

# Technical Submittal

## NiroSan® Industry (18000)

**SANHA®**  
a perfect fit



### Product Group Description

The piping system consists of premium NiroSan® Industry stainless steel press fittings with an FKM (Fluorelastomer) sealing ring and NiroSan® / NiroSan® ECO / NiroSan® F stainless steel system pipes according to EN 10312.

All NiroSan® Industry press fittings are made from the premium stainless steel type 1.4404 / AISI 316L (for pressing components) and 1.4408 (for precision cast threaded stainless steel components). The material 1.4404 contains at least 2.3 % molybdenum, yet less carbon than the conventional type 1.4401. For this reason material no 1.4404/316L is a superior material with higher corrosion resistance than standard stainless steels.

### Marking

**Marking on the fitting:** Manufacturer & dimension, approval marking, HT-marking in red

**Marking on the packaging:** Logo manufacturer (SANHA®), Approval markings, quantity, system name (NiroSan® Industry), Product type (e.g. elbow)

### Sealing Elements

FKM Red (Fluorelastomer)

Notice: Depending on the operation period and media temperature, the press fitting system's sealing materials may undergo thermal aging. The sealing material undergoes thermal aging more quickly at higher media temperatures. Nevertheless, the sealing ring have a design life of at least 50 years. This can also be substantiated with tests that confirm this.

When dealing with unique operating circumstances, such as industrial heat recovery systems, it is important to compare the press fitting system's specifications with those of the appliance manufacturer. Please get in touch with SANHA® if you have any questions about the proper material selection or would like to use the press fitting system outside of the specified application regions.

### Dimensions

All dimensions from 15 to 108 mm  
(Up to 168 mm on request).

### Tools

NiroSan® Industry can be pressed up to 54 mm with SA, M and V original profile. Furthermore, dimensions larger than 54 mm can be pressed with SA & M original profile. For reason of guarantee, the installer always has to respect the instructions of the manufacturer regarding the use of press tools and press machines; Especially the instructions for the use and combination of tools and machines of different manufacturers. Finally, a common use of the press tools and press machines of different manufacturers is strictly forbidden without the authorization of the respective manufacturers.

The tool compatibility does not apply to special applications, such as fire extinguishing systems and industrial applications.

### Areas of applications

- | Heating
- | Rainwater
- | Solar
- | Compressed air
- | Fire Extinguishing systems (DIN14462, wet)
- | Sprinklers (VdS CEA 4001, wet)
- | Cooling water
- | Ship building
- | Technical gases
- | Saturated steam
- | District heating

Any use of the system for media or application areas not listed above requires approval from SANHA®! The product information, available online or in print, contains comprehensive details regarding uses, limitations, and national regulations and guidelines.

### Standard and approvals

Press fittings suitable for NiroSan, NiroSan ECO and NiroSan F stainless steel pipes in accordance with EN 10312 and DVGW Worksheet GW 392.

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### Operating conditions

The press fitting system NiroSan® Industry can be used with the following operating conditions:

- | Water and aqueous solutions and technical gases (non-toxic, non-flammable up to 108 mm)
- | Operating pressure: 16 bar
- | Technical gases: 16 bar
- | Operating temperature with FKM: -20°C - +160°C
- | Type of thread: Pipe thread: R/Rp thread according to EN 10226,
- | Fastening thread: G thread according to ISO 228

### Press fitting material

NiroSan® Industry fittings are made of stainless steel (material number 316L/1.4404) with a minimum molybdenum content of 2.3 % according to the standard EN 10352.

### Permitted pipes

For the installation of NiroSan® Industry fittings the use of stainless steel pipes NiroSan®, NiroSan® ECO and NiroSan® F stainless steel pipes are recommended. The pipes are TIG-welded and are produced according to the standard EN 10312. (Table 1, series 1 and Table 2, series 2)

National standards and guidelines relevant to the application must be observed. If other dimensions are needed, please do not hesitate to contact us at [technik@sanha.com](mailto:technik@sanha.com)

### Certificates

These certificates can be found at [www.sanha.com](http://www.sanha.com):

Country	Certifier
Czech Republic	SZU
Denmark	PUFD
Germany	DNV GL
Germany	DIBt
Germany	TUV
Germany	VdS
Italy	TIFQ
Poland	PZH
Slovakia	TSU
Ukraine	UA
Global	ABS
Global	FM Global
Global	Lloyd's