In this data sheet the European inspection documents based on EN 10204:2004 are presented. The so called Analysis Certificate as well as the Mill Sheet and Test Certificate for shipbuilding steels are also reviewed. Additionally, Ruukki’s inspection document practices and the dispatch of documents to customers are described.

**Types of inspection documents**
- **Declaration of compliance with the order 2.1 – EN 10204:2004**
- **Test report 2.2 – EN 10204:2004**
- **Inspection certificate 3.1 – EN 10204:2004**
- **Inspection certificate 3.2 – EN 10204:2004**

The European inspection documents for deliveries of steel products are defined in EN 10204:2004 Metallic products. Types of inspection documents. The previous version of this standard was published in 1991. In addition to the type of inspection documents the new standard defines the provider of the documents i.e. validator, and the basis of the documents, that is, whether the documents are based on non-specific or specific inspection.

The scope of the test reports is based on test units. A test unit may contain steel from one charge only. Mechanical properties testing is carried out on each test unit, e.g. each 40 tonnes rolled from a charge. The size of a test unit may vary with the type of steel or order. At its smallest a test unit may comprise one heavy plate or one coil.

In this data sheet the European inspection documents based on EN 10204:2004 are presented. The so called Analysis Certificate as well as the Mill Sheet and Test Certificate for shipbuilding steels are also reviewed. Additionally, Ruukki’s inspection document practices and the dispatch of documents to customers are described.

**Types of inspection documents**
EN 10204:2004 divides inspection documents into two main classes: Non-specific inspection documents are the declaration of compliance with the order 2.1 and the test report 2.2. Specific inspection documents are the inspection certificate 3.1 and inspection certificate 3.2. These two inspection certificates differ from each other in who verifies that the product is in accordance with the order and in who signs the inspection document.

**Declaration of compliance with the order 2.1 – EN 10204:2004**
With the type 2.1, declaration of compliance with the order, document the steel works declares that the products are in accordance with the order. In this, the charge number of the products is given but neither the test report results nor chemical analysis are announced. An example of the type 2.1 is presented in figure 1.

**Test report 2.2 – EN 10204:2004**
With the type 2.2 test report document, document the steel works declares that the products are in accordance with the order. In the test report the quality control test results based on non-specific inspection are given, in accordance with the general material standards. The test results are not necessarily those from the lot supplied to the customer. The frequency of testing in this case may be at smallest 1 test per charge. The test report, type 2.2 which Ruukki supplies to customers also includes chemical analysis, an example of this type of document being shown in figure 2.

**Inspection certificate 3.1 – EN 10204:2004**
The type 3.1 inspection certificate replaces the type 3.1 B document in the previous edition of EN 10204, see table 1.

With the type 3.1, inspection certificate Ruukki declares that the products are in accordance with the order. The relevant test results and chemical analysis results are presented in this document. The test unit and testing requirements are defined in the material specification, official regulations and/or the order. For each delivery at least one plate or coil is tested. The testing for pressure equipment steels is usually stricter than that for other steels. Previously testing was carried out on both ends of every parent plate. Currently for most grades of pressure equipment steels, testing of one end of the parent plate is sufficient. The test unit at the Ruukki’s Raah Works for pressure equipment steels is a maximum of approximately 11 tonnes i.e. the maximum weight of a single plate delivery, or approximately 30 tonnes i.e. the maximum weight of a single coil delivery. The inspection certificate type 3.1 is validated by the manufacturer’s authorized inspection representative, who is independent of the works production organisation. An example of this type of inspection document is given in figure 3.

Ruukki’s Raah Works quality management system is certified in accordance with the requirements of the Pressure Equipment Directive (PED). Based on this Ruukki provides EN pressure equipment steels with a PED based inspection certificate, when this is agreed with the order. The inspection certificate designation in this case is: EN 10204:2004-3.1/ PED 97/23/EC. An example of this type of certificate is given in figure 4.
Inspection certificate 3.2 - EN 10204:2004
The type 3.2 inspection certificate replaces the type 3.1.A and 3.1.C inspection certificates and the inspection report 3.2 in the previous edition of EN 10204, see table 1.

In the type 3.2 inspection certificate both the steel works and either an inspector authorised by the customer or designated by the official regulations certify that the products are in accordance with the order. Ruukki is represented by the manufacturer’s authorized inspection representative, who is independent of the works production organisation. This inspection certificate presents the results of the materials testing. The test unit and testing requirements are defined in the material specification, official regulations and/or the order. The test report, type 3.2 which Ruukki supplies to customers includes, in addition to materials testing results, also relevant chemical analysis results.

Analysis certificate
If requested, Ruukki will supply a so called Analysis certificate in place of the standard inspection certificate, in which the chemical analysis of the charge is given in the scope required by the customer.

Mill sheet and test certificate
In accordance with the regulations of the Classification Societies, a so called Mill Sheet and Test Certificate will be provided for shipbuilding steels. In this, materials testing results and chemical analyses results are presented. The nearest equivalent inspection document to this certificate in the EN 10204:2004 is the inspection certificate 3.2.

Choice and price of inspection documents
The type and price of the inspection document to be supplied must always be agreed with the order. However, Ruukki will, without separate agreement, supply inspection certificate 3.1 for pressure equipment steels, and mill sheet and test certificate of the relevant classification society for shipbuilding steels.

Dispatch and archiving of inspection documents
Inspection documents in accordance with EN 10204:2004 are supplied to the customer by the Ruukki in the electronic data form. Inspection documents are archived in accordance with the legal and archiving regulations. Inspection documents are supplied in the language preferred by the customer, the alternatives available being the English, French, German and Finnish languages. The number of copies and the postal address for the inspection documents is to be agreed with the order.

Inspection documents in electronic data form
It is possible to transmit copies of the EN 10204:2004 inspection certificates type 2.1, 2.2 and 3.1 by the eRuukki system in electronic data form, if this is agreed in connection with the order. The language used for these documents is either English or Finnish. In this case the original, complete inspection documents are in the electronic form, the transmission of which to the customer must be separately agreed. Customers may conduct business on the eRuukki system using their own user IDs.

Inspection documents supplied by intermediaries
When delivering from stock an intermediary or steel service centre is responsible for ensuring that the inspection documents sent to the customer are those for the delivery in question, that they are traceable and are in accordance with EN 10204. The intermediary must supply the buyer with the inspection document supplied by the manufacturer or a copy of this without any alteration. In order to ensure traceability between the steel product and the inspection documents the manufacturer’s inspection document should include some suitable means of identifying the product. Copying of the original inspection document is allowed providing that traceability is ensured and providing also that the original document is available on request. If the intermediary has altered the condition or size of the product then an additional document indicating the changes in condition or size must be provided. This also applies to all special requirements stated in the order and which are not covered in the manufacturer’s inspection document.

Summary of inspection documents and their correspondence
A summary of the EN 10204:2004 inspection documents is given in table 1. In this the nearest equivalent of each type of document in the previous, now discarded version of the standard, EN 10204:1991, can also be seen.

The designations of the EN 10204:2004 inspection documents
Please, see the table 2.
Examples of inspection documents

- Fig 1. Declaration of compliance with the order EN 10204 - 2.1 (pages 5 and 6).
- Fig 2. Test report EN 10204 - 2.2 (pages 7, 8 and 9).
- Fig 3. Inspection certificate EN 10204:2004 - 3.1 (pages 10, 11 and 12).
- Fig 4. Inspection certificate in accordance with PED, EN 10204:2004-3.1/PED 97/23/EC for pressure equipment steels (pages 13, 14 and 15).
- Fig 5. Inspection certificate 3.1 – EN 10204:2004 and CE label on an extra page (page 16).

Inspection documents for steel products of pressure equipment

Please note that the terms “certificate of specific product control” of PED 97/23/EC and “inspection document based on specific inspection” of EN 10204:2004 are equivalent.

Warning

Other requirements and other EU Directives than PED may be applicable to the pressure equipment steel product(s) falling within the scope of EN 10204:2004.

CE marking

Ruukki’s Raahe works is authorised to use the CE marking for structural steels according to EN 10025-2, -3, -4 and -5:2004 as well as for the structural steel S690QL grade EN 10025-6:2009. The CE marking is marked on an extra page of inspection certificate 3.1 (figure 5).

Table 1. EN 10204:2004 inspection documents and their nearest equivalents in the previous documents

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Type 2.1</td>
<td>Declaration of compliance with the order</td>
<td>Certificate of compliance with the order 2.1</td>
</tr>
<tr>
<td>Type 2.2</td>
<td>Test report</td>
<td>Test report 2.2</td>
</tr>
<tr>
<td>Type 3.1</td>
<td>Inspection certificate 3.1</td>
<td>Inspection certificate 3.1.B</td>
</tr>
<tr>
<td>Type 3.2</td>
<td>Inspection certificate 3.2</td>
<td>Inspection report 3.2</td>
</tr>
</tbody>
</table>

Table 2. A summary of the EN 10204:2004 inspection documents in four languages and the document content as well as the validator of document

<table>
<thead>
<tr>
<th>Designation of the document type</th>
<th>Document content</th>
<th>Document validated by</th>
</tr>
</thead>
<tbody>
<tr>
<td>Declaration of compliance with the order 2.1</td>
<td>Statement of compliance with the order</td>
<td>The manufacturer (of the steel product)</td>
</tr>
<tr>
<td>Test report 2.2</td>
<td>Statement of compliance with the order, with indication of results of non-specific inspection</td>
<td>The manufacturer (of the steel product)</td>
</tr>
<tr>
<td>Inspection certificate 3.1</td>
<td>Statement of compliance with the order, with indication of results of specific inspection</td>
<td>The manufacturer’s authorized inspection representative independent of the manufacturing department</td>
</tr>
<tr>
<td>Inspection certificate 3.2</td>
<td>Statement of compliance with the order, with indication of results of specific inspection</td>
<td>The manufacturer’s authorized inspection representative independent of the manufacturing department and either the purchaser’s authorized inspection representative or the inspector designated by the official regulations</td>
</tr>
</tbody>
</table>

1) inspection document based on non-specific inspection of the steel product.
2) inspection document based on specific inspection of the steel product.
# Declaration of compliance with the order EN 10204 - 2.1

**Inspection documents**

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**Figure 1. Declaration of compliance with the order EN 10204 - 2.1 (page 1/2).**

<table>
<thead>
<tr>
<th>Item</th>
<th>Measurement</th>
<th>Mark</th>
<th>Lot</th>
<th>Weight</th>
<th>SubLot No</th>
<th>SP No</th>
<th>ST No</th>
<th>HT No</th>
</tr>
</thead>
<tbody>
<tr>
<td>064</td>
<td>25.00 X 1000 X 3653</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>1432</td>
<td>71870</td>
<td>622</td>
</tr>
</tbody>
</table>

---

**Raahesk Steel Works**

Testing and inspection

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**Surface Condition EN 10 137-212005 Class A**

---

**HOT ROLLED STEEL PLATES**

---

**TOTAL DELIVERY**

---

**Heavy Plates**

---

**Quality Specifications**

---

**ON EN 10020:2010 CLASS A**

---

**Mark of the Manufacturer**

---

**Note:** This document is a declaration of compliance with the order EN 10204 - 2.1, detailing the inspection of hot rolled steel plates. The details include the dimensions, weight, and identification of the material. The Raahesk Steel Works provide testing and inspection for the material as per the surface condition specified.
Figure 1. Declaration of compliance with the order EN 10204 - 2.1 (page 2/2).

<table>
<thead>
<tr>
<th>Lot No.</th>
<th>Test Report</th>
<th>Additional Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>021</td>
<td>EN 10204-2.1</td>
<td>NUUKI TEST REPORT</td>
</tr>
<tr>
<td>123</td>
<td></td>
<td></td>
</tr>
<tr>
<td>456</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
RAKKI

EN 10204-2.2

Inspection documents

Figure 2. Test report EN 10204 - 2.2 (page 1/3).

Total delivery

Product: HEAVY PLATES

RAEX 400

Specification: EN 10029:2010 CLASS A1

Optical inspection: Testing and Inspection

---

Rakhi Steel Works

Inspection documents

Figure 2. Test report EN 10204 - 2.2 (page 1/3).
### AINESTODISTUS TEST REPORT

**EN 10 204-2.2**

**RAAME-STEEL WORKS**

**Quality Specifications**

#### ABRASION RESISTANT STEEL

<table>
<thead>
<tr>
<th>Pos.</th>
<th>Item</th>
<th>Material</th>
<th>Test No.</th>
<th>Test Cond</th>
<th>Verification Test</th>
<th>Material Required</th>
<th>Cooler and Furnace Test</th>
<th>Material Test</th>
<th>Heat No.</th>
<th>Test Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>010</td>
<td>62974 011</td>
<td>0</td>
<td>CAST</td>
<td></td>
<td>(EN ISO 14711:2010)</td>
<td></td>
<td></td>
<td>120 A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>016</td>
<td>62974 011</td>
<td>1</td>
<td>CAST</td>
<td></td>
<td>(EN ISO 14711:2010)</td>
<td></td>
<td></td>
<td>120 A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RAANE STEEL WORKS**

Testing and inspection

Authorized inspection representative:

JAAKKO JUUSO

Yhteisministry: RUUKKI METALS OY

Address: P.O. Box 110, FIN-00220 HELSINKI

Phone: +358 20 2391, Telefax: +358 20 23911

Yhteyttä myyntivaihdon: Työn antaminen: Oikeudet ja liitteet:
<table>
<thead>
<tr>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Al</th>
<th>Ni</th>
<th>Mo</th>
<th>Sn</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.119</td>
<td>0.20</td>
<td>1.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.01</td>
<td>0.12</td>
<td>0.06</td>
<td>0.094</td>
</tr>
</tbody>
</table>

Raahoe Steel Works

Testing documents

Steel manufactured and supplied by Raahoe is free from notations.

Jaanos Jaaks
Authorized inspection representative
VASTAANOTTODISTUS INSPECTION CERTIFICATE

EN 10 204-3.1 (2004)

RUUKKI METALS OY
PL-92101 RAASEPAA, FINLAND

Date: 04.07.2013

Sample: 040713

1.0

Inspection Documents

Figure 3. Inspection certificate EN 10204-3.1 (page 1/3).
<table>
<thead>
<tr>
<th>C</th>
<th>Si</th>
<th>Mn</th>
<th>P</th>
<th>S</th>
<th>Al</th>
<th>Nb</th>
<th>V</th>
<th>Ti</th>
<th>Cu</th>
<th>Cr</th>
<th>Ni</th>
<th>Mo</th>
<th>H</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.05</td>
<td>0.03</td>
<td>0.15</td>
<td>0.01</td>
<td>0.002</td>
<td>0.042</td>
<td>0.001</td>
<td>0.016</td>
<td>0.002</td>
<td>0.012</td>
<td>0.031</td>
<td>0.04</td>
<td>0.15</td>
<td>0.003</td>
<td>0.023</td>
</tr>
</tbody>
</table>

Raahs Steels Works

Steel manufactured and supplied by Raahs works is free from radiation.
### Figure 4. Inspection certificate in accordance with PED, EN 10204-3.1/PED 97/23/EC for pressure equipment steels (page 1/3).

**VASTAANOTTOTODISTUS INSPECTION CERTIFICATE**

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Thickness mm</th>
<th>Mark</th>
<th>PL</th>
<th>Pansio</th>
<th>Width mm</th>
<th>Subsidiary no</th>
<th>SP no</th>
<th>UT</th>
<th>MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>15.00</td>
<td>2 2400</td>
<td>9450</td>
<td>2</td>
<td>5444</td>
<td>70292</td>
<td>044</td>
<td>044</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5444</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Product**

- **HEAVY PLATES**
- **Grade:** P265GH EN 10028-2:2009
- **Location:** Quality Specifications
- **PRESSURE VESSEL STEEL**

---

**Raase Steel Works**

**Testing and inspection**

**Signed:** JAAKKO JUURINEN

**Authorized inspectors:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Company Name</th>
<th>Over Address:</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAAKKO JULIOI</td>
<td>Authorised inspector representative</td>
<td>RUUKKI METALS OY HELSINKI</td>
<td>P.O. Box 51, FIN 00010 RAASEHE, FINLAND</td>
</tr>
</tbody>
</table>
## AINESTODISTUS TEST REPORT

EN 10 204-3.1 (2004) PED 07/23/EC/DNV.

14 Inspection documents

---

### PRESSURE VESSEL STEEL

<table>
<thead>
<tr>
<th>No.</th>
<th>Test item</th>
<th>Test No.</th>
<th>Test method</th>
<th>Test result</th>
<th>Test result</th>
<th>Test result</th>
<th>Test result</th>
</tr>
</thead>
<tbody>
<tr>
<td>001</td>
<td>07292 044</td>
<td>111</td>
<td>1C</td>
<td>306 468 35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

### RAÄHE STEEL WORKS

Tällä toiminnalla, että töitä on lausutettu ja valmistettu, mikäli:

We hereby certify that the material described above has been tested and complies with the terms of the order confirmation.

---

[Signature]

JAAKKO JUURINEN

Authorized inspection representative

---

Company name: RAÄHE STEEL WORKS

Address: Pl 63, P.O. BOX 93, FIN-92101 RAÄHE, FINLAND

Phone: 00 358 30 39111

---

Mark of the Manufacturer

Mark of the manufacturer

---

Figure 4. Inspection certificate in accordance with PED, EN 10204-3.1/PED 97/23/EC for pressure equipment steels (Page 2/3).
Figure 4. Inspection certificate in accordance with PED, EN 10204:2004-3.1/PED 97/23/EC for pressure equipment steels (page 3/3).
Figure 5. Inspection certificate 3.1 - EN 10204:2004 and additional page with CE marking. In addition, the plate is marked with the designation information of the steel grades.
Ruukki provides its customers with energy-efficient steel solutions for better living, working and moving.

This publication is accurate to the best of our knowledge and understanding. Although every effort has been made to ensure accuracy, the company does not assume any responsibility for any errors or omissions, or any direct, indirect or consequential damage caused by incorrect application of the information. We reserve the right to make changes. Always use original standards for accurate comparison.