DESCRIPTION:
SFC-2594 is a 26%Cr-10% Ni-3.5%Mo-0.2%N ferrite-austenitic superduplex stainless steel deposits with excellent pitting resistance, stress corrosion resistance and crack resistance. PREN >40.5, has better corrosion resistance and toughness than 2209.

APPLICATIONS:
Typical applications include pumps, vessels, heat exchanger, chemical equipments, oil and gas platform and pipes processing chloride containing solutions. UNS S32750(Alloy 2507),

NOTE ON USAGE:
1. Clean up the base metal to be free from contamination.
2. Use stainless steel wire brush for cleaning of slags
3. Use DC (+) for welding.
4. Shielding gas: CO2 (99.8% 20-25 l/min) gas recommended; Mixed gas (80%Ar+20%CO2) recommended to use lower voltage, 1~2 lower than CO2 gas welding. E.S.O. less than 20mm to prevent worm hole.

WELDING POSITION:

TYPICAL CHEMICAL COMPOSITION OF WELD METAL (wt%): (Shielding Gas: 100% CO2)
Weld Metal Analysis:
Carbon (C) 0.03
Chromium (Cr) 26.18
Nickel (Ni) 10.14
Molybdenum (Mo) 3.48
Manganese (Mn) 0.74
Silicon (Si) 0.66
Phosphorus (P) 0.026
Sulphur (S) 0.006
Nitrogen (N) 0.22

TYPICAL MECHANICAL PROPERTIES OF WELD METAL: (Shielding Gas: 100% CO2)
TS N/mm² 850
EL% 25

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>
</tr>
<tr>
<td>Welding Position</td>
<td></td>
<td></td>
<td></td>
</tr>
<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>