

# TYPE APPROVAL CERTIFICATE

**This is to certify:****That the Electrode**

with trade name  
**OK 63.31**

Manufacturer  
**ESAB AB**  
**PERSTORP, Sweden**

is found to comply with  
**DNV GL rules for classification – Ships**

with this approval

|                          |                                        |
|--------------------------|----------------------------------------|
| <b>Grade</b>             | <b>VL 316 L</b>                        |
| <b>Current</b>           | <b>AC/DC(+)</b>                        |
| <b>Approved diameter</b> | <b>1.6 mm - 5.0 mm</b>                 |
| <b>Positions</b>         | <b>All</b>                             |
| <b>Remarks</b>           | <b>Impact energy min 32J at - 60°C</b> |

**Product(s) approved by this certificate is/are accepted for installation on all vessels classed by DNV GL.**

This Certificate is valid until **2020-11-30**.

Issued at **Høvik** on **2015-12-01**

DNV GL local station: **Gothenburg**

Approval Engineer: **Maxim Bobrov**

for **DNV GL**

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**Hanne Anita Hjerpetjønn**  
**Head of Section**

Any significant change in design or construction may render this Certificate invalid.