DESCRIPTION:
SFC-81Ni2 is a flux cored wire whose weld metal contains 2.5%Ni for the welding of 550N/mm² high tensile steel with requirement of low temperature down -40°C. In conjunction with 100%CO₂, it provides excellent weldability involved good bead appearance, less spatter, stable arc and easy slag removal.

APPLICATIONS:
It is suitable for welding of 550N/mm² low temperature 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
3. Interpass temperature under 150°C being kept in multipass welding is good for mechanical property

WELDING POSITION:

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%):(Shielding Gas: 100% CO₂)
Weld Metal Analysis:
Carbon (C) 0.052
Manganese (Mn) 1.15
Silicon (Si) 0.35
Phosphorus (P) 0.021
Sulphur (S) 0.012
Nickel (Ni) 2.34

TYPICAL MECHANICAL PROPERTIES OF WELD METAL:(Shielding Gas: 100% CO₂)
YP N/mm² 523
TS N/mm² 631
EL% 25

TYPICAL IMPACT VALUES:
IV -40°C J 46

APPROVALS:

SUGGESTED WELDING PARAMETERS (DC <->)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Diameter (mm)</th>
<th>1.2mm</th>
<th>1.6mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage (Volts)</td>
<td>25 ~ 35</td>
<td>30 ~ 40</td>
<td></td>
</tr>
<tr>
<td>Current (Amps)</td>
<td>250 ~ 330</td>
<td>300 ~ 400</td>
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</tr>
<tr>
<td>Flow Rate (I / min)</td>
<td>15 ~ 25</td>
<td>15 ~ 25</td>
<td></td>
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</tbody>
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