

APPROVAL OF MANUFACTURER CERTIFICATE

Certificate No:
AMMM00000CK

This is to certify:

That
ERNE FITTINGS GmbH
Plant Mürzzuschlag
Industriepark
Mürzzuschlag, Austria

is an approved manufacturer of
Steel Pipes and Fittings

in accordance with
DNV GL rules for classification – Ships

and the following particulars:

Products	Pipe Fittings
Steel type(s)	Pipes for Pressure Systems Austenitic and Ferritic-Austenitic Steel Pipes Pipes for Low-Temperature Service Boiler and Superheater Tubes
Process	Cold Forming Process
Dimensions	max. Ø323.9 x 25 mm
Welding Method	not applicable
Remarks	see Particulars of the approval

Manufacturer(s) approved by this certificate is/are accepted to deliver according to DNV GL, DNV and GL rules.

This Certificate is valid until **2019-02-14**.

Issued at **Hamburg** on **2016-02-15**

DNV GL local station: **Vienna**

Approval Engineer: **Oliver Krömer**



for **DNV GL**
Digitally Signed By: Wildhagen, Christian
Location: DNV GL Hamburg, Germany
Signing Date: 2016-02-16, on behalf of

Thorsten Lohmann
Head of Section

Particulars of the approval

Connecting Elements and Fittings:

Grade	Product	Supply Condition	Wall Thickness [mm], max.	Diameter [mm], max.
P235TR2 acc. to EN 10253-2	RF	N	25	323.9
P265TR2 acc. to EN 10253-2	RF	N	25	323.9
P235GH acc. to EN 10253-2	RF	N	25	323.9
P265GH acc. to EN 10253-2	RF	N	25	323.9
16Mo3 acc. to EN 10253-2	RF	N	25	323.9
10CrMo5-5 acc. to EN 10253-2	RF	N+T, Q+T	25	323.9
13CrMo4-5 acc. to EN 10253-2	RF	N+T, Q+T	25	323.9
10CrMo9-10 acc. to EN 10253-2	RF	N+T, Q+T	25	323.9
P355N acc. to EN 10253-2	RF	N	25	323.9
P355NH acc. to EN 10253-2	RF	N	25	323.9
P355NL1 acc. to EN 10253-2	RF	N	25	323.9
P215NL acc. to EN 10253-2	RF	N	25	323.9
P265NL acc. to EN 10253-2	RF	N	25	323.9
1,4301 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4306 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4307 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4401 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4404 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4435 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4436 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4541 acc. to EN 10253-4	RF-A	S+Q	25	323.9
1,4571 acc. to EN 10253-4	RF-A	S+Q	25	323.9
WPA acc. to ASTM A234	RF	N	25	323.9
WPB acc. to ASTM A234	RF	N	25	323.9
WPC acc. to ASTM A234	RF	N	25	323.9
WP1 acc. to ASTM A234	RF	N	25	323.9
WP11 acc. to ASTM A234	RF	N+T, Q+T	25	323.9
WP12 acc. to ASTM A234	RF	N+T, Q+T	25	323.9

Job Id: **263.11-005390-1**
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Grade	Product	Supply Condition	Wall Thickness [mm], max.	Diameter [mm], max.
WP22 acc. to ASTM A234	RF	N+T, Q+T	25	323.9
WPHY42 acc. to ASTM A860	RF	N	25	323.9
WPHY46 acc. to ASTM A860	RF	N	25	323.9
WPHY52 acc. to ASTM A860	RF	N	25	323.9
WPL6 acc. to ASTM A420	RF	N	25	323.9
WP304 acc. to ASTM A403	RF-A	S+Q	25	323.9
WP304L acc. to ASTM A403	RF-A	S+Q	25	323.9
WP316 acc. to ASTM A403	RF-A	S+Q	25	323.9
WP316L acc. to ASTM A403	RF-A	S+Q	25	323.9
WP321 acc. to ASTM A403	RF-A	S+Q	25	323.9
WP347 acc. to ASTM A403	RF-A	S+Q	25	323.9

RF: pipe fittings -A: austenitic stainless steels N: normalized N+T: normalized + tempered
Q+T: quenched + tempered S+Q: solution annealed + quenched