

# APPROVAL OF MANUFACTURER CERTIFICATE

**This is to certify:**

**That**

**Erne Fittings GmbH, Plant Mürzzuschlag  
Industriepark 8680 Mürzzuschlag,  
Austria**

is an approved manufacturer of  
**Steel Pipes and Fittings**

in accordance with  
**DNV GL rules for classification – Ships**

and the following particulars:

<b>Product</b>	<b>Fittings</b>
<b>Application area</b>	<b>Piping fittings</b>
<b>Steel type</b>	<b>Carbon and carbon-manganese, Alloy, Austenitic stainless, See page 2</b>
<b>Manufacturing method</b>	<b>Cold formed</b>
<b>Max. outer diameter</b>	<b>See page 2</b>
<b>Max. wall thickness</b>	<b>See page 2</b>
<b>Heat treatment condition</b>	<b>See page 2</b>
<b>Additional approval conditions</b>	<b>See page 2</b>

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules. Materials to be applied to DNV GL classed object shall fulfill the material requirements in the applicable DNV GL class rules.

Issued at **Hamburg** on **2019-03-04**

This Certificate is valid until **2022-02-14**.

DNV GL local station: **Augsburg**

for **DNV GL**

Approval Engineer: **Enno Brück**

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



Job Id: **263.11-005390-3**  
Certificate No: **AMMM00000CK**  
Revision No: **1**

## Particulars of the approval

---

### Piping fittings (elbows, tees, reducers and caps)

Steel type <sup>2)</sup>	Manufacturing method <sup>1)</sup>	Max. outer diameter [mm]	Max. wall thickness [mm]	Heat treatment condition
C and C-Mn	CFS	323,9	25	acc. standard
Alloy	CFS	323,9	25	acc. standard
Austenitic	CFS	323,9	25	acc. standard

#### Remarks:

1) CFS: cold finished seamless

2) Piping fitting

Suitable pipe grades shall be selected from the following recognized standards:

EN 10253, ASTM A234, ASTM A403, ASTM A420, ASTM A744, ASTM A815, ASTM A860, ASTM A960, ASTM A961, JIS B2312, JIS B2313 or JIS B2316.