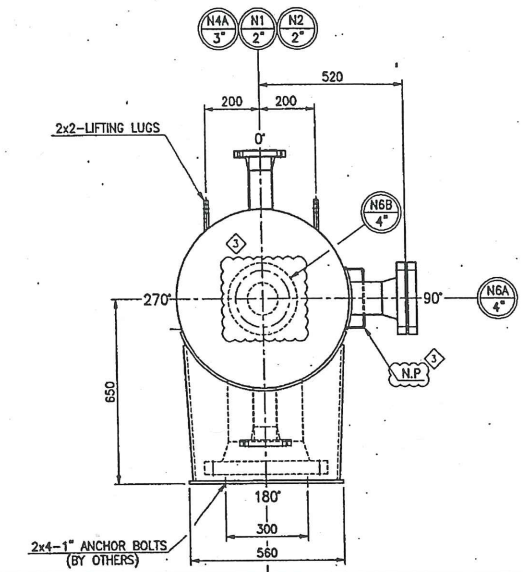
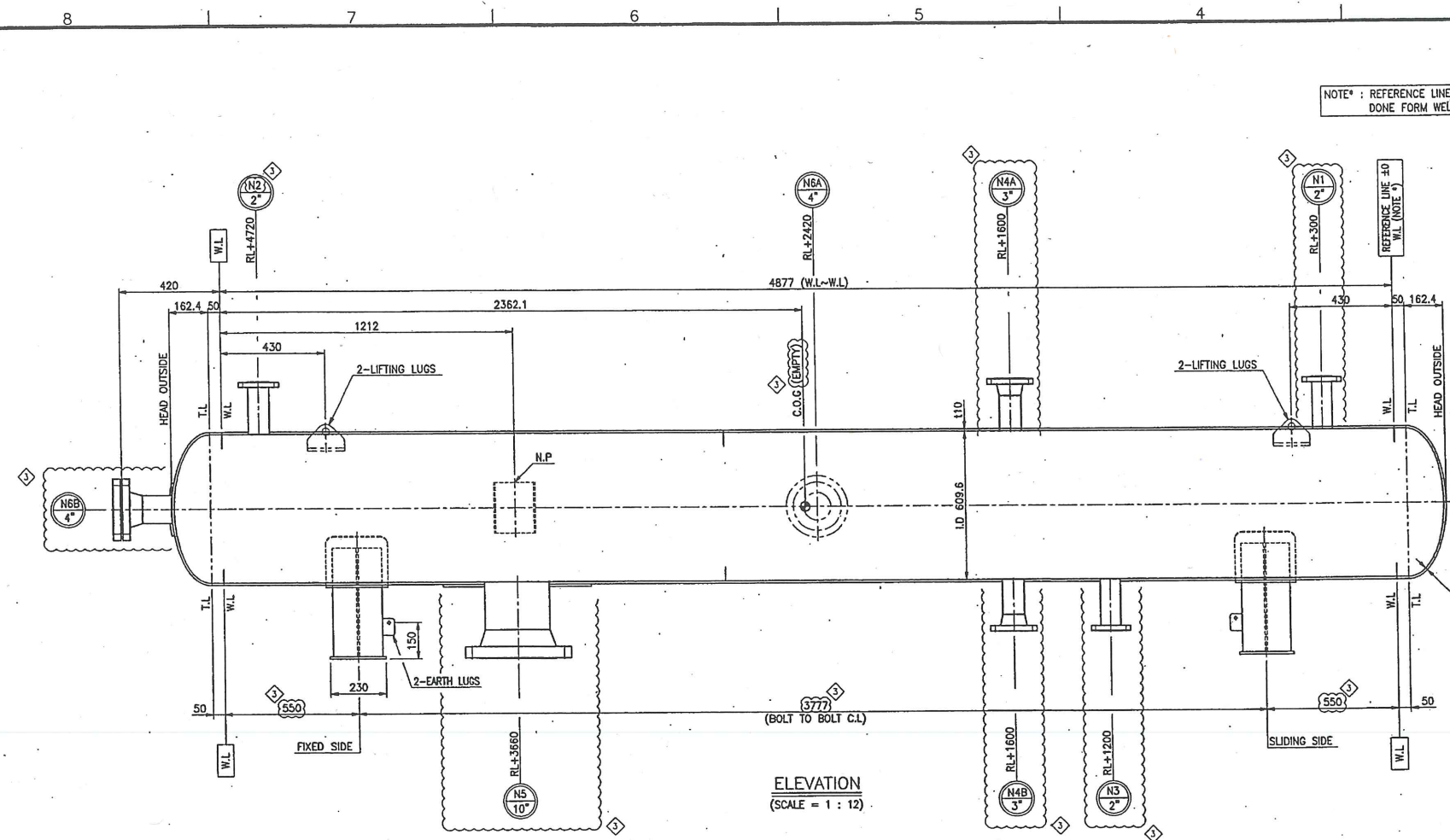


See next page

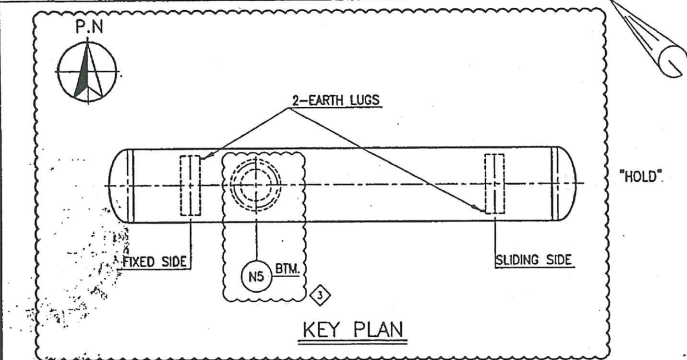


NOZZLE ORIENTATION  
(VIEW "X"-"X")  
(SCALE = 1 : 12)

FOR APPROVAL ASME-UI

REFERENCE DRAWINGS

1. GENERAL ASSEMBLY (1/2)	D0644-3AV3173-D-01
2. GENERAL ASSEMBLY (2/2)	D0644-3AV3173-D-01-1
3. DETAIL OF BODY	D0644-3AV3173-D-02
4. DETAIL OF NOZZLES	D0644-3AV3173-D-03
5. DETAIL OF NAME PLATE	D0644-3AV3173-D-04
6. DETAIL OF SHIPPING DRAWING	D0644-3AV3173-D-05



NOZZLE LOADS

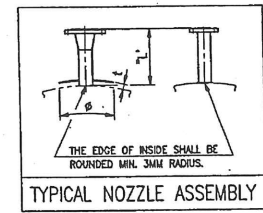
NOZZLE	Fa (N)	Fb (N)	Fc (N)	Ma (Nm)	Mb (Nm)	Mc (Nm)
N5 (10")	8070	9880	9880	12755	9020	9020
N1 (2")	1000	1225	1225	350	250	250
N2 (2")	1000	1225	1225	350	250	250
N3 (2")	1000	1225	1225	350	250	250

MAXIMUM FOUNDATION LOADING DATA (PER SADDLE)

WEIGHT (Kg/Set)	EMPTY	OPERATING	TEST
1270	2780	2650	
WIND LOAD SHEAR (N)	4487	4487	3141
MOMENT (N-m)	2916	2916	2041
SEISMIC LOAD SHEAR (N)	2388	5228	
MOMENT (N-m)	1552	3398	

NOZZLE SCHEDULE

MARK	NOM SIZE	NO.	RATING	TYPE	FACING	THICK	"L"	EXPORD	SERVICE & REMARKS
N6B	4"	1	ASME	W.N	R.F	205.2	110x216	INSPECTION OPENINGS C.W (W/B/F)	
N6A	4"	1	ASME	W.N	R.F	205.2	110x216	INSPECTION OPENINGS C.W (W/B/F)	
N5	10"	1	ASME	W.N	R.F	305.2	110x620	PROCESS IN/OUTLET	
N4A/B	3"	2	ASME	W.N	R.F	205.2		LEVEL TRANSMITTER AND LEVEL GAUGE	
N3	2"	1	ASME	L.W.N	R.F	205.2		DRAIN	
N2	2"	1	ASME	L.W.N	R.F	205.2		GLYCOL FILL UP	
N1	2"	1	ASME	L.W.N	R.F	205.2		VENT CONNECTION	



TYPICAL NOZZLE ASSEMBLY

ASME STAMP

DESIGN & TEST DATA

NO. REQUIRED	1 (ONE)
CODE	ASME SEC VIII DIV 1 2010 ED. + 2011 ADD. & CSA B51
ASME CODE STAMP	YES
CRN. NO.	TBD
NATIONAL BOARD REGISTRATION	YES
SPECIAL SERVICE	HORIZONTAL
CAPACITY (M <sup>3</sup> )	1.51
FLUID	GLYCOL/WATER
PRESSURE (Kpa)	DESIGN (MT/DT) 100/F.V
TEMP. (°C)	DESIGN 93
TEST PRESS. (Kpa)	HYDROSTATIC (OP/FLD) 2317
MAP (NEW/COLD)	1782093°C
M.A.E.W.P (Kpa)	103093°C
POST WELD HEAT TREATMENT	NO
RADIOGRAPHY (S/H)	SPOT/SPOT
WELDER'S QUALIFICATION	BY SPEC.
JOINT EFFICIENCY	0.85
CORROSION ALLOWANCE (MM)	1.6
INSULATION TH'K (MM)	
IMPACT TEST	YES (SEE NOTE 12.)
FIRE PROOFING (MM)	
PAINTING	SEE NOTE 20.
TOLERANCE	SEE NOTE 11.
M.D.M.T (°C)	-450/1782 Kpa
WIND CODE	NBC 2005, IMPORTANCE FACTOR = 1.15, WIND SPEED = 113km/hr
SEISMIC CODE	NBC 2005, IMPORTANCE FACTOR = 1.3, SITE CLASS = D, S(0.2) = 0.12, S(0.5) = 0.08, S(1.0) = 0.04, S(2.0) = 0.02
FABRICATION	1270
ERECTION	1270
SHIPPING	1270
OPERATING	2780
TEST (SHOP/FLD)	2780/2650

MATERIAL SPECIFICATIONS

SHELL, HEADS & PAD	SA516-70N	EXTERNAL BOLTS/NUTS	SA193-L7M/SA194-7M
SADDLE	SA516-70N	INTERNAL BOLTS/NUTS	
NOZZLE FLANGE	SA350-LF2 CL.1	INTER. SUPT WELDED TO SHELL	
NOZZLE NECK PLATE	SA516-70N	EXTER. SUPT WELDED TO SHELL	SA516-70N
NOZZLE NECK PIPE	SA333-6	DEFLECTOR	
WELDING FITTING		NAME PLATE	304 S.S
EXTERNAL GASKETS	SEE MARK *1)	EARTH LUGS	SA240-304
INTERNAL GASKETS		ANCHOR BOLTS	BY OTHER

\*1) SPIRAL WOUND : HOOP : 316 S.S, INNER RING : 316 S.S, OUTER RING : 316 S.S, FILLER : GRAPHITE

REV.	DATE	DESCRIPTIONS FOR REVISION	DRWN	CHK'D	REV'D	APP'D
1	2014 03 13	FOR APPROVAL	S.K.KIM			
2	2014 01 02	FOR APPROVAL	J.H.LIM			
3	2013 11 12	FOR APPROVAL	J.H.LIM			
4	2013 09 13	FOR APPROVAL	ADRAH			

CUSTOMER: GTG GLYCOL AERIAL COOLER EXPANSION VESSEL

CLIENT: SEWON CELLONTECH CO., LTD. CHANGWON, KOREA

PROJECT: 3A-V-3173 GENERAL ASSEMBLY (1/2)

OWNER JOB NO.: P-5120-01

SEWON JOB NO.: D0644-3AV3173-D-01

PROJECTION METHOD: THIRD ANGLE PROJECTION

SCALE: SEE DWG.

WORKS: C