SFC-81Ni1

FLUX CORED WIRES FOR LOW TEMPERATURE-SERVICE LOW-ALLOY STEEL

DESCRIPTION:
SFC-81Ni1 is an all-positional flux cored wire designed for 100%CO2 shielding gas. It can provide excellent weldability involved good bead appearanace, less spatter, stable arc and easay slag removal, but also qualified impact value down to -30°C.

APPLICATIONS:
It is suitable for welding of 590N/mm² high tensile strength steel on bridge structure, storage tanks and construction machinery.

NOTE ON USAGE:
1. Use 100%CO2.
2. Proper heat input can obtain required impact value

WELDING POSITION:

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%) : (Shielding Gas: 100% CO2)
Weld Metal Analysis:
Carbon (C) 0.053
Manganese (Mn) 1.26
Silicon (Si) 0.45
Phosphorus (P) 0.018
Sulphur (S) 0.012
Nickel (Ni) 0.93

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Shielding Gas: 100% CO2)
YP N/mm² 534
TS N/mm² 618
EL% 25

TYPICAL IMPACT VALUES:
IV -30°C J 85

APPROVALS:
DNV · GL

SUGGESTED WELDING PARAMETERS (DC <+>)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Diameter (mm)</th>
<th>1.2mm</th>
<th>1.4mm</th>
<th>1.6mm</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>F, HF</td>
<td>V-UP, OH</td>
<td>F, HF</td>
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<tr>
<td>Welding Position</td>
<td></td>
<td></td>
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<tr>
<td>Voltage (Volt)</td>
<td>25 ~ 35</td>
<td>24 ~ 30</td>
<td>28 ~ 38</td>
<td>25 ~ 30</td>
</tr>
<tr>
<td>Current (Amp)</td>
<td>250 ~ 330</td>
<td>150 ~ 220</td>
<td>270 ~ 360</td>
<td>170 ~ 220</td>
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