

INSPECTION CERTIFICATE

KOBELCO WELDING OF EUROPE B.V.

FLUX CORED WIRE

PURCHASER _____

CERTIFICATE NO: KC22-322

DATE OF ISSUE: 20/10/2022

| TRADE DESIGNATION | DIAMETER (mm) | MFG.NO. | APPLICABLE SPECIFICATION AND CLASSIFICATION |
|-------------------|---------------|---------|--|
| DW-316L | 1.2 | N21480 | AWS A5.22 E316LT0-1/4 EN ISO 17633-A T 19 12 3 L R C1/M21 3 |

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 | 0.024 | 0.60 | 1.69 | 0.021 | 0.005 | 0.05 | 12.36 | 19.18 | 2.65 | 0.020 | < 0.01 | |
| ELEMENT | V | | FS | FN | | FNW | | | | | | |
| WELD METAL | 0.05 | | 8.0 | 13.0 | | 10.0 | | | | | | |

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 at 0.2% OFFSET (MPa) | TENSILE STRENGTH (MPa) | ELONGATION GL=5D(%) |
|---|------------------------------|------------------------|
| 387 | 559 | 38 |

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

| TESTING TEMPERATURE (°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-316L R0

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



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QA Manager