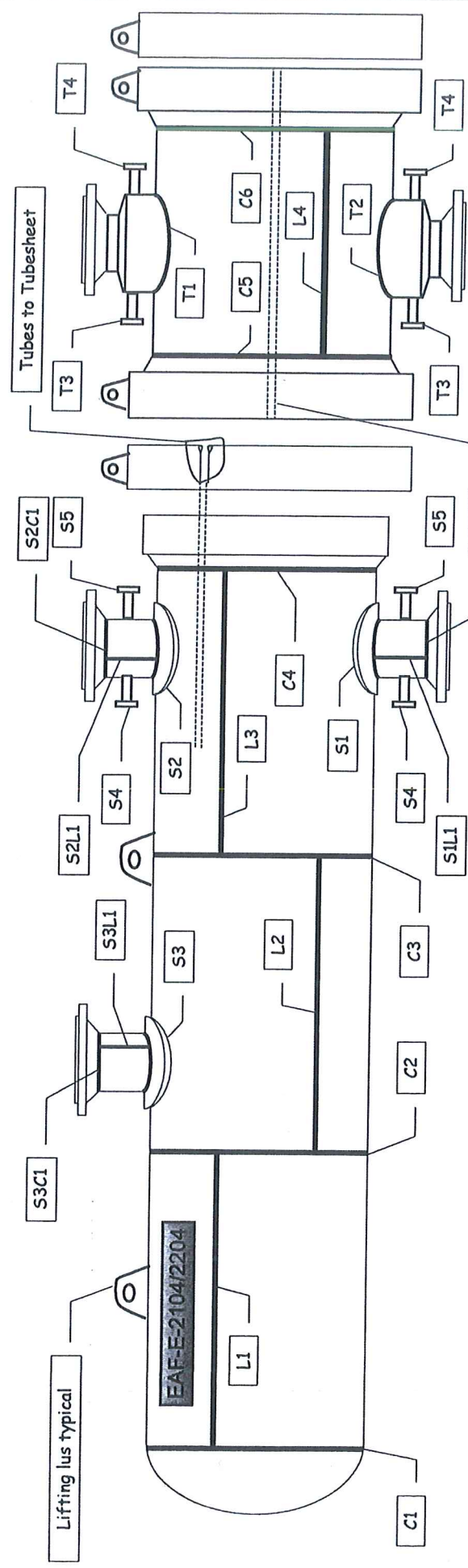


QUALITY CONTROL PLAN FOR FIT-UP UPDATING Rev. 2

Customer	M/ERSK OILE OG GAS AS	P.Order	PE-601483	QCP	7147-01-QCP-01
Plant	TYRA EAST PLATFORM A - MODULE F - DENMARK	Item	EAF-E-2204;	Serial number	11868

AS BUILT SKETCH - SCHEMA COME COSTRUITO



ITEM: EAF-F-2104/2204
 SHELL: ASTM B 265 Gr. 2 - 8-10mm THK. *TITANIUM*
 CHANNEL: ASTM A 240 UNS S32750 - 28mm THK. →
 TUBESHEET: ASTM B 381 Gr. F12 - 240mm THK. →
 EXCHANGER TUBES: ASTM B 338 Gr. 12 - DIAM. 31,75 x 1,6mm M.W. →
 TUBES TO TUBESHEET JOINT: STRENGTH WELD + HYDRAULIC EXPANSION →

2	MODIFIED SKETCH WITH LIFTING LUGS	00/01/1900	M. PREVITALI	P. DELAIRE
1	AS PER K.O.M. COMMENTS	05/02/2009	M. PREVITALI	P. DELAIRE
0	ISSUED FOR APPROVAL	13/01/2009	M. PREVITALI	P. DELAIRE
Rev.	Description-Descrizione	Date-Data	Prepared by-Preparato da	Checked by-Controllato da

M. COLOMBO
 M. COLOMBO
 M. COLOMBO

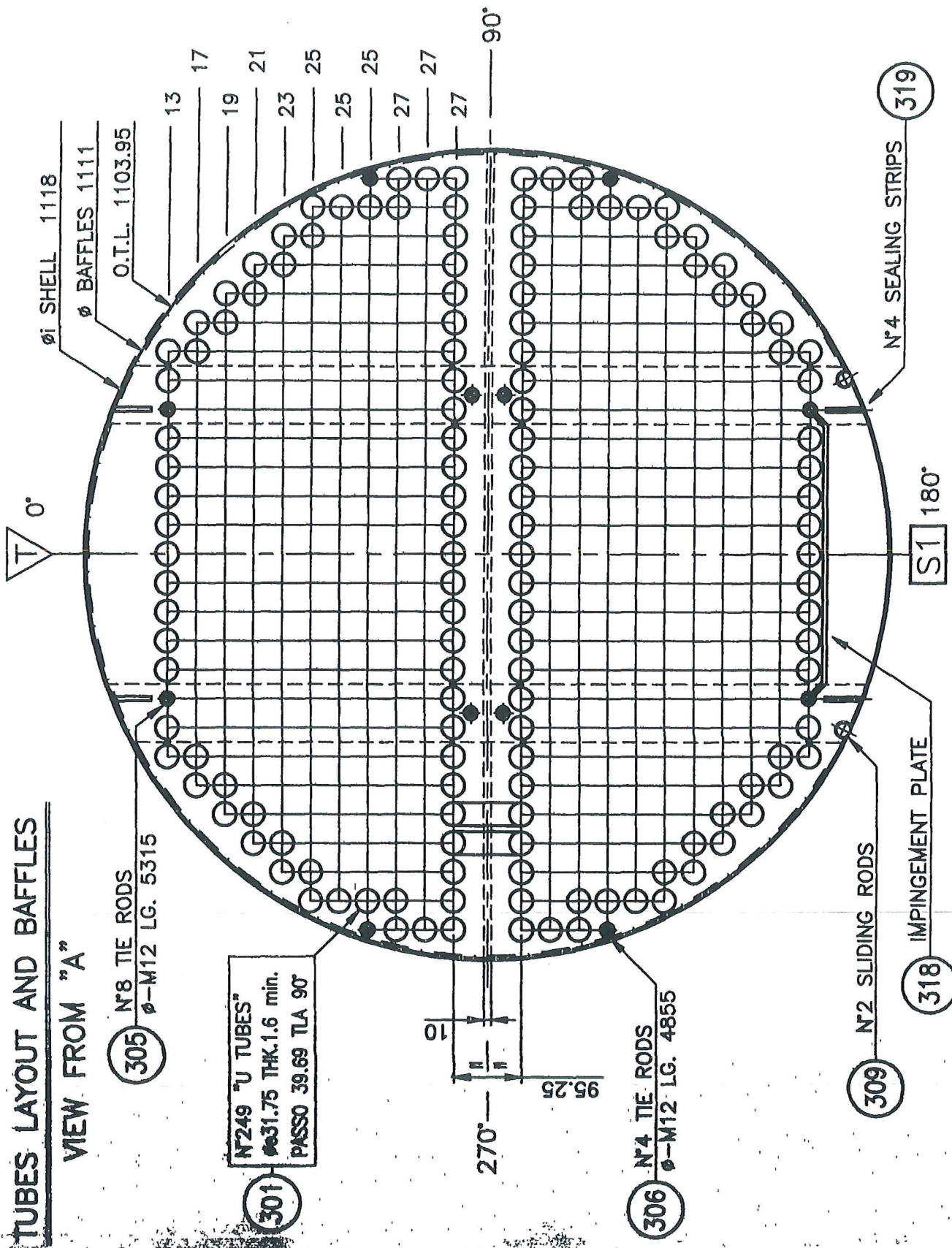
Approved by-Approvato da

TUBES LAYOUT AND BAFFLES

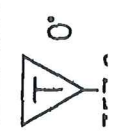
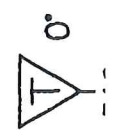
VIEW FROM "A"

N° TUBES	RADIUS	STRAK LENGTH
13	444.52	555
17	404.83	555
19	365.14	555
21	325.45	555
23	285.76	555
25	246.07	555
25	206.38	555
25	166.69	555
27	127	555
27	87.31	555
27	47.62	555

317 31



BAFFLES DET.



7700



HARDNESS TEST REPORT

HRD 11868

CERTIFICATO DI CONTROLLO DUREZZE

Client - Cliente MÆRSK OILE OG GAS AS

Plant - Impianto TYRA EAST PLATFORM A - MODULE F - DENMARK

P.Order - Ordine PE-601483

Item - Sigla EAF-E-2204;

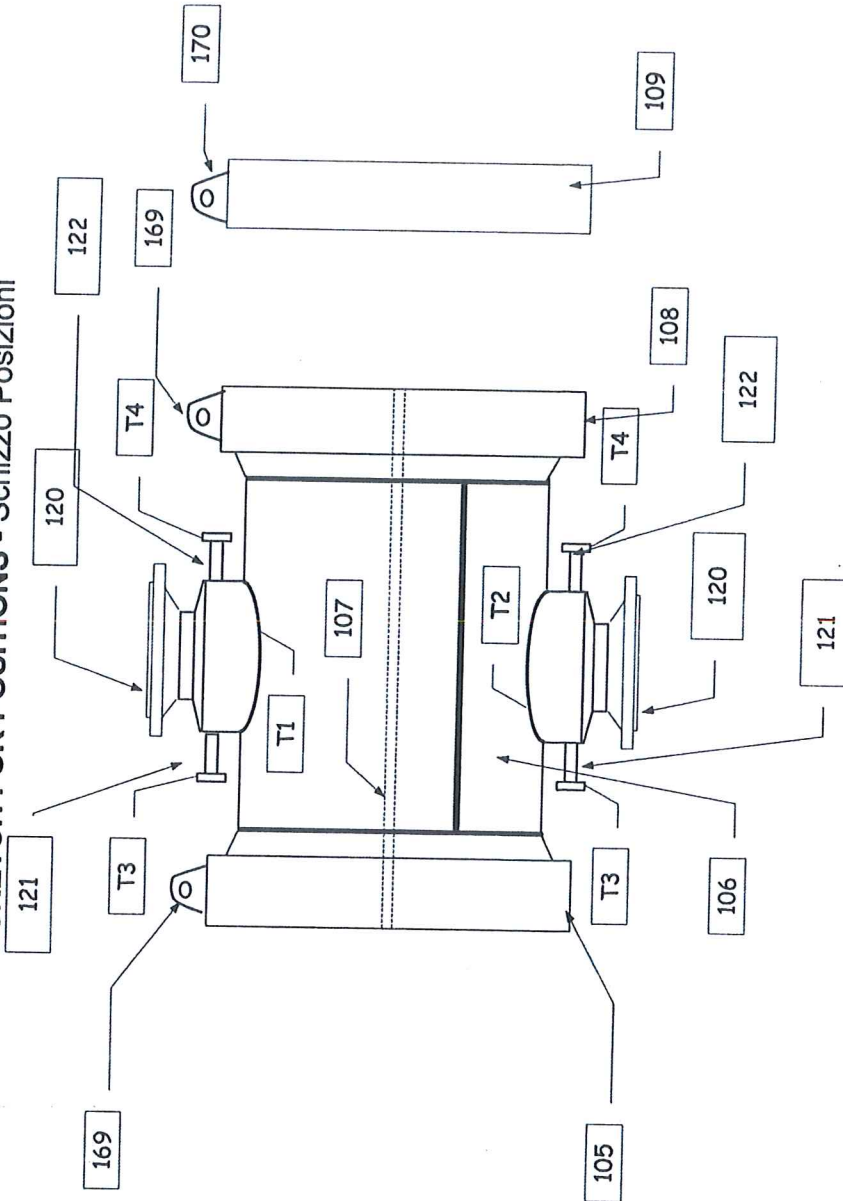
Drawing - Disegno 7147-01-000-01

Job - Commessa 7147

Serial Number - No. F. 11868

Q.C.P. - P.C.Q. 7147-01-QCP-01

SKETCH FOR POSITIONS - Schizzo Posizioni



C. Pennati

Date 28/09/2009

Performed by - Eseguito da



Date 28/09/2009

Verified by - Verificato da



Date 28.09.09

Approved by - Approvato da

Date

Witnessed by - Presenziato da

Date

Witnessed by - Presenziato da



DIMENSIONAL CHECK REPORT
CERTIFICATO DI CONTROLLO DIMENSIONALE

DCR 11868

Client MÆRSK OILE OG GAS AS

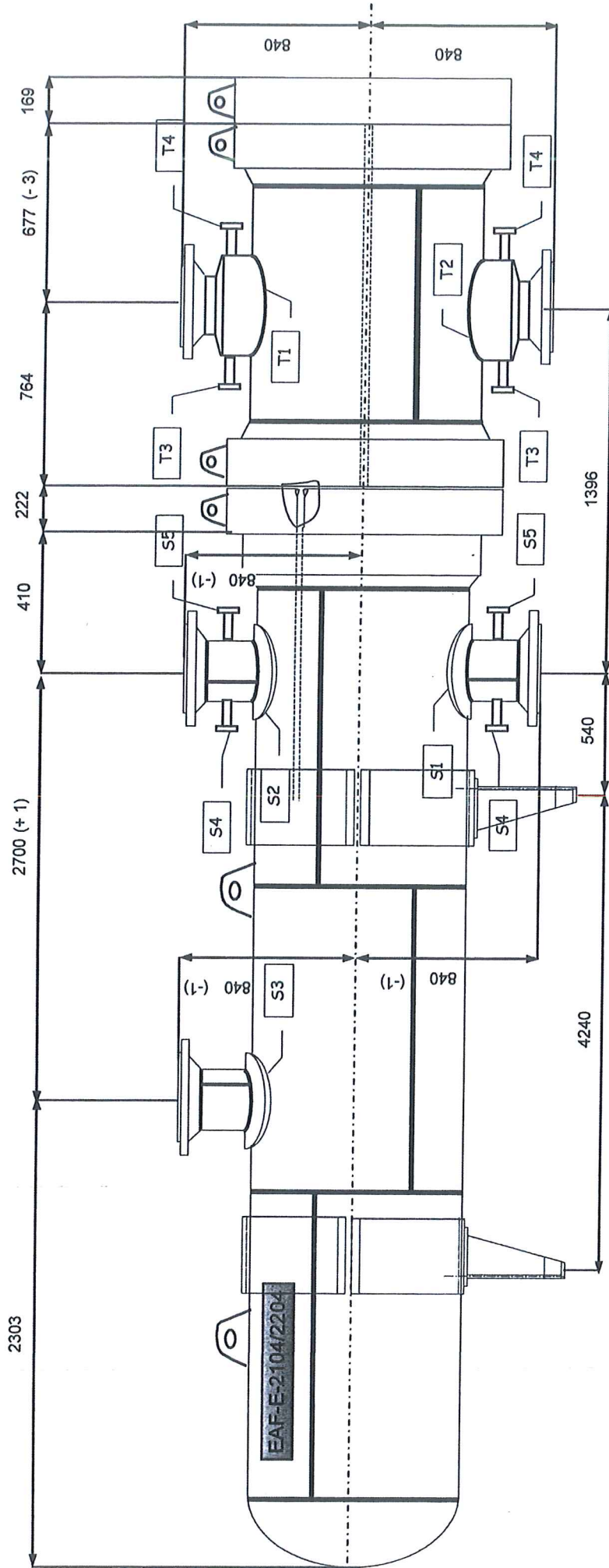
Olmi job Comessa
Olmi item Sigla
Drawing Disegno
Plant Impianto

7147
EAF-E-2204;
7147-01-000-01 Rev. 3
TYRA EAST PLATFORM A - MODULE F - DENMARK

P.Order Ordine cliente
Olmi QCP Piano controllo
Olmi S.N. N° di fabbrica

PE-601483
7147-01-QCP-01
11868

AS BUILT SKETCH - Schema come costruito



[Signature]

The equipment has been visually and dimensionally checked the dimensions taken during the control are in accordance with the required tolerances as per your subject order an drawing 7147-01-000-01 Rev. 3. Thickness check has been found in accordance with the dwg. 7147-01-000-01 Rev. 3 requirements.
Visual, Dimensional & Go-no Go on Tubesheets and Baffles Holes, including Template and Thickness Check: SATISFACTORY

Date 29/10/2009

Page 1 of 1



MARKING CHECK REPORT
MC 11868

Customer	MERSK OILE OG GAS AS		Plant	TYRA EAST PLATFORM A - MODULE F - DENMARK					
P. Order	PE-601483	Job	7147	Serial No.	11868				
Pos.	Description Descrizione	Dimension (mm) Dimensioni (mm)	Material Materiale	Manufacturer Fabbricante	Certificate Type / Number Tipo e numero di certificato	QCP	7147-01-QCP-01	Identification Identificazione	Cert. Mark.

MATERIAL LIST ACCORDING TO DWG 7147-01-100-01 Rev. 3

Pos.	Description Descrizione	Dimension (mm) Dimensioni (mm)	Material Materiale	Manufacturer Fabbricante	Certificate Type / Number Tipo e numero di certificato	QCP	Identification Identificazione	Cert. Mark.
101A	SHELL COURSE I	I.D. 1118 x 1990 x 8	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000340	152685 029094 04 03	1/3
101B	SHELL COURSE II	I.D. 1118 x 1990 x 8	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000337	152685 029094 04 04	1/4
102	SHELL COURSE III	I.D. 1118 x 1645 x 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000334	152721B 029092 05 03	1/5
103	ELLIPT. HEAD	I.D. 1118 x 8 min.	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
104	SHELL FLANGE	I.D. 1248 / 1118 x 130	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09244	8061879	2/1
105	CHANNEL FLANGE	I.D. 1464 / 1118 x 225	ASTM A 182 F53 S32750	ASFO S.p.A.	3.1	01900895	900196 - 901083	2/2
106	CHANNEL COURSE III	I.D. 1118 x 991 x 28	ASTM A 240 S32750	OUTOKUMPU	3.1	9035195.R00	490378 4990 1303	1/7
107	PARTITION PLATE	Thk. 10	ASTM A 240 S32750	OUTOKUMPU	3.1	9035193.R00	490378 4990 1205	1/8
108	CHANNEL FLANGE	I.D. 1440 / 1118 x 225	ASTM A 182 F53 S32750	ASFO S.p.A.	3.1	01900895	900196 - 901083	2/2
109	FLAT COVER	Ø 1440 thk. 178	ASTM A 182 F53 S32750	INOXFUCINE	3.1	549/09/IF-941	68473 - 568	2/3
112	FLANGE WN S1	Ø 12" 150# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09165	8031793	2/4
112	FLANGE WN S2	Ø 12" 150# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09165	8031793	2/4
113	PIPE FROM PLATE NOZZLE S1	Ø 12" THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
113	PIPE FROM PLATE NOZZLE S2	Ø 12" THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
114	REINFOR. PLATE NOZZLE S1	THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
114	REINFOR. PLATE NOZZLE S2	THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
115	FLANGE WN S3	Ø 8" 150# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09167	8031771	2/5
116	PIPE FROM PLATE NOZZLE S3	Ø 8" THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
117	REINFOR. PLATE NOZZLE S3	THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092 05 02	1/6
118	SPECIAL FLANGE WN S4	Ø 2" 300# RF L. 146	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09169	7121701	2/6
118	SPECIAL FLANGE WN S5	Ø 2" 300# RF L. 146	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09169	7121701	2/6
118	SPECIAL FLANGE WN S4	Ø 2" 300# RF L. 146	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09169	7121701	2/6
118	SPECIAL FLANGE WN S5	Ø 2" 300# RF L. 146	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09169	7121701	2/6
119	BLIND FLANGE S4	Ø 2" 300# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09168	152632E	2/7



MARKING CHECK REPORT MC 11868

Customer		MÆRSK OILE OG GAS AS		Plant		TYRA EAST PLATFORM A - MODULE F - DENMARK	
P. Order	PE-601483	Job	7147	Item	EA-F-2204	Serial No.	11868
Pos.	Description Descrizione	Dimension (mm) Dimensioni (mm)	Material Materiale	Manufacturer Fabbricante	Certificate Type / Number Tipo e numero di certificato	QCP	7147-01-QCP-01
119	BLIND FLANGE S5	Ø 2" 300# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09168	152632E
119	BLIND FLANGE S4	Ø 2" 300# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09168	152632E
119	BLIND FLANGE S5	Ø 2" 300# RF	ASTM B 381 Gr. F2	TITALIA S.r.l.	3.1	09168	152632E
120	SPECIAL FLANGE LWN T1	Ø 10" 600# RTJ L. 372	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1118	802484 - 771
120	SPECIAL FLANGE LWN T2	Ø 10" 600# RTJ L. 372	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1118	802484 - 771
121	SPECIAL FLANGE WN T3	Ø 2" 600# RTJ L. 145	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
121	SPECIAL FLANGE WN T4	Ø 2" 600# RTJ L. 145	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
121	SPECIAL FLANGE WN T3	Ø 2" 600# RTJ L. 145	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
121	SPECIAL FLANGE WN T4	Ø 2" 600# RTJ L. 145	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
122	BLIND FLANGE T3	Ø 2" 600# RTJ	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
122	BLIND FLANGE T4	Ø 2" 600# RTJ	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
122	BLIND FLANGE T3	Ø 2" 600# RTJ	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
122	BLIND FLANGE T4	Ø 2" 600# RTJ	ASTM A 182 F53 S32750	INOXFUCINE	3.1	749/09/IF-1119	44323
125	FIXED PLATE	THK. 28	SA 516 Gr. 70	DILLINGER HUTTE	3.1B	235799-001	17114 - 23324/01
126	FIXED SADDLE	THK. 16	SA 516 Gr. 70	TRAMETAL	3.1	150248	ETB448/06/03B
127	WRAP PLATE FIXED	THK. 16	SA 516 Gr. 70	TRAMETAL	3.1	150248	ETB448/06/03B
129	BOLTS No. 8	M12 Length 70	SA 320 Gr. L7	BEA	3.1	91099/007	AJ1538
130	NUTS No. 16	M12	SA 194 Gr. 7	BEA	3.1	91099/007	AB2738
131	SLIDING PLATE	THK. 28	SA 516 Gr. 70	DILLINGER HUTTE	3.1B	235799-001	17114 - 23324/01
132	SLIDING SADDLE	THK. 16	SA 516 Gr. 70	TRAMETAL	3.1	150248	ETB448/06/03B
133	WRAP PLATE SLIDING	THK. 16	SA 516 Gr. 70	TRAMETAL	3.1	150248	ETB448/06/03B
142	PLATE	THK. 5	ASTM B 265 Gr. 2	TRAMETAL	3.1	150248	ETB448/06/03B
146	GASKET No. 2 + 4	Ø 1180 / 1130 x 4	CAMPROF. Ti-Gr. 12 + GRAPH	THYSSENKRUPP	3.1	2007-4014	7091603 - 027486 01 02
147	STUD BOLTS No. 32 + 4	Ø 2 ¼" 8 UN Length 610	ASTM A 276 UNS S32760 S	FMI	3.1	901864	0640407
148	STUD BOLTS No. 32 + 4	Ø 2 ¼" 8 UN Length 560	ASTM A 276 UNS S32760 S	BEA	3.1	91099/001	333151
150	EX. NUTS No. 128 + 16	Ø 2 ¼" 8 UN	ASTM A 276 UNS S32760 A	BEA	3.1	91099/001	333151
						91099/001	328934



MARKING CHECK REPORT MC 11868

Customer		TYRA EAST PLATFORM A - MODULE F - DENMARK		Serial No.		QCP		7147-01-QCP-01	
P. Order		Item		EAF-E-2204		11868		11868	
Job		Plant		Material		Manufacturer		Certificate Type / Number	
Description		Dimension (mm)		Material		Fabbriicante		Tipo e numero di certificato	
Descrizione		Dimensioni (mm)		Materiale		Fabbricante		Identificazione	
Descrizione		Dimensioni (mm)		Materiale		Fabbriicante		Tipo e numero di certificato	
151	GASKET No. 1 + 2	Ø 1150 / 1118 x 4	CAMPROF. Ti-Gr. 12 + GRAPH	FMI	3.1	901864	0640407	5/1A	
152	STUD BOLTS No. 36 + 4	Ø ¾" UNC Lenght 200	ASTM A 276 UNS S32760 S	BEA	3.1	91099/003	R74986	4/2	
154	EX. NUTS No. 36 + 4	Ø ¾" UNC	ASTM A 276 UNS S32760 A	BEA	3.1	91099/003	332043	4/2	
155	GASKET No. 4 + 8	Ø 2" 300#	S.W. Ti-Gr.2 + GRAPHOUT. RING. S.S.	FMI	3.1	901864	0640407	5/2A	
156	STUD BOLTS No. 32 + 4	Ø 5/8" Lenght 100	ASTM A 276 UNS S32760 S	BEA	3.1	91099/001	331046-1	4/1	
157	EX. NUTS No. 64 + 8	Ø 5/8"	ASTM A 276 UNS S32760 A	BEA	3.1	91099/001	334299	4/1	
158	GASKET No. 4 + 8	Ø 2" 600# R23 OCTOG.	ASTM B 564 UNS N10276	FMI	3.1	MEST599884/2008	303105	5/1B	
159	STUD BOLTS No. 32 + 4	Ø 5/8" Lenght 130	ASTM A 276 UNS S32760 S	BEA	3.1	91099/001	331046-1	4/1	
160	EX. NUTS No. 64 + 8	Ø 5/8"	ASTM A 276 UNS S32760 A	BEA	3.1	91099/001	334299	4/1	
161	PLUG No. 3	Ø ¾"	ASTM B 348 Gr. F2	STAMPINOX	3.1	OC0900488-1	80247 - STI-2	6/1	
163	SUPPORT NAMEPLATE	THK. 5	ASTM B 265 Gr. 1	TITANIA S.p.A.	3.1B	93/587	89101 - T1198/22	1/11	
166	RING No. 2	Ø 90 / 38 THK. 10	ASTM B 265 Gr. 2	THYSSENKRUPP	3.1	2009/000336	152721B 029092.05 02	1/6	
167	LIFTING LUG	THK. 15	ASTM B 265 Gr. 2	TITANIA S.p.A.	3.1B	2004/3136	151988 - 02442y 05 02	1/12	
168	LIFTING LUG	THK. 15	ASTM B 265 Gr. 2	TITANIA S.p.A.	3.1B	2004/3136	151988 - 02442y 05 02	1/12	
169	LIFTING LUG No. 2	THK. 23	ASTM A 240 S32750	VESTA POLARIT	3.1	2104003.R00	823498 6221 2403-1	1/13	
170	LIFTING LUG	THK. 10	ASTM A 240 S32750	OUTOKUMPU	3.1	9035193.R00	490378 4990 1205	1/8	

MATERIAL LIST ACCORDING TO DWG 7147-01-300-01 Rev. 1

301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09368	869912 - 85026	3/1
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09369	869912 - 85027	3/2
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09370	869912 - 85028	3/3
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09371	869914 - 85051	3/4
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09372	869914 - 85052	3/5
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09373	869914 - 85053	3/6
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09374	869913 - 85055	3/7
301	EXCHANGER "U" TUBES	Ø 31.75 thk. 1.6	ASTM B 338 Gr. 12 SMLS	SANDVIK	3.1	Z 09375	869913 - 85060	3/8



NAME PLATE
PHOTOCOPY

NPP / 0 11868

DISEGNO / DRAWING
7147-01-400-01 Rev. 1

CLIENTE ORDINE
PURCHASER ORDER

PE-601483

COMM.
JOB 7147

SIGLA
ITEM EAF-E-2204

N. F.
S.N. 11868

MÆRSK OIL TAG NO. **EAF-E-2204** MÆRSK OIL P.O. NO. **PE-601483**

MANUFACTURE **OLMI S.p.A**

MANUFACTURES SERIAL NO. **11868**

DESIGN CODES **SECTION VIII DIV.I ED.2007 / TEMA Class R-PED**

RADIOGRAPHY **FULL FULL RØNTGENKONTROL**

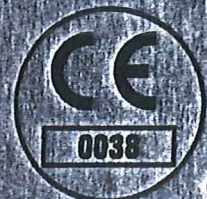
P.W.H.T. **NO NO SPÆNDINGSUDLØDNING**

	SHELL	TUBES	
DESIGN PRESSURE	10,34	97,6	BARS BEREGNINGSTRYK
DESIGN TEMP. MAX.	82,2	82,2	°C MAX. BEREGNINGSTEMPERATUR
DESIGN TEMP. MIN.	-10	-20	°C MIN. BEREGNINGSTEMPERATUR
DESIGN SHELL THK. W/O CORR. ALLOWANCE	8	28	MM BEREGET GODSTYKKELSE SVØB UDEN KORROSIONSTILLÆG
DESIGN HEAD THK. W/O CORR. ALLOWANCE	8	28	MM BEREGET GODSTYKKELSE ENDEBUND UDEN KORROSIONSTILLÆG
CORROSION ALLOWANCE	0	0	MM KORROSIONSTILLÆG
TEST PRESSURE NEW & COLD	14,8	139,6	BARS PRØVETRYK I NY TILSTAND
TEST PRESSURE FIELD	14,8	139,6	BARS PRØVETRYK EFTER IBRUGTAGNING
FABRICATED WEIGHT	12100		KG FABRIKATIONSVEGT
VESSEL VOLUME	3700	3300	LITERS RUMINDHOLD
TEST DATE	28-10-2009		PRØVEDATO
FLUID CIRC. (PED)	SEA WATER	HYDROCARBON GAS	REG. NO. <input type="text"/>
FLUID GROUP (PED)	2	1	
CATEGORY (PED)	IV	IV	

E R14

COSTRUZIONI BERGAMO  **SUISIO ITALY**

YEAR **2009** JOB **7147** SERVICE **PRODUCED GAS COOLERS**



Witnessed
 Monitored
 Reviewed
R. MASSONE SURVEYOR

DATA DATE **28/10/2009**

L'ISPETTORE CODE INSPECTOR

IL COLLAUDO PLANT INSPECTOR



MÆRSK OLIE OG GAS AS
SHELL AND TUBE HEAT EXCHANGER
MÆRSK DATA SHEET - PROCESS / MECHANICAL

NO.	TMP018-XERJ300608-EAF-E-2104/2204		Page /3
REQ./P.O NO.	(2)	TMP018-XERJ010708-SPEC-001 / PE-601483	
PROJECT	TMP018 - TYE corroded gas coolers		
PLATFORM	Tyra East Platform A module F		
AREA	TEA F module, Upper deck		
TAG NO.	EAF-E-2104 & EAF-E-2204		
MESC. NO.			
MANUFACTURER	(2)	OLMI S.P.A. Suisio (BG) Italy	
MODEL NO.			

2	As built (Olmi issue)	A.B.			20/10/2009
1	Update	XERJ			30/06/2008
0	For Enquiry	SNY	GOH	NAH	05/03/2008
A	For Comments	SNY	GOH		04/03/2008
REV.	DESCRIPTION	PREP	CHK	APP	DATE

PLANT SPECIFIC DATA

DESCRIPTION	SPECIFIED	VENDOR DATA
1 AMBIENT TEMPERATURE	-10 / +22 DEG. C.	-10 / +22 DEG. C.
2 HUMIDITY	100 % R.H.	100 % R.H.
3 ENVIRONMENT	EXPOSED, SALIFEROUS	EXPOSED, SALIFEROUS
4 AREA CLASSIFICATION	ZONE 3G, 11 B, T3	ZONE 3G, 11 B, T3

EQUIPMENT SPECIFIC DATA

5 SERVICE (Location)	Gas cooler		Gas cooler
6 TYPE	HOR./VERT.	Horizontal TEMA class R Type AFU	Horizontal TEMA class R Type AFU
7 SIZE		-	1118 x 5550 mm
8 NUMBER OF UNITS		Two (2)	Two (2)
9 CONNECTED IN:	PAR/SER.	PAR	PAR
10 SURFACE AREA/UNIT	m2	N/A	293,73

PERFORMANCE OF ONE (1) UNIT

	FLUID ALLOCATION	SPECIFIED		VENDOR		SPECIFIED		VENDOR	
		SHELL SIDE INLET	SHELL SIDE OUTLET	SHELL SIDE INLET	SHELL SIDE OUTLET	TUBE SIDE INLET	TUBE SIDE OUTLET	TUBE SIDE INLET	TUBE SIDE OUTLET
11	FLUID NAME	Filtered North sea water (note 1)		Filtered North sea water (note 1)		Hydrocarbon gas	H.C. gas / Condensate	Hydrocarbon gas	H.C. gas / Condensate
12	TEMPERATURE °C	12,8	15,6	12,8	15,6	23,0	18,0	23,0	18,0
13	PRESSURE barg	3,8	3,3	3,8	3,2	55,9	55,4	55,9	55,4
14	FLUID QUANTITY, TOTAL (TP) m ³ /hr	368,7	369,4	368,7 x 1,2	369,4 x 1,2	6363,0	6237,0	6363 x 1,2	6237 x 1,2
15	GAS (TP)					6363,0	6236,0	6363 x 1,2	6236 x 1,2
16	LIQUID (TP)						1,5		1,5 x 1,2
17	WATER (TP)								
18	NONCONDENSABLE (TP)					Note 2	Note 2	Note 2	Note 2
19	COOLING MEDIUM (SEA WATER) (TP)	368,7	369,4	368,7 x 1,2	369,4 x 1,2				
20	FLUID QUANTITY, TOTAL Note 6 kg/hr	374800	374800	374800 x 1,2	374800 x 1,2	350678	350678	350678 x 1,2	350678 x 1,2
21	GAS					350678	349824	350678 x 1,2	349824 x 1,2
22	LIQUID						854		854 x 1,2
23	WATER								
24	NONCONDENSABLE					Note 2	Note 2	Note 2	Note 2
25	COOLING MEDIUM (SEA WATER)	374800	374800	374800 x 1,2	374800 x 1,2	13530	13530	13530 x 1,2	13530 x 1,2
26	DENSITY kg/m ³	1017	1014	1017	1014	55,11	56,22	55,11	56,22
27	GAS					55,44	56,10	55,44	56,10
28	LIQUID						570,8		570,8
29	WATER								
30	NONCONDENSABLE								
31	COOLING MEDIUM (SEA WATER)	1017	1014	1017	1014				
32	VISCOSITY, cP	1,20	1,12	1,20	1,12				
33	GAS					0,013	0,013	0,013	0,013
34	LIQUID						0,170		0,170
35	WATER								
36	NONCONDENSABLE								
37	COOLING MEDIUM (SEA WATER)	1,20	1,12	1,20	1,12				
38	MOLECULAR WEIGHT, kg/kmol					19,69	19,66	19,69	19,66
39	GAS								
40	LIQUID								
41	WATER								
42	NONCONDENSABLE								
43	COOLING MEDIUM (SEA WATER)								
44	SPECIFIC HEAT kJ/kg K	4,32	4,32	4,32	4,32				
45	GAS					2,597	2,617	2,597	2,617
46	LIQUID						2,374		2,374
47	WATER								
48	NONCONDENSABLE					Note 2	Note 2	Note 2	Note 2
49	COOLING MEDIUM (SEA WATER)	4,32	4,32	4,32	4,32				
50	THERMAL CONDUCTIVITY W/mK	0,59	0,60	0,59	0,60				
51	GAS					0,037	0,036	0,037	0,036
52	LIQUID						0,094		0,094
53	WATER								
54	NONCONDENSABLE								
55	COOLING MEDIUM (SEA WATER)	0,59	0,60	0,59	0,60				
56	LATENT HEAT kJ/kg					437		437	
57	VELOCITY m/s			1,21 avg.				13,45 avg.	
58	PRESSURE DROP, ALLOW / CALC. bar	0,5		0,5 / 0,6		0,5		0,5 / 0,51	
59	FOULING RESISTANCE (MIN) m ² /kW	0,000176		0,000176		0,000264		0,000264	
60	HEAT EXCHANGED kW	1253 (note 5)		1253 x 1,2		1253 (note 5)		1253 x 1,2	
61	TRANSFER RATE, CLEAN / DIRTY W/m ² K			1496,56 / 876,33					
62									