



DET NORSKE VERITAS

PRODUCTION QUALITY MANAGEMENT CERTIFICATE - EC

Certificate No 96739-2011-CE-FIN-DNV Rev. 0
This Certificate consists of 8 pages

This is to certify that the Quality Management System of

VAHTERUS OY

Kalanti, Finland

for production and final product inspection/testing of

Pressure Vessels

has been assessed with respect to

the conformity assessment procedure described in annex III (Module D) of Council Directive 97/23/EC on Pressure Equipment, as amended, and found to comply

Further details are given overleaf

Place and date:
Høvik 2011-05-12

This Certificate is valid until:
2014-05-12

for **DET NORSKE VERITAS AS**



Marianne Spæren
Certification Manager
NACNO378

Notified Body No.:
0575

Torgny Segerstedt
Technical Reviewer

Notice: The Certificate is subject to terms and conditions overleaf. Any significant changes in design or construction may render this Certificate invalid.

If any person suffers loss or damage which is proved to have been caused by any negligent act or omission of Det Norske Veritas, then Det Norske Veritas shall pay compensation to such person for his proved direct loss or damage. However, the compensation shall not exceed an amount equal to ten times the fee charged for the service in question, provided that the maximum compensation shall never exceed USD 300.000. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officers, employees, agents and any other acting on behalf of Det Norske Veritas.



Cert. No.: 96739-2011-CE-FIN-DNV
Rev. No.: -
Project No.: PRJC-62966-2008-MSL-FIN

Jurisdiction

Application of Council Directive 97/23/EC of 29 May 1997 on Pressure Equipment, adopted as regulation of 1999-06-09 no. 721 "Forskrift for Trykkpåkjent Utstyr" by the Norwegian Directorate of Civil Protection and Emergency Planning and by the Petroleum Safety Authority Norway.

Certificate history

| Revision | Description | Issue Date |
|----------|----------------------|------------|
| - | Original certificate | 2011-05-12 |

Products covered by this Certificate

The approved system is valid for products covered by the following Type Examination Certificates

| Product Name | Type of material | Applied Product Standards | Certificate nr. |
|--|--|---------------------------|-----------------|
| PSHE 3, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 01-690243-01 |
| PSHE 5, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated temperature properties | AD-2000 MERKBLATT | 01-690243-02 |
| PSHE 9, Welded plate and shell heat exchanger types PN 10, 16 and 25 | Austenitic steels | AD-2000 MERKBLATT | 01-690243-04 |
| PSHE 3, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated temperature properties | AD-2000 MERKBLATT | 01-690243-05 |
| PSHE 5, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated temperature properties | AD-2000 MERKBLATT | 01-690243-06 |
| PSHE 9, Welded plate and shell heat exchanger types PN 10, 16 and 25 | Austenitic steels, Elevated temperature properties | AD-2000 MERKBLATT | 01-690243-07 |
| PSHE 3, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 01-690243-08 |



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| PSHE 5, Welded plate heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 01-690243-09 |
| PSHE 3, Welded plate heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 01-690243-10 |
| PSHE 5, Welded plate heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 01-690243-11 |
| PSHE 3, Welded plate heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 01-690243-12 |
| PSHE 5, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 01-692355-00 |
| PSHE 9, Welded plate and shell heat exchanger PN 40 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-145164 |
| PSHE 5, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-145818-00 |
| PSHE 5, Welded plate and shell heat exchanger | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-146931-00 |
| PSHE 3, Welded plate and shell heat exchanger types PN 16, 25 and 40 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-148176-01 |
| PSHE 3, Welded plate and shell heat exchanger type PN 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-148176-02 |
| PSHE 5, Welded plate heat exchanger types PN 16, 25 and 40 | Austenitic steels | AD-2000 MERKBLATT | 02-237623-00 |
| PRHE 12, Welded plate and shell heat exchanger | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 02-237714-00 |
| Droplet Separators CESEMLO 400, 660, 800, 1100 and 1600 for PSHE Welded plate & shell heat exchangers | Elevated tempera-ture properties | AD-2000 MERKBLATT | 03-296231 |



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| Plate & Shell Heat Exchanger PSHE 9, Type CEM940 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 03-298294-00 |
| Plate & Shell Heat Exchanger PSHE 9, Type CEM940 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 03-298294-01 |
| Plate & Shell Heat Exchanger PSHE 2 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-00 |
| Plate & Shell Heat Exchanger PSHE 2 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-01 |
| Plate & Shell Heat Exchanger PSHE 2 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-02 |
| Plate & Shell Heat Exchanger PSHE 2 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-03 |
| Plate & Shell Heat Exchanger PSHE 5 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-04 |
| Plate & Shell Heat Exchanger PSHE 5 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-06 |
| Plate & Shell Heat Exchanger PSHE 3 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-07 |
| Plate & Shell Heat Exchanger PSHE 3 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-08 |
| Plate & Shell Heat Exchanger PSHE CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-09 |
| Plate & Shell Heat Exchanger PSHE 7 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-10 |
| Plate & Shell Heat Exchanger PSHE 7 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-11 |



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| Plate & Shell Heat Exchanger PSHE 7 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-12 |
| Plate & Shell Heat Exchanger PSHE 2 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-13 |
| Plate & Shell Heat Exchanger PSHE 3 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-14 |
| Plate & Shell Heat Exchanger PSHE 5 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-15 |
| Plate & Shell Heat Exchanger PSHE 7 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-16 |
| Plate & Shell Heat Exchanger PSHE 9 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-17 |
| Plate & Shell Heat Exchanger PSHE 2 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-18 |
| Plate & Shell Heat Exchanger PSHE 3 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-19 |
| Plate & Shell Heat Exchanger PSHE 5 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-20 |
| Plate & Shell Heat Exchanger PSHE 7 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-21 |
| Plate & Shell Heat Exchanger PSHE 9 CEM | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-22 |
| Plate & Shell Heat Exchanger PSHE 2 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-23 |
| Plate & Shell Heat Exchanger PSHE 3 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-24 |



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| Plate & Shell Heat Exchanger PSHE 5 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-25 |
| Plate & Shell Heat Exchanger PSHE 7 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-26 |
| Plate & Shell Heat Exchanger PSHE 9 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-27 |
| Welded Plate & Shell Heat Exchanger PSHE 4 CEMLO | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 05-690022-00 rev.1 |
| Welded Plate & Shell Heat Exchanger PSHE 4 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 05-690022-01 rev.1 |
| Welded Plate & Shell Heat Exchanger PSHE 4 CEK-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 05-690022-03 |
| Welded Plate & Shell Heat Exchanger PSHE 4 CEM-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 05-690022-04 |
| Plate & Shell Heat Exchangers PSHE 3HH/5HH-xx/2/1, Liquid- Liquid – York series | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 06-689198-00 |
| Plate & Shell Heat Exchanger PSHE 7 CEK | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 07-268910-01 rev. 0 |
| Plate & Shell Heat Exchanger PSHE 3HH-XXX/2/1 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 07-375640-00 rev. 0 |
| Plate & Shell Heat Exchanger PSHE 34HH-XXX/2/1 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 07-375640-01 rev. 0 |
| Plate & Shell Heat Exchanger Type PSHE 3, CEK380-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 08-840551-00 rev. 0 |
| Plate & Shell Heat Exchanger Type PSHE 3, CEM380-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 08-840551-01 rev. 0 |



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| Plate & Shell Heat Exchanger Type PSHE 5, CEK640-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 08-840551-02 rev. 0 |
| Plate & Shell Heat Exchanger Type PSHE 5, CEM640-400 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 08-840551-03 rev. 0 |
| Welded Plate & Shell Heat Exchanger PSHE CEM 9 PN 16, 25, 40, 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 01-690243-03 rev. 3 |
| Welded Plate & Shell Heat Exchanger PSHE CEM 7 PN 16, 25, 40, 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 07-268910-00 rev. 1 |
| Welded Plate & Shell Heat Exchanger PSHE CEM 5 PN 16, 25, 40, 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 04-521144-05 rev. 2 |
| Welded Plate & Shell Heat Exchanger PSHE CEM 4 PN 16, 25, 40, 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 05-690022-02 rev. 4 |
| Welded Plate & Shell Heat Exchanger PSHE CEM 3 PN 16, 25, 40, 60 | Austenitic steels, Elevated tempera-ture properties | AD-2000 MERKBLATT | 01-690243-00 rev. 6 |

Applications/Limitations

Materials have been subject to a Particular Material Approval.

Sites covered by this Certificate

| Product Name | Production Site Name | Address |
|--|----------------------|--------------------------------------|
| All products covered by this certificate | Vahterus OY | Pruukintie 7, 23600 Kalanti, Finland |
| All products covered by this certificate | Vahterus OY | Valintie 1, 23600 Kalanti, Finland |

Performed Audits

DNV has carried out the Assessment of the Manufacturers Quality System to verify that the relevant requirements relating to the above listed products have been implemented

Assessment has been carried out on the production site by DNV Helsinki, as described in Assessment Report dated 2011-05-02



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Terms and conditions

The certificate is subject to the following terms and conditions:

- In case of damages caused by defective products, directive 85/374/EEC, as amended, will apply
- The certificate is only valid for the products and/or manufacturing premises listed above.
- The Manufacturer shall fulfil the obligations arising out of the quality system as approved and uphold it so that it remains adequate and efficient.
- The Manufacturer shall inform the local DNV Office of any intended updating of the quality system and DNV will assess the changes and decide if the certificate remains valid.
- The Manufacturer shall inform the local DNV Office of any addition/modification of products and/or design for products and DNV will decide if a reassessment of the quality system is required.
- Periodical audits will be held, in order to verify that the Manufacturer maintains and applies the quality system DNV reserves the right, on a spot basis or based on suspicion, to pay unannounced visits.

The following may render this Certificate invalid:

- Changes in the quality system affecting production.
- Periodical audits not held within the allowed time window.

Conformity declaration and marking of product

When meeting with the terms and conditions above, and based on a EC Design Examination Certificate or EC Type Examination Certificate valid for the same product(s), the Manufacturer may draw up an EC declaration of conformity and legally affix the CE mark followed by the Notified Body identification number of DNV (0575)

END OF CERTIFICATE