

CERTIFICATE

Welding of railway vehicles and components according to EN 15085-2

This is to certify that **Mantena AS**

**Eilert Smiths vei 1
0975 Oslo
NORWAY**

is qualified to perform welding work within the range of certification of:

Certification level CL1 according to EN 15085-2

Field of application: • Repair and maintenance of railway vehicles and railway vehicle parts

Range of certification

| Welding process according to EN ISO 4063 | Material group according to CEN ISO/TR 15608 | Dimensions | Comments |
|--|--|---|--|
| 111 | X120Mn12 75/76 1.2 75/76 2.1 3.1 2.1/3.1 | t = 3 - 10 mm t = 3 - 10 mm t = 3 - 16 mm t = 3 - 16 mm t = 3 - 28 mm t ≥ 5 mm t = 13 - 52 mm | FW FW, mat. Group 75.1 BW, FW FW, mat. Group 76 FW FW BW-Y, mat. group 2.1 |

(continuation: see reverse)

Responsible welding coordinator: Dipl.-Ing. Ellen Solaas (IWE)

born: 07.10.1965

Deputy with equal rights: -

Deputy: see reverse

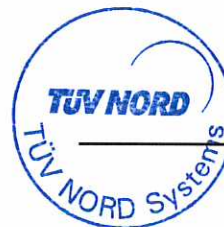
Certificate no.: TÜVNORD/15085/CL1/152/2/12

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Valid: from 16.05.2018 to 16.05.2021

Issued on: 07.06.2018

Auditor: HESSE
General regulations (see reverse)



Hoffmann
Hoffmann
certification body

Certificate no.: TÜVNORD/15085/CL1/152/2/12

Continuation of range of certification

| Welding process according to EN ISO 4063 | Material group according to CEN ISO/TR 15608 | Dimensions | Comments |
|--|---|--|--|
| 111 | 2.1 2.1/3.1 | t = 14.4 - 27 mm t = 16 - 64 mm | clad BW-Y, mat. group 3.1 |
| 131 | 22.4 23.1 | t = 3 - 24 mm t = 3 - 40 mm | BW FW |
| 135 | 3.2 8.1 1.3 1.2 3.1 1.2, 1.2/8.1, 3.1, 8.1 11.2/1.2 2.1 1.2/3.1 | t = 3 - 12 mm t = 3 - 12 mm t = 3 - 23 mm t = 3 - 24 mm t = 3 - 30 mm t ≥ 5 mm t = 6 - 24 mm t = 16.8 - 31.5 mm t = 21 - 84 mm | BW, FW BW-Y, FW BW, FW BW, FW FW FW FW clad FW, mat. group 3.1 |
| 135/136 | 1.2 1.2 | t = 3 - 32 mm t = 8 - 32 mm | FW BW |
| 136 | 1.2/3.1 | t ≥ 5 mm | FW |
| 138 | 1.2/5.1 1.2/5.1 | t = 3 - 20 mm t = 3 - 30 mm | FW, mat. group 1.2 FW, mat. group 5.1 |
| 141/131 | 23.1 23.1 | t = 3 - 8 mm t = 3 - 12 mm D ≥ 30 mm | BW, 131 BW, 141 |
| 141 | 8.1 8.1 8.1 | t = 1 - 4 mm D ≥ 24 mm t = 3 - 7.2 mm t = 3 - 7.2 mm D ≥ 30 mm | BW FW BW, multi-run |

Comments:

Authorized for performing, evaluation and approval of qualification tests of welders and approval testing of welding operators, production weld tests and tests for the approval of welding instructions is: Mrs. Ellen Solaas (IWE)

Additional deputies:

- Morten Brohjem (Level C) born: 05.07.1968
- Jomar Kvitland (IWS/Level B) born: 01.12.1954

General regulations

It apply the conditions of the standard EN 15085-2:2007, section 7.
The General Terms and Conditions of the TÜV NORD Systems apply in the currently valid version.