DESCRIPTION:
AFR-X80-O is a self-shielded low-alloy flux cored wire designed for 550N/mm² grade steel, low temperature high tensile steel. Electrical polarity choice is DC(-), droplet mode is spray transfer.

APPLICATIONS:
Deposited metal has excellent impact properties and crack resistance, can be used in API Gr. X80 steel pipe welding, and low-alloy steel welding. Suitable for outdoor low-alloy steel and low carbon steel welding.

NOTE ON USAGE:
1. Use DC(-) polarity.
2. Adjust the power voltage to increase 1-2 volts when the extension power cord is more than 15m.
3. Take proper wind-proof procedure while welding to avoid the blow holes.
4. Keep the inter-pass temperature below 150°C.

WELDING POSITION:

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%): (Shielding Gas: 100% CO2)
Weld Metal Analysis:
- Carbon (C) 0.05
- Manganese (Mn) 1.10
- Silicon (Si) 0.07
- Aluminum (Al) 1.01
- Nickel (Ni) 1.83
- Sulphur (S) 0.003
- Phosphorus (P) 0.01

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Shielding Gas: 100% CO2)
- YP N/mm² 485
- TS N/mm² 578
- EL% 24
- IV J (-40°C) 110

APPROVALS:
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SUGGESTED WELDING PARAMETERS (DC <->)

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Diameter (mm)</th>
<th>1.6 mm</th>
<th>2.0 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage (Volt)</td>
<td></td>
<td>16 ~ 20</td>
<td>16 ~ 20</td>
</tr>
<tr>
<td>Current (Amp)</td>
<td></td>
<td>180 ~ 250</td>
<td>180 ~ 280</td>
</tr>
<tr>
<td>E.S.O.(mm)</td>
<td></td>
<td>10 ~ 20</td>
<td>10 ~ 20</td>
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</tbody>
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