DESCRIPTION:
SFC-410NM is a flux cored wire for welding with pure CO2 shielding gas to produce the weld metal of 410 martensitic stainless steel with Ni and Mo. It performs with smooth arc transfer, low spatter level, fine ripple, easy control of weld pool, good heat and corrosion resistance.

APPLICATIONS:
The weld metal contains nickel to eliminate ferrite microstructure as ferrite has a deleterious effect on machanical property. It is generally used for welding of ASTM CA6NM castings, materials, with similar composition, and turbines of hydro plant.

NOTE ON USAGE:
1. Use DC (+) polarity.
2. Weld with pure CO2 shielding gas and suitable gas flow is 20 ~ 25 l/min.
3. Proper preheat at 150 ~ 300°C and PWHT at 600 ~ 620°C.

WELDING POSITION:

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%): (Shielding Gas: 100% CO2)
Weld Metal Analysis:
Carbon (C) 0.040
Manganese (Mn) 0.31
Silicon (Si) 0.43
Phosphorus (P) 0.014
Sulphur (S) 0.012
Nickel (Ni) 4.39
Chromium (Cr) 11.31
Molybdenum (Mo) 0.49

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Shielding Gas: 100% CO2)
TS N/mm2 780
EL% 20

HEAT TREATMENT:
620°C X 1hr

TYPICAL IMPACT VALUES:
IV 0°C J 58

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></td>
<td></td>
<td>F, HF</td>
<td>V-UP, OH</td>
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<tr>
<td>Welding Position</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Voltage (Volt)</td>
<td>23 ~ 33</td>
<td>25 ~ 30</td>
<td>27 ~ 32</td>
</tr>
<tr>
<td>Current (Amp)</td>
<td>130 ~ 220</td>
<td>120 ~ 200</td>
<td>200 ~ 300</td>
</tr>
</tbody>
</table>

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