

# DET NORSKE VERITAS QS CERTIFICATE OF ASSESSMENT-EC

Application of the Council Directive 97/23/EC of 29 May 1997 on Pressure Equipment, as amended.

> **CERTIFICATE NO. PED-H-111** This Certificate consists of front page + Appendixes

This is to certify that the quality system of

# Sento Oy Högfors Salo, Finland

for design, manufacture and testing of **Pressure Accessories** 

as specified in the Appendix I to this certificate, is found to comply with the requirements of the Pressure Equipment Directive

The Manufacturers Quality System for the equipment has been assessed with respect to the procedure of conformity assessment as described in Module H, in the Directive

Further details of the product and conditions for the certification are given overleaf.

Place and date Høvik, 2007-01-02 for DET NORSKE VERITAS AS

Line Gangeskar Head of Section, ZNWNO440 Product and Personnel Certification



This Certificate is valid until 2010-01-02

Hans Dyrdal Rasmussen Project Engineer

Notice: The certificate is subject to terms and condition, if any, overleaf. Any significant changes in design or construction of the product, the quality system or amendments to the Directive or Standards referenced above may render this certificate invalid. The product liability rests with the manufacturer or his representative in accordance with the Council Directive, as amended.

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 2 million. In this provision "Det Norske Veritas" shall mean the Foundation Det Norske Veritas as well as all its subsidiaries, directors, officiers, employees, agents and any other acting on behalf of Det Norske Veritas.

DET NORSKE VERITAS AS Form No.: 20.90a Issue: January 98

VERITASVEIEN 1, N-1322 HØVIK, NORWAY

TEL: (+47) 67 57 99 00



Cert. No.: PED-H-111 Case No.: 962

## **APPENDIX 1, REV. NO. 0**

#### **SCOPE AND CONDITIONS**

#### Products covered by this certificate

DNV has carried out the QS assessment of the Manufacturer's quality system to verify that the relevant requirements relating to the following pressure equipment have been implemented.

Product designation	DNV QS Assessment Report dated
Valves and strainers	1718.8.2006

#### Valve types and product identification

Valve type	Product code
Ball valve	00500 - 00599
Ball valve	32000 – 38899
Ball valve	350 – 355, 35000 – 35599
Ball valve	440 – 499, 44000 – 49999
Ball valves	450 – 454, 45000 - 45499
Ball valve	455 – 459, 45500 – 45999
Ball valve	4 <mark>65 – 46</mark> 9, 46500 - 46999
Butterfly valve	245, 24501 – 24599
Butterfly valve	410, 41000 - 41099
Butterfly valve	411, 41101 – 41199
Butterfly valve	31300 – 31399
Butterfly valve	31500 - 31599
Butterfly valve	31000 - 31099,31100 - 31199, 31200 - 31299
Butterfly valve	41300 - 41399
Butterfly valve	41500 - 41500
Strainer	381 – 389, 38100 - 38999

#### Conditions

- 1. The system approval is only valid for the equipment listed above. For other equipment, an application for extension of the certificate must be sent to the local DNV Office.
- 2. The local DNV Office must be informed of any sub suppliers for main pressure retaining parts.
- 3. The manufacturer shall inform the local DNV office of the intended schedule of production for equipment to Category III.



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- 4. Periodical audits and unexpected visits will be held, in order to verify that the Manufacturer duly fulfils the obligations arising out of the approved quality system.
- 5. The Manufacturer must give information of any intended adjustments of the Quality System to DET NORSKE VERITAS AS, who will assess the changes and decide if the certificate remains valid.
- 6. When required by Annex I Section 4.2 and the Pressure Equipment Directive, "Particular Material Appraisal" for equipment of category III must be given by DET NORSKE VERITAS AS.

This certificate supersedes certificate number 04-SKM-PED-404341-00 Issued by Det Norske Veritas Inspection AB, NB number 0409.

The manufacturer complies with the Council Directive 97/23/EC on Pressure Equipment and is allowed to affix the CE Mark followed by the DNV identification number 0575.

Place and date Iøvik, 2007-01-02 Hans Dyrdal Rasmussen **Project** Engineer



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## **APPENDIX 2, REV. NO. 0**

# PARTICULAR MATERIAL APPRAISAL

The materials listed below have been subject to a particular material appraisal as required by PED annex 1 sec. 4.2b. This particular material appraisal covers materials for main pressure bearing components to equipment described in annex 1 to this certificate. Specific PMA documents have been issued for each grade of material.

<b>Specification</b>	Grade
SFS 2113	GRP 370 <sup>1)</sup>
ASTM A351	CF8M <sup>2)</sup>
DIN 17457	X2 CrNiMo 17 13 2

1) Individual testing of each casting if weight exceeds 2000kg.

2) Temperature limitations given in EN 1503 pt. 2 applies

The Materials are found to be acceptable under to the following conditions:

- Mechanical and chemical requirements in the product standard must be complied with.
- The maximum stresses shall not exceed those allowed by the product standard.
- All testing specified in the product standard additional to the testing specified in the material standard must be carried out, with test-results acceptable also to the product standard.
- Documentation of materials is assumed to comply with PED annex 1 sec 4.3

Place and date 2007-01-02 Hans Dyrdal Rasmussen 786

Ians Dyrdal Rasmussen<sup>\* 48</sup> Project Engineer

TEL: (+47) 67 57 99 00