



MILL TEST CERTIFICATE

EN 10204 3.1

Certificate No. **K**
G0201215 **2** Date
23.06.2016

Material
BMB Order No. P235 GH TC1
031530
CUSTOMER REFERENCE
3135-089/7733587/EK

Standard
Customer Name EN 10217-2:2003

Shipment
Product description 307400903
ERW STEEL PIPES

| No. | OD [mm] | WT [mm] | Length [mm] | Pieces | Meters | Pipe Type | HT Bar | HT Sec | BD | NDT | EL | NP | External Coating | UL/FM | Delivery Condition |
|-----|---------|---------|-------------|--------|--------|-----------------|--------|--------|----|-----|------|----|------------------|-------|--------------------|
| 1 | 168,30 | 4,50 | 6.000 | 40 | 240,00 | Black Plain End | 89 | 5 | 30 | OK | 0,00 | 0 | Norm | | NW. |
| 2 | 219,10 | 4,50 | 6.000 | 141 | 846,00 | Black Plain End | 68 | 5 | 30 | OK | 0,00 | 0 | | | NW. |

| No. | Heat No. | Heat code | C | Si | Mn | P | S | Al | V | Nb | Ti | Mo | Cr | Ni | Cu | N | B | Ceq |
|-----|-----------|-----------|------|------|------|------|------|------|-----|-----|-----|-----|------|------|------|-----|-----|-------|
| 1 | D16112519 | 0 | 4,5 | 6,3 | 40,1 | 11,5 | 19,2 | 42,2 | 0,6 | 1,0 | 1,2 | 1,4 | 20,2 | 39,6 | 50,0 | 0,5 | 0,0 | 123,7 |
| 1 | D16221537 | 0 | 5,2 | 8,2 | 46,6 | 12,6 | 11,0 | 52,8 | 0,3 | 0,4 | 1,3 | 1,8 | 24,5 | 40,4 | 42,2 | 4,3 | 0,3 | 140,4 |
| 2 | L1607617 | 0 | 10,3 | 19,3 | 34,1 | 10,4 | 6,6 | 49,9 | 2,1 | 0,4 | 1,1 | 0,7 | 18,9 | 21,6 | 34,1 | 4,1 | 0,3 | 168,1 |
| 2 | L1608856 | 0 | 11,7 | 21,1 | 34,2 | 11,3 | 7,8 | 44,3 | 1,7 | 0,7 | 1,5 | 2,7 | 34,4 | 27,1 | 40,0 | 4,1 | 0,1 | 185,7 |

| No. | Heat No. | Re MPa | Rm MPa | A % |
|-----|-----------|--------|--------|-----|
| 1 | D16112519 | 315 | 394 | 31 |
| 1 | D16221537 | 356 | 405 | 32 |
| 2 | L1607617 | 323 | 440 | 35 |
| 2 | L1608856 | 313 | 445 | 39 |

Destructive Tests & Visual Inspections:

DE OK VD OK
FB OK C OK



AT: 90583029 - 0001 - rff

90 58 30 29

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Description
AD2000 Merkblatt W4, PED 97/23/EC.





MILL TEST CERTIFICATE

EN 10204 3.1

Certificate No
G0201215

K 2

Date
23.06.2016

Shipment
307480903

Product description
ERW STEEL PIPES

Standard
EN 10217-2:2003

Customer name

Material
P235 GH TC1

BMB Order No
031530

Contract No
1385

CUSTOMER REFERENCE
3135-0897/7733587/EK

| | | | | | | |
|----|-----|-------------------|----------------------|------------------|------|--------------------|
| BD | Re | Yield strength | 1. Kind of steel | FF: Fully Killed | ITHL | Charpy Haz Max |
| VD | Rm | Tensile strength | 2. Direction | L: Longitudinal | ITHD | Charpy Haz Min |
| FB | A% | Elongation | 3. Sampling Position | C: Transverse | ITHT | Charpy Notal Max |
| DE | AVE | Reduction of Area | 4. Impact type | BTWD | ITMT | Charpy Notal Min |
| C | HT | Hydrostatic Test | | BTWeld | ITMI | Charpy Welding Max |
| EL | NP | Number per inch | | BTWeld | | Charpy Welding Min |
| OK | | | | U Type | | |
| | | | | V Type | | |

We hereby certify that the material described above complies with the terms of order contract.
The values for the C, Mn and Si elements have been multiplied by 100 and the remaining chemical elements' values have been multiplied by 1000.



AT: 90583029 - 0002 - rff

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Description
AD2000 Merkblatt W4, PED 97/23/EC

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