

CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS No. FAB167922XG

This is to certify that the manufacture of the product identified below is in compliance with the applicable requirements of the RINA Rules for the Approval of Manufacturers of Materials.

Description Steel plates for boilers, pressure vessels and low temperature

service

Type Carbon and Carbon-Manganese, Austenitic stainless,

Austenitic-ferritic (duplex) stainless

Nickel alloy. Manufacturing method hot and cold forming.

Manufacturer König + Co. GmbH

Place of manufacture Obere Industriestraße 24-26

D-57250 Netphen GERMANY

Reference standards RINA Rules for the approval of manufacturers of materials

Issued in HAMBURG on July 1, 2022. This Certificate is valid until June 30, 2027

RINA Services S.p.A.

Matthaios Chrysovalantis Symeonidis

M. Symeonidis

This certificate consists of this page and 1 enclosure



RINA Services S.p.A. Via Corsica, 12 - 16128 Genova Tel +39 010 53851 Fax +39 010 5351000



FAB167922XG CERTIFICATE OF APPROVAL OF MANUFACTURERS OF MATERIALS

The Approval is valid for the following steel types and manufacturing process.

Steel type			Manufacturing process			
Type	Group acc. to ISO 15608	Examplary	Cold forming without subsequent heat treatment	Hot forming without subsequent heat treatment	Cold forming followed by heat treatment	Hot forming followed by heat treatment
C and C-Mn grades	1.1	P265GH, P275NH, P275NL1, P295GH, 16Mo3	×	×	×	×
	1.2	\$35512, P355GH, P355NH, P355NL1, P355NL2	×	×	×	×
	1.3	P460NH,P460NL1,P460NL2			×	×
	3.1	\$460Q,\$690QL			×	×
Alloy steel grades, e.g. Ni- alloy	5.1	13CrMo4-5			×	×
	5.2	10CrMo9-10, 12CrMo9-10, 1.7380	WA THE STATE OF		x	×
	6.4	1.4903			×	×
	9.2	12Ni14			×	ж
	9.3	X8Ni9	x		×	x
	41	2.4068			×	x
	43	2.4360, 2.4600, 2.4602, 2.4605, 2.4610			×	x
Austenitic steel greades	8.1	1.4301, 1.4306, 1.4307, 1.4404, 1.4435, 1.4541, 1.4571, 1.4311, 1.4315, 304L/304LN, 316L/316LN, 321, 347	×	×	х	×
	8.2	1.4465, 1.4529, 1.4547, 1.4539, 1.4876H	×	×	×	×
Duplex steel	10.1	1.4462, 1.4362, 1.4162, \$31803, \$32205			×	×
	10.2	1.4410			х	×

Remarks:

Welded repairs to the above mentioned products are not permitted.

General conditions for the approval:

The approval is granted on condition that the RINA Rules for the approval, manufacture, testing and certification of materials are complied with in all respects.

RINA is to be notified of any change of materials, manufacturing process, quality control routines that may affect the validity of this certificate.



RINA Services S.p.A. Via Corsica, 12 - 16128 Genova Tel +39 010 53851 Fax +39 010 5351000

