



Certificate No:  
**TAW00005B2**

# TYPE APPROVAL CERTIFICATE

**This is to certify:**

**That the Electrode**

with trade name  
**LB-80LSR**

Manufacturer  
**Kobe Steel, Ltd. Ibaraki Plant**  
**Ibaraki, Osaka Pef, Japan**

is found to comply with  
**DNV rules for classification – Ships**  
**DNV class programme DNV-CP-0069 – Type approval – Welding consumables**

with this approval

<b>Grade</b>	<b>5 Y69 (H5)</b>
<b>Current</b>	<b>DC(+)</b>
<b>Approved diameter</b>	<b>3.2 mm - 5.0 mm</b>
<b>Positions</b>	<b>All, except vertical downwards</b>
<b>Remarks</b>	<b>Also for fillet welding</b>

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

Issued at **Hamburg** on **2022-11-23**

for **DNV**

This Certificate is valid until **2027-11-22**.

DNV local unit: **Kobe**

Approval Engineer: **Dietmar Liebich**

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**Thorsten Lohmann**  
**Head of Section**

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