

# INSPECTION CERTIFICATE

**KOBELCO WELDING OF EUROPE B.V.**

FLUX CORED WIRE

PURCHASER \_\_\_\_\_

CERTIFICATE NO: KC23-104

DATE OF ISSUE: 12/04/2023

| TRADE DESIGNATION | DIAMETER (mm) | MFG.NO. | APPLICABLE SPECIFICATION AND CLASSIFICATION                      |
|-------------------|---------------|---------|------------------------------------------------------------------|
| DW-309MoLP        | 1.2           | N30410  | AWS A5.22 E309LMoT1-1/4<br>EN ISO 17633-A T 23 12 2 L P C1/M21 1 |

1. CHEMICAL COMPOSITIONS OF ALL WELD METAL(wt%) (ACCORDING TO EN 10204 TYPE 3.1)

| ELEMENT    | C     | Si   | Mn   | P     | S     | Cu   | Ni    | Cr    | Mo   | N     | Nb   |  |
|------------|-------|------|------|-------|-------|------|-------|-------|------|-------|------|--|
| WELD METAL | 0.030 | 0.67 | 0.92 | 0.022 | 0.003 | 0.07 | 12.66 | 22.22 | 2.30 | 0.017 | 0.01 |  |
| ELEMENT    | V     |      | FS   | FN    |       | FNW  |       |       |      |       |      |  |
| WELD METAL | 0.05  |      | 15.0 | > 18  |       | 22.0 |       |       |      |       |      |  |

FS:FERRITE CONTENT%(SCHAEFFLER DIAGRAM)  
FN:FERRITE NUMBER(DELONG DIAGRAM)  
FNW:FERRITE NUMBER(1992 WRC DIAGRAM)

2. MECHANICAL PROPERTY OF ALL WELD METAL (ACCORDING TO EN ISO)

2.a TENSILE TEST (ACCORDING TO EN 10204 TYPE 3.1)

| YIELD STRENGTH<br>at 0.2% OFFSET<br>(MPa) | TENSILE<br>STRENGTH<br>(MPa) | ELONGATION<br>GL=5D(%) |
|-------------------------------------------|------------------------------|------------------------|
| 514                                       | 697                          | 31                     |

2.b CHARPY IMPACT (ACCORDING TO EN 10204 TYPE 3.1)

| TESTING<br>TEMPERATURE<br>(°C) | ABSORBED ENERGY(J) |         |
|--------------------------------|--------------------|---------|
|                                | EACH               | AVERAGE |
|                                |                    |         |

3. WELDING CONDITIONS FOR THE TESTING

| TYPE OF CURRENT | DC+     | SHIELDING GAS | 80%Ar+20%CO2 |
|-----------------|---------|---------------|--------------|
| WELDING CURRENT | 210 (A) | ARC VOLTAGE   | 28.0 (V)     |

4. REMARKS

BISMUTH (Bi) CONTENT IN DEPOSITED METAL IS NO LESS THAN 0.002%.  
According to GofQ DW-309MoLP R0

WE HEREBY CERTIFY THAT THE TEST RESULTS OF THE ABOVE  
WELDING MATERIAL ARE CORRECT



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QA Manager