# Safe - reliable - flexible





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## **Standard solutions for industrial applications**

Safe piping is indispensable for the transport of all media, be it in refineries, shipbuilding, the chemical or automotive industry or power generation. Only with a reliable and economical pipe system can reliable production, heating, energy supply and generation, distribution of fluids such as fuels and oils or safe drinking water supply be ensured at all times. The quality of the pipework is very often overlooked in design or procurement, with emphasis placed heavily on the plant equipment required within the pipeline.

#### A system, not a patchwork

SANHA offers a range of tried and tested solutions as a system for precisely this purpose. All components of the pipework – from the flange to the elbow to the pipe – are not only optimally matched to each other in our own ISO-certified plants, but are also tested and certified in the system.

In addition to industrial stainless steel tubes, our extensive industrial programme includes a wide range of standard fittings, special parts made of copper and copper alloys, special system fittings for gas-free or silicone-free (LABS-free) applications as well as various types of stainless steel or lead-free silicon bronze fittings. Depending on the operating conditions (pressure, temperature...) sealing rings made of EPDM, FKM or HNBR are available. Industrial companies can thus implement a solution at any time that is tailored to individual requirements and complies with all safety standards.

We can not only offer the most suitable material for each application but can also fall back on all common production techniques from machining to drop forging, hydroforming, cold forming or assembly. It goes without saying that it is also possible to neck out or flange the moulded parts and this offers additional application possibilities.

#### **Quality over Quantity**

SANHA® manufactures all stainless steel pipes using the TIG welding process, which has proven its worth for decades. This process is also characterized by a particularly uniform microstructure in the weld seam area. Depending on the requirements, all tubes can be eddy current or X-ray tested or examined with a thermal transfer camera.

Depending on the application, SANHA® industrial tubes made of stainless steel can be supplied (bright) annealed, smoothed, brushed, externally ground or pickled. The necessary manufacturing competence and flexibility are available as well as planning, control and comprehensive quality control.



# Success needs responsibility

#### Advantages at a glance

- Many areas of application, such as oil lines, brine systems, control and service air, fresh and potable water, fire extinguishing systems, cooling and heating water circuits
- Comprehensive certification (DNV-GL, ABS, Bureau Veritas, Lloyds Register, RINA)
- Easy and cost-saving installation
- Secure and durable, tried and tested press connection technology
- All commonly used materials available
- Wide range of products & excellent service



With more than 50 years of experience, SANHA is now one of Europe's leading manufacturers of pipeline systems and has been a family-owned enterprise since its establishment in 1964. Their product range comprises around 8,500 products made of copper and copper alloys, stainless steel, carbon steel and plastic, which are used in the areas of drinking water, heating, gas, solar energy, industry, fire protection, waste water and many other applications. The company has four production sites in Europe, all of which maintain the highest standards of quality. Practical, ready-to-install and reliable premium products, the highest quality standards, comprehensive service and a clear commitment to the three-stage sales channel through wholesale and retail partners are our success factors.

#### **Facts and figures**

- Founded in 1964
- Owner-operated family enterprise
- 8,500 different products
- More than 70% in-house production
- Four production sites, including own pipe factory
- Sales activities in 40 countries
- € 100 million annual turnover
- Approx 650 employees
- Many patents and trademarks
- Fully certified in accordance with ISO 9001: 2008
- More than 200 international product certifications
- Three fully equipped training centres

## Many years of experience with industrial applications

SANHA has a lot of experience when it comes to solutions for industry. It does not matter whether you come from the building services sector, the food industry, the chemical industry or any other sector. And we can prove this experience – just give us a call at +49 163 7925144!

#### Fixed water extinguishing systems

In the event of a fire, human lives are at stake. Even if not, valuable property is damaged, often beyond repair. The proper functioning of the respective water extinguishing system is therefore of paramount importance. Press systems from SANHA are suitable for the connection of stationary water extinguishing systems.

System pipes and press fittings from the extensive SANHA product range enable an individual adjustment. Depending on the respective requirements and regulations, certified product lines are available.

#### Industrial compressed air

Compressed air is used in almost all industrial sectors: From the food and automobile to the chemical industry, it is hard to imagine life without it.

SANHA offers a range of tried and tested, reliable solutions for all requirements of ISO 8573-1:2010E. Our press fittings and pipes always form a certified and optimally matched system "made from one hand" – this simplifies the entire process from the consultation to the installation to the warranty significantly and thus contributes to saving time and costs.





## Solutions for industrial gases

Whether oxygen, argon, synthesis gas, hydrogen or "only" natural gas – industrial plant operators can rely on the safe and economical transport of all kinds of gases.

SANHA offers all branches of industry matching solutions. Our press systems are an economical and reliable alternative to conventional welded pipes and have a corresponding TÜV certificate.



	LABS-free (silicon-free) applications	Industrial gases & fuels	Cooling & refrigeration	Ship building & maritime platforms	Stationary water extinguishing / sprinkler systems*	Industrial compressed air**
NiroSan <sup>® 1)</sup>		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>	٥	6
TSF <sup>1]</sup>	<ul> <li>Image: A set of the set of the</li></ul>					6
Gas 1)		<ul> <li>✓</li> </ul>		<ul> <li>✓</li> </ul>		
SF 2]	<ul> <li>Image: A set of the set of the</li></ul>					
Industry				<ul> <li>✓</li> </ul>	<u>ه ۲</u>	
NiroTherm®		<ul> <li>✓</li> </ul>				6
SF	<ul> <li>Image: A set of the set of the</li></ul>					
Industry						6
SANHA®-Therm				<ul> <li>✓</li> </ul>	٥	€ ۲
SF	✓					
Industry				<ul> <li>✓</li> </ul>		<b></b>
PURAPRESS® 3]					٥	6
3fit®-Press						6
SANHA®-Press 3]						6
Gas		<ul> <li>✓</li> </ul>				
SANHA RefHP			<ul> <li>✓</li> </ul>			
Serie SA			<ul> <li>✓</li> </ul>			

\* Gases acc. to DVGW G 260 and DVGW G 262 \*\* Extinguishing systems acc. to DIN 14462

1) Special LABS-free version available 2) Standard versionis LABS-free 3) Only Stationary water extinguishing

■ Closed system O Wet systems
 ♦ Oil Content (up to 25 mg/m<sup>3</sup>)

## Typical applications in the industry

The extensive SANHA® product range offers a number of proven, reliable solutions for all requirements of ISO 8573-1:2010E. Our press fittings and pipes always form an tested and optimally matched system from one supplier - this simplifies the entire process from consulting to installation and warranty and thus helps save time and money. Depending on the respective demands and regulations, we can provide our certified product series NiroSan®, SANHA® Press | PURAPRESS® and SANHA®-Therm as well as high-pressure solder fittings (130 bar) for refrigeration.

#### Stainless steel

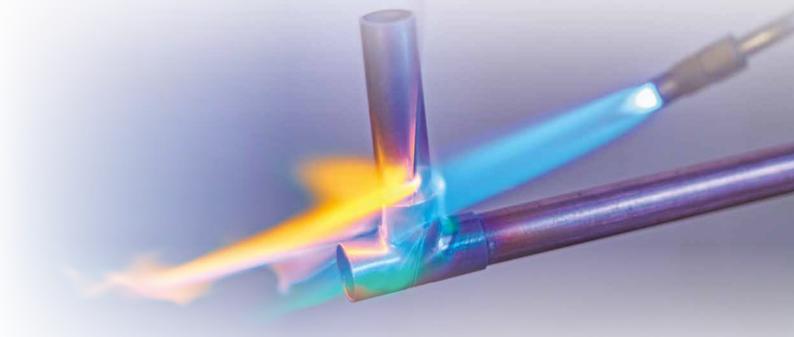
The premium user-friendly combinations of our various **NiroSan®** pipes in accordance with BS EN 10312 and NiroSan® system fittings let you fulfill special requirements and achieve economical solutions with the highest corrosion resistance, whether for potable water, heating, gases or in industry and shipbuilding.

The fittings and pipes are produced from the material 1.4301 (AISI 304). Due to the well-known corrosion resistance of stainless steel, **NiroTherm®** offers installers a real alternative compared to conventional steels when it comes to closed systems in humid atmospheres such as within the screed. Since it needs considerably less isolation against humidity, the installation is faster and labour costs accordingly lower.

#### Carbon steel

The **SANHA®-Therm** installation system consists of tried and trusted SANHA®-Therm press fittings from carbon steel with a black sealing ring from EPDM (ethylene propylene diene monomer) and SANHA®-Therm carbon steel pipes according to EN 10305-3. The carefully manufactured installation system and its components offer an economically attractive solution for closed heating installations. At the same time, SANHA®-Therm ist especially well suited for pressurised air and fire extinguishing systems according to EN 10346 (DZ version). The variant "Contiflo" also offers galvanized system pipes which are characterized by being easy to bend. Our C-steel system is furthermore available as a LABS\*-/silicone free version (series 27000).





#### Lead-free Silicon bronze

**PURAPRESS®** are unique modern premium transition press fittings for copper and stainless steel pipes made from completely leadfree silicon bronze CuSi. They are tested and approved for reliable connections with copper pipes according to EN 1057 and NiroSan® stainless steel system tubes and certified by all relevant national and international certification bodies. Press fittings of the PURAPRESS series are manufactured from the completely lead-free premium material silicon bronze CuSi and therefore an excellent solution for nonlead contaminated drinking water installations.

**3fit®-Press** system fittings made of leadfree silicon bronze CuSi for use in a system with MultiFit®-Flex and MultiFit®-PEX multilayer plastic pipes by SANHA according to DVGW W 542 (for drinking water and heating installations) as well as copper pipes. The 3fit®-Press system is approved according to DVGW W 534 and WRAS.

#### Copper

**Classic copper: SANHA®-Press** System press fittings from copper for copper pipes according to EN 1057 for drinking water and heating installations. SANHA®-Press system fittings are well-known for outstanding quality, easy to work with and offer the right solution for a wide range of applications, whether they are residential or office buildings. They can be ideally combined with our unique PURAPRESS series 8000 made of completely lead-free copper alloy silicon bronze.

**Copper – Iron alloy: SANHA RefHP** In air conditioning and refrigeration technology environmentally friendly solutions are becoming more and more important. Optimum results are obtained by an increase in efficiency and the use of ecologically safe refrigerants such as  $CO_2$  (R744) for the transcritical part with higher operating pressures. To meet the desired pressures of up to 130 bar, we recommend our RefHP Series as the ideal solution.

**Copper and red brass: SA** Solder and transition fittings in copper and copper alloy for copper pipes according to EN 1057. Tested according to BE EN 1254, BS 864-2, and BSI certified to BS 864-2. The SANHA capillary solder fittings are manufactured from copper, Cu-DHP, CW024A (moulded parts) and copper alloy CC499K (threaded parts, cast parts) and fulfil the requirements of BS EN 1254. Certified according to DVGW GW 8.





## With safety on your side



### SANHA offers genuine advantages

As a family enterprise for over 50 years we have been observing a simple principle: every pipe and every fitting must give the customer added value in terms of safety and practical use at a fair price. This is our mission and, at the same time, the best recommendation from our satisfied customers.

As a specialist for pipeline systems we offer a unique breadth and depth of products for all of the usual connection techniques and applications from a one stop shop. Tried and tested installation techniques are as much a part of our program as practice-oriented innovations.

#### And that's why: SANHA. Always a perfect fit.

#### Your advantages:

Always fits At SANHA, the focus is on the installer, whose job we want to make as easy as possible.

For this reason, all SANHA products offer extensive advantages that enable easy and convenient workmanship.

**Large product range**SANHA offers a wide material, product and dimension range, multiple connection methods, with significant expertise and experience – all from a one stop shop. SANHA, the pipeline specialist.

**Guaranteed safety** SANHA has all the important approvals, certifications and warranties, backed up by WRAS and BSI, ensuring you are always on the safe side.

**Nationwide technical service** SANHA is pleased to offer a wide range of services from installation training, technical seminars, design advice, specifications and on site support as and when required.

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