



**CERTIFICATE OF APPROVAL OF MANUFACTURERS OF
MATERIALS
No. FAB021616XG**

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.

<i>Description</i>	Pipes and fittings
<i>Type</i>	Pressfitting System in Stainless and Carbon Steel
<i>Manufacturer</i>	Sanha Gmbh & Co. KG
<i>Place of manufacture</i>	Hauptstraße 76 01909 Ot Schmiedefeld, Großharthau Germany
<i>Reference standards</i>	RINA Rules for the approval of manufacturers of materials

Issued in **HAMBURG** on **March 4, 2016**. This Certificate is valid until **January 28, 2021**



H. Brunk
Dr. H. Brunk
H. Brunk

RINA Services S.p.A.
Henning Brunk

This certificate consists of this page and 1 enclosure

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Presfitting System in Stainless and Carbon Steel

APPROVAL CONDITIONS

Series	Presfitting System in Stainless Steel	Presfitting System in Carbon Steel
	material	material
Water	NiroSan Pressfittings serie 9000 EPDM (1)	SANHA-Therm Pressfittings serie 24000, galvanized EPDM (1)
Gas	NiroSan Gas Pressfittings serie 17000 HNBR (2)	
Industry	NiroSan Industry Pressfittings serie 18000 FKM (3)	SANHA-Therm Industry Pressfittings serie 28000, galvanized FKM (3)
Technical Data		
Fittings	up to pipe outside diameter 108 [mm] made of stainless steel 1.4404 (316L)	up to pipe outside diameter 108 [mm] made of carbon steel 1.0034
Pipes	up to pipe outside diameter 108 [mm] made of stainless steel look below	up to pipe outside diameter 108 [mm] made of carbon steel 1.0034
	NiroSan pipe serie 9000 1.4404 (316L)	SANHA Therm Rohr Serie 24000 (outside galvanized) 1.0034
	NiroSan-ECO pipe serie 9600 1.4404 (316L)	SANHA Therm DZ Rohr Serie 24000-DZ (outside and inner side galvanized) 1.0034
	NiroTherm pipe serie 9100 1.4301 (304)	
NiroSan F pipe serie 9700 1.4521 (444)		
maximim allowable working pressure		
	16 bar	16 bar
EPDM (1)	EPDM -30[°C] up to 120 [°C] (140 [°C] peak)	
HNBR (2)	HNBR -20[°C] up to 70 [°C] (100 [°C] peak)	
FKM (3)	FKM -20[°C] up to 200 [°C] (250 [°C] peak)	

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.

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