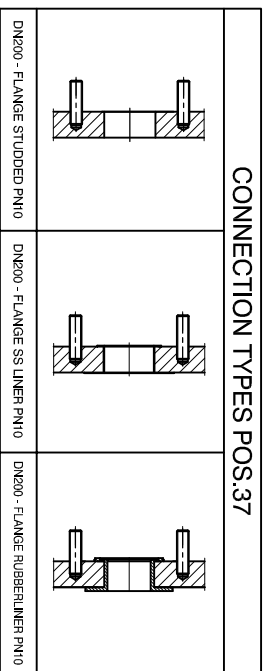
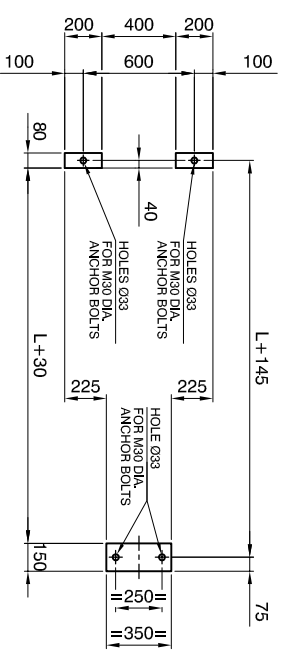


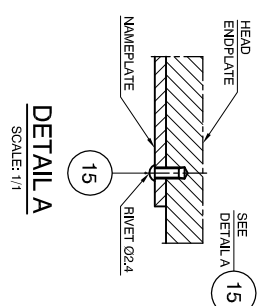
ISO VIEW



CONNECTION TYPES POS.37



FOUNDATION PLAN



DETAIL A

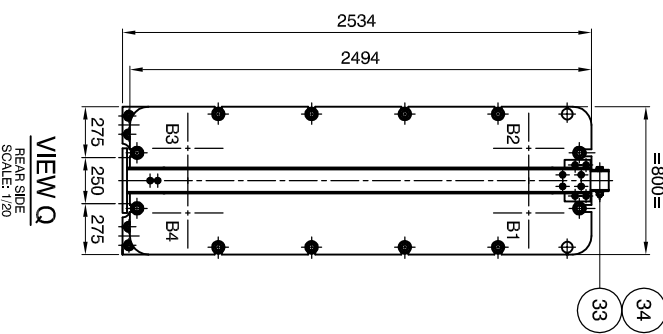
**ares**  
PHE

PLATE HEAT EXCHANGER TYPE [AWG8-P10] YEAR [ ]  
 MANUFACTURING NO. [ ]  
 NO OF PLATES [ ]  
 MAX. WORKING PRESSURE [ ] bar  
 TESTING PRESSURE [ ] bar  
 MIN. WORKING TEMPERATURE [ ] °C  
 MIN. ASSEMBLING MEASURE [ ] mm  
 LIQUID VOLUME [ ] LT  
 DRY WEIGHT [ ] kg

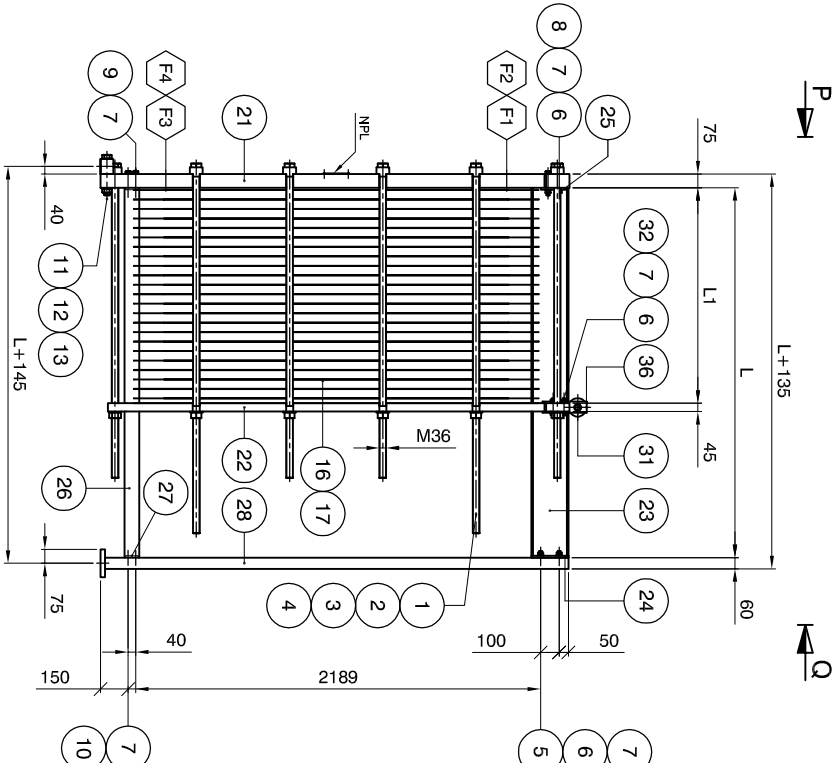
**IMPORTANT:**  
 1. The plate heat exchanger must not be subjected to mechanical stress and pressure during its lifetime.  
 2. Start-up must be done without shocks and against closed valves.

[www.aresphe.com](http://www.aresphe.com)

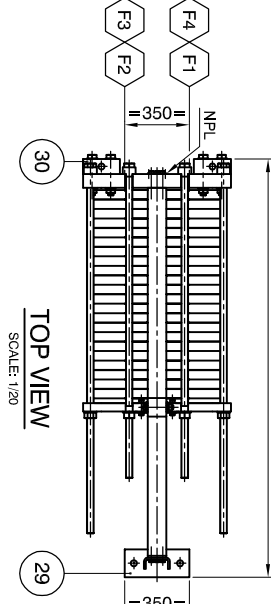
DETAIL NAMEPLATE



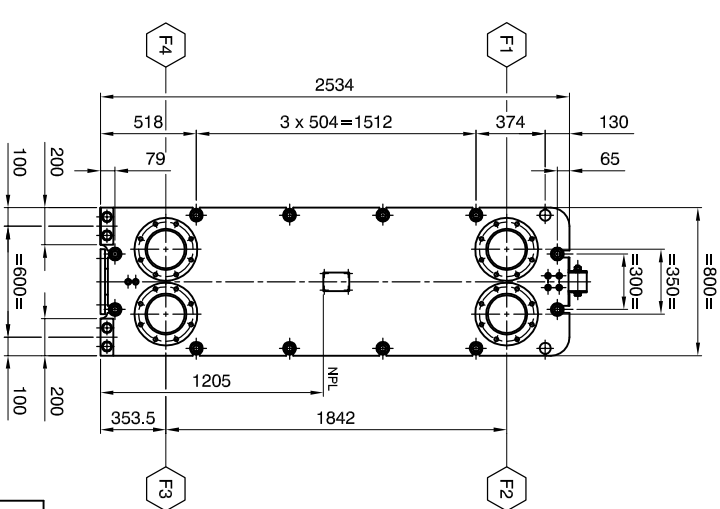
VIEW Q  
REAR SIDE  
SCALE: 1/20



ELEVATION  
SCALE: 1/20



TOP VIEW  
SCALE: 1/20

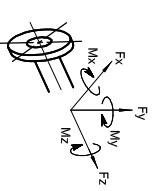


VIEW P  
FRONT SIDE  
SCALE: 1/20

MAX. ALLOWABLE FORCES and MOMENTS ON NOZZLES

NOZZLE	Forces (N)		Moments (Nm)	
	Longitud. Fx	Circum. Fy	Longitud. Mx	Torsional My
F1,F2,F3,F4	981.0	981.0	1170.2	1170.2

NOZZLE LOADS ACCORDING TO API 662, TABLE 1



FOUNDATION LOADS

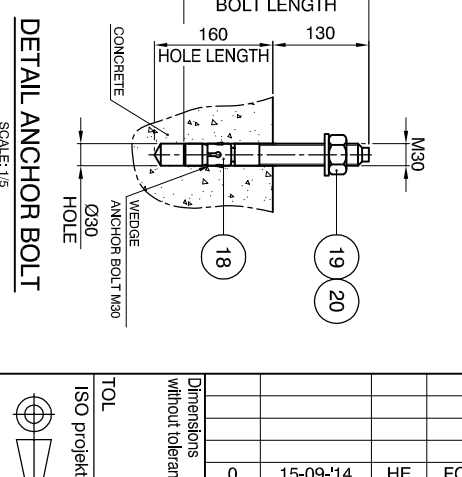
	FRONT SIDE (N)	REAR SIDE (N)
DEAD LOAD (DL)	33231.2	15115.6
OPERATING LOAD (OL - NOZZLE LOAD)	41688.2	19629.5

**GENERAL NOTES**

- ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE STATED
- FLANGE BOLT HOLES STRADDLE CENTERLINES
- NOZZLE FLANGE FACES SMOOTH FINISH 3.2-6.4 um Ra
- ROUGHNESS OF GASKETS SURFACE SHALL BE Ra 3.2...6.3 um MAX. UNLESS NOTED OTHERWISE

**REFERENCE DRAWINGS & DOCUMENTS**

DESCRIPTION	ARES PHE DRAWING
DETAILS	AWG8-10010-Q02
CALCULATION	AWG8-10010-Q00-CAL



DETAIL ANCHOR BOLT  
SCALE: 1/5

**DESIGN DATA**

DESIGN ACC. TO	AD 2000 - Merkblatt / PED 97/23/EG
MEDIUM	-
CATEGORY	SEP
OPERATING DATA	HOT SIDE COLD SIDE
PRODUCT	-
TEST PRESSURE (AD2000 / PED)	Bar
MIN. / MAX. ALL. PRESSURE (PS)	Bar
MIN. / MAX. ALL. TEMPERATURE (TS)	°C
CONTENT (V)	L
HE-SURFACE	m²
WEIGHT NETTO	kg
INLET TEMPERATURE	°C
OUTLET TEMPERATURE	°C
LENGTH OF PACK	l <sub>max</sub> =L1 l <sub>min</sub> =L1
LENGTH OF CARRY BAR	b=L

**NOZZLE CONNECTIONS**

POS	DIR	MEDIA	TYPE	DN
F1	IN	HOT SIDE	-	200
F2	OUT	COLD SIDE	-	200
F3	IN	COLD SIDE	-	200
F4	OUT	HOT SIDE	-	200

Item	qty	description	dimensions	material	remarks	cert
37	4	NOZZLE CONNECTION	-	-	-	3.1
36	2	ANGLE	L60x60x6 L=240	S235JR	-	-
35	2	WASHER	M20	CS	-	-
34	1	HEX. NUT	M20	8	-	-
33	1	BOLT	M20x150	8.8	-	-
32	4	BOLT	M16x80	8.8	-	-
31	1	ROLLER	Ø100 L=100	HARD BLACK PLASTIC	-	-
30	2	PLATE	200x80x70	S235JR	-	-
29	1	BASE PLATE	350x150x25	S235JR	-	-
28	1	SUPPORT COLUMN	250x42x40x10	S235JR	-	-
27	2	PLATE	70x70x10	S235JR	-	-
26	1	GUIDE BAR (SQUARE TUBE)	80x80x4	S235JR	-	-
25	2	PLATE	140x47x10	S235JR	-	-
24	1	PLATE	200x100x10	S235JR	-	-
23	1	CARRY BAR	IPE 200	S235JR	-	-
22	1	FOLLOWER ENDPLATE	2494x800x45	S355 J2G3	-	3.1
21	1	HEAD ENDPLATE	2534x800x75	S355 J2G3	-	3.1
20	4	FLAT WASHER	M30	CS	-	-
19	4	NUT	M30	8	-	-
18	4	WEDGE ANCH. BOLT	M30 L=250	8.8	-	-
17	-	GASKET	-	-	-	-
16	-	HE PLATE	-	-	-	-
15	4	RIVET	Ø2.4 L=8	SS	-	3.1
14	1	NAMEPLATE ARES	140x100x3	SS	-	-
13	8	WASHER	M30	CS	-	-
12	4	HEX. NUT	M30	8	-	-
11	4	BOLT	M30x200	8.8	-	-
10	4	BOLT	M16x30	8.8	-	-
9	2	BOLT	M16x100	8.8	-	-
8	4	BOLT	M16x120	8.8	-	-
7	28	WASHER	M16	CS	-	-
6	12	HEX. NUT	M16	8	-	-
5	4	BOLT	M16x30	8.8	-	-
4	12	BUSHING	Ø68x35	S235JR	-	-
3	12	LOCK WASHER	Ø70x50	S235JR	-	-
2	24	HEX. NUT	M36	8	-	-
1	12	DOUBLE-END STUD	M36	8.8	-	3.1

**PART LIST**

Designed by [ ] Date [ ] Approved by [ ] Date [ ]  
 HITARD A. YABAU

ISO projection

**ares** PHE

Rev. date [ ] Rev. by [ ] Drawing no. [ ]  
 15-09-14 HE AWG8-10010-01

Sheet 1 OF 1