

## Applications

Used for welding of offshore oil/gas, chemical and petrochemical process industries, e.g. pipework systems, flowlines, risers, manifolds etc.

## Characteristics on Usage

- ① Duplex stainless steel pipe, plate, fittings and forgings have an approximate 50:50 microstructure of austenite with a ferrite matrix.
- ② Superflux209 is a inert flux that composition of Si and Mn is hardly changed though welding condition is changed, and superflux209 is a high basicity flux (the basicity of superflux300 is 1.8).

## Notes on Usage

- ① Dry the flux at 300~350°C (572~662°F) for 60 minutes before use.
- ② Preheat not generally required. Interpass temperature 100~150°C max, heat input in the range 1.0 ~ 1.5KJ/min-depending on material thickness.

### Approval

### I Current

### I Basicity Index

DC +

1.8

### Typical Chemical Composition of All-Weld Metal (%)

C	Si	Mn	P	S	Cr	Ni	Mo	Cu	N
0.02	0.49	1.28	0.017	0.001	22.15	9.28	3.12	0.20	0.20

### Typical Mechanical Properties of All-Weld Metal

TS MPa(lbs/in <sup>2</sup> )	EL (%)	Temp. °C (°F)	CVN-Impact Value J (ft.lbs)
800 (116,000)	28	-46 (-50)	70 (52)