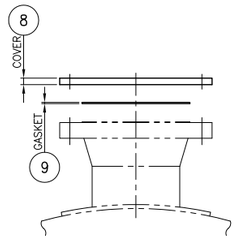
DETAIL "B"

ITEM NO.							
1	E–10180	5	E–20180	9	E–30180	13	E–40180
2	E–10190	6	E–20190	10	E–30190	14	E–40190
3	E–10200	7	E–20200	11	E–30200	15	E–40200
4	E–10210	8	E–20210	12	E–30210	16	E–40210



DETAIL OF TEMPORARY FLANGE COVER

NOZZLE NO.	SIZE	RATING	COVER TH'K
S1A	8"	300#	t14
S2A	8"	300#	t14
T1B	6"	300#	t16
T2B	6"	300#	t16



DETAIL OF TEMPORARY FLANGE COVER

NOZZLE NO.	SIZE	RATING	COVER TH'K
S1B	8"	300#	t14
S2B	8"	300#	t14
T1A	6"	300#	t16
T2A	6"	300#	t16

NOTE

1. THE VESSEL TAG NUMBER SHALL BE STENCILED ON EACH VESSEL IN 150mm HIGH LETTERS.
2. UNPAINTED SURFACES WHICH ARE SUSCEPTIBLE TO CORROSION, INCLUDING FLANGE FACINGS, SHALL BE COATED WITH A RUST PREVENTATIVE THE RUST PREVENTATIVE SHALL BE AN EASILY REMOVABLE TYPE.
3. ALL TEMPORARY SHIPPING FLANGE COVERS, SHIPPING BOLTS AND NUTS SHALL BE PAINTED IN A DIFFERENT COLOR THAN H/EX.
4. ⚠4 TEMPORARY COVERS SHALL HAVE A MINIMUM OF FOUR(4) BOLTS AND BE FULLY FASTENED.
5. EXCHANGER SHALL BE PURGED WITH INERT (NITROGEN) TO A MAXIMUM PRESSURE OF 100kPa (15psi) (MINIMUM) PURGE PRESSURE IS 35 kPa (5 psi).
6. EXCHANGER SHELLS SHALL BE TAGGED WITH RED COLOURED WATERPROOF LABELS.

PACKAGE NO.	E–10180/E–10200 E–20180/E–20200 E–30180/E–30200 E–40180/E–40200	
PACKAGE STYLE	STEEL SKID	
DIMENSION	9.05Lx1.095Wx1.8H	M
MEASUREMENT	17.84	M^3
NET WEIGHT	11135	kg
GROSS WEIGHT	11465	kg
SADDLE WEIGHT	330	kg

PACKAGE NO.	E–10190/E–10210 E–20190/E–20210 E–30190/E–30210 E–40190/E–40210	
PACKAGE STYLE	STEEL SKID	
DIMENSION	9.05Lx1.095Wx1.905H	M
MEASUREMENT	18.88	M^3
NET WEIGHT	11455	kg
GROSS WEIGHT	11785	kg
SADDLE WEIGHT	330	kg

A S M E - U

SOUR SERVICE (SHELL SIDE)

SWEET SERVICE (TUBE SIDE)

ITEM	NAME OF PART / PART CODE	MATERIAL	Q'TY FOR ONE SET	SP1	UNIT	REMARK
10	TAG PLATE	304 S.S	1		EA	t1
9	TEMPORARY GASKET	NON–ASBESTOS	4		EA	SEE TABLE
8	TEMPORARY COVER	SA283–C	4		EA	SEE TABLE
7	RIB PLATE	SA283–C	2		EA	t20
6	BTM. PLATE	SA283–C	2		EA	t6
5	BOTTLE SUP'T PIPE	SA53–B	2		EA	8" SCH.80
4	HEX. B/N/2W	SA307–B/SA563–A/SA283–C	6		SETS	M33x110L
3	WEB PLATE	SA283–C	2		EA	t14
2	UPPER PLATE	SA283–C	2		EA	t14
1	LOWER PLATE	SA283–C	2		EA	t14

(16) SETS TO BE MANUFACTURED

REV.	DATE	DESCRIPTION	DRWN	CHKD	REVD	APPD
⚠3	2015.03.20	ISSUED FOR APPROVAL	TY–ENG	H.S.JEON	K.B.KIM	Y.G.PARK
⚠2	2015.03.05	ISSUED FOR APPROVAL	TY–ENG	H.S.JEON	K.B.KIM	Y.G.PARK
⚠1	2014.11.26	ISSUED FOR APPROVAL	TY–ENG	H.S.JEON	K.B.KIM	Y.G.PARK
⚠2	2014.08.13	ISSUED FOR APPROVAL	TY–ENG	W.I.LEE	K.B.KIM	Y.G.PARK
⚠1	2014.07.02	ISSUED FOR APPROVAL	TY–ENG	W.I.LEE	K.B.KIM	Y.G.PARK

Document Number: CCK-4511951391-0111-B04-00010-001 | Rev: 05

Approval Status:

- ■ 1 – Approved, No Comment - Proceed with Fabrication/Construction
- ☐ 2 – Approved, Note Comments - Revise and Resubmit. Proceed with Fabrication/Construction
- ☐ 3 – Not Approved, Revise and Resubmit - do not proceed with Fabrication/Construction
- ☐ 4 – Information Only

VENDORS PLEASE NOTE: Permission to proceed does not constitute acceptance or approval of design details, calculations, analyses, test methods or materials developed or selected by the supplier and does not relieve supplier from full compliance with contractual obligation.

Responsible Engineer Signature: Wayne Gossett (Wayne.Gossett@shell.com) | Date: 03/26/2015

CLIENT: SHELL CANADA ENERGY

PROJECT: CARMON CREEK PROJECT

P/O NO. 4511951391 | W/O NO. P–13SG–007 | SCALE NONE

TITLE: E–10180 (SEE ITEM NO. TABLE) TREATED BITUMEN COOLERS (DETAIL OF SHIPPING SADDLE)

CLIENT DOC. NO. CCK–4511951391–0111–B04–00010–001 | REV NO. 05

ILSUNG CORPORATION, ONSAN , KOREA | ILSUNG DOC. NO. VP–SG07–E10180–008

A1(594x841mm)