# OP 1450A

OERLIKON

**SAW Fluxes**
**Hardfacing**

OP 1450A is an agglomerated alloy bearing flux used for hardfacing in combination with low alloy OE-S2 and OE-S2Mo wires. Applications include the hardfacing of piston rod ends and earth moving equipment, etc. The alloying effect of the flux depends, to a large degree, on the welding parameters chosen. For instance, optimum welding parameters for a 4 mm wire are approximately 600 A, 32 V, 50 cm/min. OP 1450A is suitable for use on both DC+ and AC.
Damp flux should be re-dried at 300-350°C. Grain size according to EN 760: 2-20.

| Wire | Classification |
|---|---|
| | EN 760: SA CS 3 87 CCrMo AC |

| Wire | Approvals | Grades |
|---|---|---|

| Flux Analysis | |
|---|---|
| SiO2 + TiO2 | 40 % |
| CaO + MgO | 30 % |
| Al2O3 + MnO | 20 % |
| CaF2 | 10 % |

**Basicity to Boniszewski**

**Analysis of all-weld metal (Typical values in %)**

| Wire | C | Mn | Si | Cr | Ni | Mo | Nb | N | Cu |
|---|---|---|---|---|---|---|---|---|---|
| OE-S2 -1st | 0.14 | 1.20 | 0.40 | 1.90 | - | 0.10 | - | - | - |
| OE-S2 -2nd | 0.18 | 1.30 | 0.50 | 2.80 | - | 0.20 | - | - | - |
| OE-S2 -3rd | 0.19 | 1.30 | 0.60 | 2.80 | - | 0.30 | - | - | - |
| OE-S2Mo -1st | 0.17 | 0.90 | 0.40 | 1.90 | - | 0.30 | - | - | - |
| OE-S2Mo -2nd | 0.19 | 1.10 | 0.60 | 2.60 | - | 0.60 | - | - | - |
| OE-S2Mo -3rd | 0.20 | 1.20 | 0.70 | 2.90 | - | 0.60 | - | - | - |

**All-weld metal Mechanical Properties**

| Wire | Heat Treatment | Yield Strength N/mm$^2$ | Tensile Strength N/mm$^2$ | Elongation A5 (%) | Hardness |
|---|---|---|---|---|---|
| OE-S2 - 1st | As Welded | - | - | - | 280 HB |
| OE-S2- 2nd | As Welded | - | - | - | 350 HB |
| OE-S2- 3rd | As Welded | - | - | - | 370 HB |
| OE-S2Mo -1st | As Welded | - | - | - | 310 HB |
| OE-S2Mo -2nd | As Welded | - | - | - | 440 HB |
| OE-S2Mo -3rd | As Welded | - | - | - | 450 HB |

**Packaging data**

25kg heavy duty sealed polythene sacks

Further forms of delivery on request.

| Current condition |
|---|
| **AC; DC+** |