

As Built Documentation

Chapter 3.4.9 Back-Up System Vaporizer

HP LAR Ambient Vaporizer W48101, W48201

- EC-Declaration of Conformity & Test Certificate
- CNLP 4x4x5000 Ambient Air Vaporizer
Drawing no. CN4507-2

W48101, W48201

Cryonorm b.v.
Koperweg 3
2401 LH Alphen aan den Rijn
The Netherlands

CRYONORM

EC-DECLARATION OF CONFORMITY & TEST CERTIFICATE
PED 97/23/EC / EN10204-2.2

CUSTOMER:	Air Liquide AGS GmbH Füttingsweg 34 D-47793 Krefeld Germany	Serial nr. :	7770 & 7771
		Your order nr. :	4500023372
		Our order nr. :	R2-040241

DESCRIPTION	2-off Vaporiser CNLP 4x4x5000
DRAWING NR(S):	CN 4507-2
TEST PRESSURE:	44 Bar
DESIGN PRESSURE:	40 Bar
APPLICABLE STANDARDS:	AD Merkblätter
TEST MEDIUM:	Clean Air
DRYED AND CLEANED FOR LOX SERVICE ACC. TO I.6.1.03	
CRYONORM B.V. herewith declares that the above mentioned equipment is supplied in accordance with the specifications and order requirements and has been tested on leakage and was found tight.	
The used materials are in compliance with the design code and PED 97/23/EC requirements.	

Alphen a/d Rijn: dd. 15-12-03

Quality Control

CRYONORM
Quality control
C.H.M. Elstgeest

We, CRYONORM, Koperweg 3, 2401LH Alphen a/d Rijn, hereby declare that in compliance with the above Directive, the product(s) detailed below have been manufactured in accordance with annex III, conformity assessment module B 'Type Examination' and module D 'Product Quality Assurance' as approved by Stoomwezen B.V. (Notified Body No. 0343), Weena Zuid 168, 3012 NC Rotterdam, under:
EC Type Examination Certificate PED/B/8028140 for type CNLP & CNFA, 8028134 for type PB and 8029239 for type CNHP and EC Certificate of Conformity Module D STW 302030636.

Alphen a/d Rijn: dd.

P.A.A.M. Tel
Director

15/12/04

GENERAL NOTES

MEDIA : O₂-N₂-Ar-CO₂,
CAPACITY : 400 Nm³/hr.
WEIGHT : ± 460 KG.
MAX. WORKING PRESSURE : 40 BAR.
TEST PRESSURE : 44 BAR.

TOLERANCE ON DIMENSIONS ±3MM.

CLEANED FOR OXYGEN USE.

STAINLESS STEEL FLANGES ON REQUEST.

FLANGE OUTSIDE DIAMETER AND BOLTCIRCLE ACC. TO DIN 2635 NP40.

ANCHORBOLT CALCULATIONS

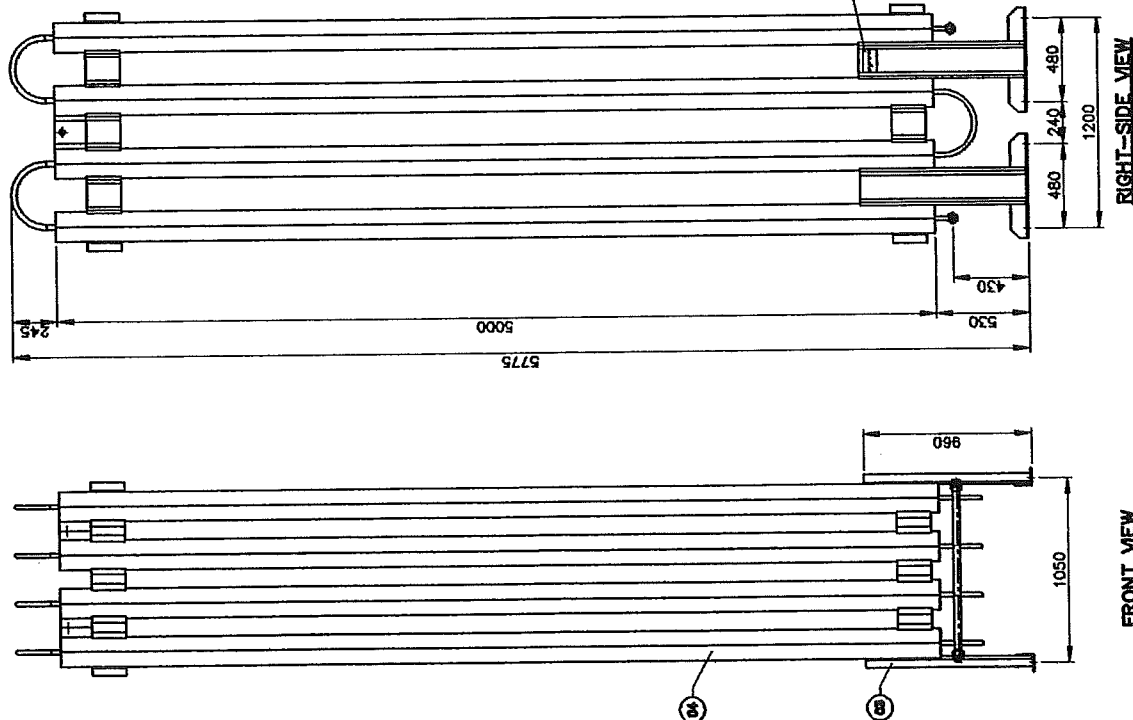
COMBINED SHEAR FORCE : 3.9 kN
COMPR. LOAD : 18.0 kN MAX. (PER FOOT)
TENSILE LOAD : 12.6 kN MAX. (PER FOOT)
PRESSURE ON CONCRETE : 2.25 N/mm²
RECOMMENDED ANCHORBOLTS : M16 QUALITY 8.8
SIZE AND QUALITY : 111,28 N/mm²
STRESS(TENSILE)

GENERAL INFORMATION ANCHORBOLT CALCULATIONS

- DESIGN ANALYSIS ACC. TO UBC-1997/ASCE-1989
- NORMAL OPERATING AND WINDLOAD CONDITIONS, INCLUDING ICE-LOAD.
- WINDLOAD AS PER BS5596 / CP3 / UBC-1997 / DIN1055-4.
- DESIGN WIND VELOCITY 36m/s (134km/hr), SHAPE FACTOR 1.3
- DESIGN LOAD 2-0.3 (SEISMO ZONE 3), SOIL PROFILE TYPE B
- HORIZONTAL ACCELERATION LOAD: 8-0.3g
- VERTICAL ACCELERATION LOAD: 8-0.3g
- ICE-LOAD: UNDER NORMAL OPERATING CONDITIONS THE BOLTCIRCLE WILL BE COVERED WITH ICE. UNIT LOAD IS 250N/m FOR EACH BOILING PIPE.

NOTES

- CIVIL ENGINEER TO USE THESE VALUES FOR CONSTRUCTION OF FOUNDATION/PILES.
- VALUES CALCULATED WITH MAXIMUM WIND-, ICE AND SEISMIC LOADS ACCORDING TO GENERAL INFORMATION AS STATED ABOVE.



05	1	NAMEPLATE	CN4193-4	ALUMINIUM	-
04	1	VAPORISER BLOCK	-	ALUMINIUM	-
03	1	BASE FRAME	CN4222-2	ALUMINIUM	-
02	1	3 PIECE OUTLET COUPLING DN40	CN5002-4	ALU./AISI	-
01	1	3 PIECE INLET COUPLING DN25	CN5001-4	ALU./AISI	-
NR.	QUANT.	NAME/DESCRIPTION	DRWG.	MATERIAL	REMARKS
REV.	DESCRIPTION	DRWG.	SCALE:	CHK.	DATE
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			CHECKED:	DATE:	25-03-04
CNLP 4x4x5000			DATE:		
AMBIENT AIR VAPORISER			DATE:		
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