



Viega Sanpress Inox

Stainless in steel and usage.

viega

The global leader in plumbing,
heating and pipe joining systems.



Viega. A better idea!

Some things last. Even after more than 110 years. At Viega, innovation and entrepreneurial vision are now more alive than ever before – these success factors date back to the company founders. Today, the Viega Group employs more than 3,000 staff worldwide. Products are manufactured at four locations in Germany, and special solutions for the North American market are made in McPherson/USA. The company specialises in installation technology – the constant driver of growth.




Viega has a worldwide reputation for **innovations that set standards**. Take for example press connection technology, the innovative solution for copper pipe systems. Or the introduction of the Smart Connect Feature for visible inspection reliability in every press connector. With Viega, safety is not just guaranteed upon installation. Viega also offers intelligent solutions for the global challenge of operating hygienic drinking water systems.



“Quality made in Germany” is taken seriously at Viega. Computer-controlled, automated production delivers absolutely reliable results. Each production process is monitored by up to five quality checks that guarantee maximum safety. The result: over 17,000 products for almost every type of application. The equation of quality and flexibility impresses planners, architects, installers and builders around the world. Be it residential apartments, hotels, hospitals, sports areas or production plants – Viega systems are proven for all buildings and applications.



The deciding factor in piping systems: the content.



The high-grade stainless steel system Viega Sanpress Inox encompasses a comprehensive installation spectrum for building services and industry. Available in the dimensions 15 to 108 mm, it provides precise solutions for almost every challenge.

Sanpress Inox

The stainless steel complete system for high-quality and safe piping systems

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Sanpress Inox

The complete system that includes both ease of installation and reliability.



Sanpress Inox – Stainless steel system

Sanpress Inox boasts all the advantages of innovative Viega technology. The system uses reliable Viega press technology and ensures the highest degree of assembly-friendliness even in places that are hard to access. A wide product range for drinking water, gas and industrial installations offers an enormous number of possible applications. Additionally, the ready availability of the parts and their quality facilitate the punctual and professional completion of all jobs.

Pressing with safety factor (2)

The superiority of press connecting is not only due to the fact that assembly – during which the jaws of the pressgun grip the connector – is precise, durable and takes place within seconds, but also to its utter reliability. Since the pipes are cold-pressed, there is no risk of fire as is the case with welding or soldering. For this reason, Sanpress is suitable for refurbishment and extensions. As with all Viega press systems, Sanpress Inox comes with another safety feature: Viega Smart Connect Feature.

Function of Smart Connect Feature (1)

Viega's innovative Smart Connect Feature is a small channel on the bead of the press connector that ensures a connection leaks if unpressed. The medium used (water or inert gases) can clearly be seen to emerge and the pressure in the system drops when a central pressure test is carried out. Inadvertently unpressed connections are made visible. The "patented safety" will also take the pressure off you and save you the usually laborious visual inspection of the individual connections.

Incidentally: When the connector is properly pressed using a Viega Pressgun, the channel is closed and rendered ineffective. The connection is sealed and secure.

Central leakage test

Viega ensures that the watertightness of a complete installation can be centrally and conveniently tested using a manometer, as long as the installation is equipped throughout with Viega Smart Connect Feature. The central leak test thus offers even more reliability and convenience, because it eliminates the necessity of visually inspecting each individual press connection. Thanks to Smart Connect Feature, all the connectors are forced to leak. If connections are accidentally left unpressed, the medium escapes and the pressure drops on the gauge.

However, dry leakage and load testing using compressed air is also possible. It also provides hygienic advantages, as it prevents water being present in the system between the completion of the installation and its commissioning.

Sealing element and tube guide for additional safety

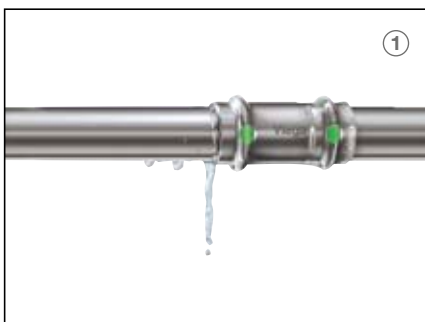
Every Sanpress Inox connector is equipped with a high-quality sealing element.

The cylindrical pipe guide stops the jamming and wedging of the pipes in the connector and effectively prevents damage to the seal. Secure seating of the fitting is guaranteed and the work is made much easier.

Guaranteed hygiene

It is especially important in drinking and industrial water systems that all components be undamaged and possible contamination of the pipes excluded. Sanpress Inox products arrive at your premises in the same condition they left our factory: clean and undamaged.

All pipes are delivered with protective plugs and fittings supplied in protective bags, to exclude any possibility of contamination. In addition protective caps are available for purchase, which allows pipe ends to be covered during partial installation.



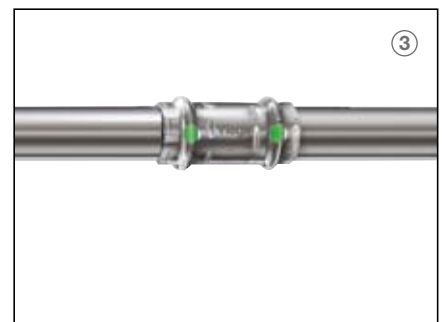
Unpressed

Identify an unpressed connection during pressure testing when water flows past the sealing element.



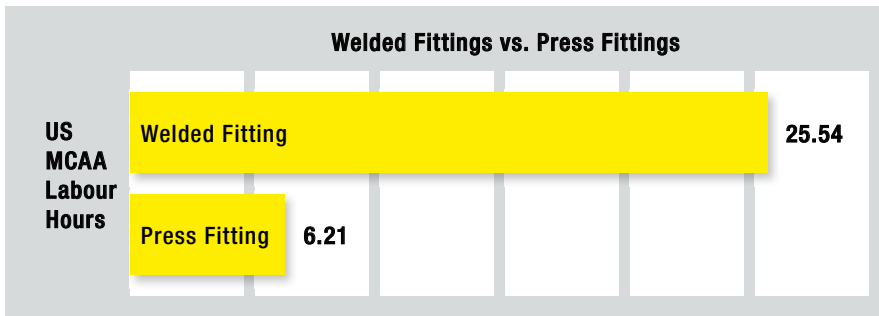
Pressing

Upon identification, use the press tool to press the fitting, making a permanent leak-proof connection.



Pressed

Sanpress Inox connections are fast, flameless and reliable.



① Note: MCAA labor calculations were utilized in the labor estimate

Time-saving on many levels (1)

Sanpress Inox not only stands for the highest degree of reliability, but also provides you with maximum efficiency. The cylindrical pipe installation simplifies the assembly of the system and minimises potential sources of error right from the start. Pressing takes place simultaneously in front of, behind and on the fitting. So not only are three steps reduced to one, but the pressing itself takes only a few seconds. In addition, Smart Connect Feature eliminates the need for a time-consuming visual inspection of each individual connection while also ensuring maximum safety and maximum efficiency.

The following practical example shows how much time is saved with Viega cold pressing technology compared to the conventional soldering method. Imagine a sanitary installation with five WCs, a urinal, four sinks and a water heater. Fifty-three connections with sizes from 15 mm to 28 mm are required for the installation. The calculation of working hours, with the help of the MCAA calculation, shows that press technology provides a significant time gain over welding. For the installer, this means less work and a higher level of profitability.

A comprehensive range of products (2)

For drinking-water installations, Sanpress Inox offers a comprehensive product range. All parts and components are available in sizes from 15 mm to 108 mm. Sanpress Inox is therefore particularly suitable for use in industrial applications.

Pipe dimension series Dimensions/Volumes

②

d x s (mm)	Volume per running metre (litre/m)	Volume increase (%)
15 x 1.0	0.13	
18 x 1.0	0.20	53
22 x 1.2	0.30	50
28 x 1.2	0.51	70
35 x 1.5	0.80	57
42 x 1.5	1.19	49
54 x 1.5	2.04	71
64 x 2.0	2.82	38
76.1 x 2.0	4.08	45
88.9 x 2.0	5.66	39
108 x 2.0	8.49	50

Dimensions in metric (new dimension)

The Sanpress Inox system is exclusively available in metric dimensions.



They stay sealed – which takes the pressure off you. The sealing elements of the Sanpress Inox press connectors.

Withstands all pressures

The sealing element of a press connector is primarily responsible for a reliable sealed connection. Only a perfectly matched elastomer, which has been adjusted to the medium and the pressure conditions in the piping system, can ensure reliability and the possibility of long-term use. Sanpress Inox offers the right solution for every medium. Two different elastomers can be employed in the press connectors: the EPDM seal, used mainly in water installations, or the HNBR seal for more demanding applications involving gas or heating oil.

The EPDM sealing element

Operating temperatures: -18°C to 110°C. The EPDM sealing elements in Viega press connectors are ideal for use in drinking-water, heating, sprinkler or compressed-air-line systems and are remarkable for their good material properties. EPDM, ethylene-propylene-diene rubber, is artificially produced and peroxide cured. The result is an excellent all-purpose elastomer, suitable for a variety of application areas. The EPDM sealing element can be recognised by its glossy black colour.

HNBR sealing element

Operating temperatures: -40°C to 70°C. The HNBR sealing elements from Viega are primarily used in gas installations and are suitable for natural gas, propane, mixed gases or compounds. They can also be used in heating oil systems. The unique material properties are increasingly in demand from the automotive industry, in particular. Hydrogenated Nitrile Butadiene Rubber, or HNBR, is primarily used in engine seals or fuel lines. The HNBR sealing element can be recognised by its yellow colour.

**Viega Service:
Quality that starts with the
piping system and does
not stop short at consultation.**



An excerpt from the material recommendation

If you have any questions, please contact the Viega Service Team.

①	Technical gases							Liquid media		
	Compressed air	Biogas	Oxygen	Nitrogen	Noble gas Argon	Acetylene	Methane	Heating oil	Biogas	Diesel fuel
Sanpress Inox (stainless steel)	x		x	x	x	x				
Sanpress Inox G (stainless steel)	x	x	x	x	x	x	x	x	x	x

Constant quality controls make for reliability

Only high-quality products can guarantee operating reliability in industry and keep down times due to repairs to a minimum. At Viega quality begins in the development phase. For this reason Viega subjects all components to the strictest quality tests, testing their resilience and longevity under realistic conditions.

Always ready to help: Viega Service
Viega takes pride not only in the high quality of its products, but also in its comprehensive customer service. Every project can be supervised individually on location by Viega application specialists. Clear recommendations regarding materials, exhaustive laboratory tests, training courses and expert technical consulting complete the range. Thus you can rely 100% on encountering the usual Viega standard of quality in service matters as well.

Proven reliability
Every branch of industry is obliged to observe certain standards. It goes without saying that Viega not only observe but also exceed the relevant valid standards. Whether in the automobile industry, shipbuilding or chemicals, Viega fulfils and exceeds national and international requirements. For example, the high-quality Sanpress Inox system exceeds the prevailing Watermark norm with over 100 additional quality checks throughout the manufacture process for each batch of fittings.



Viega Laboratories determine the right material (1)

In the selection and installation of suitable materials, dimensions and systems Viega leaves nothing to chance: its own laboratories develop customised recommendations with due regard for the relevant operating conditions, such as pressure, temperature and media concentration. It also provides remote support by phone: 1800 484 342 or ausupport@viega.com.

High-grade steel 1.4401 (316) – Stainless austenitic chromium nickel molybdenum steel

High-grade steel 1.4401 is a stainless and acid-proof steel which, because of its molybdenum content, is particularly resistant to high-chloride media and non-oxidising acids. In its delivered condition 1.4401 is absolutely resistant to intercrystalline corrosion. In its welded condition, however, the surface structure of the high-grade steel loses its resistance to intercrystalline corrosion.

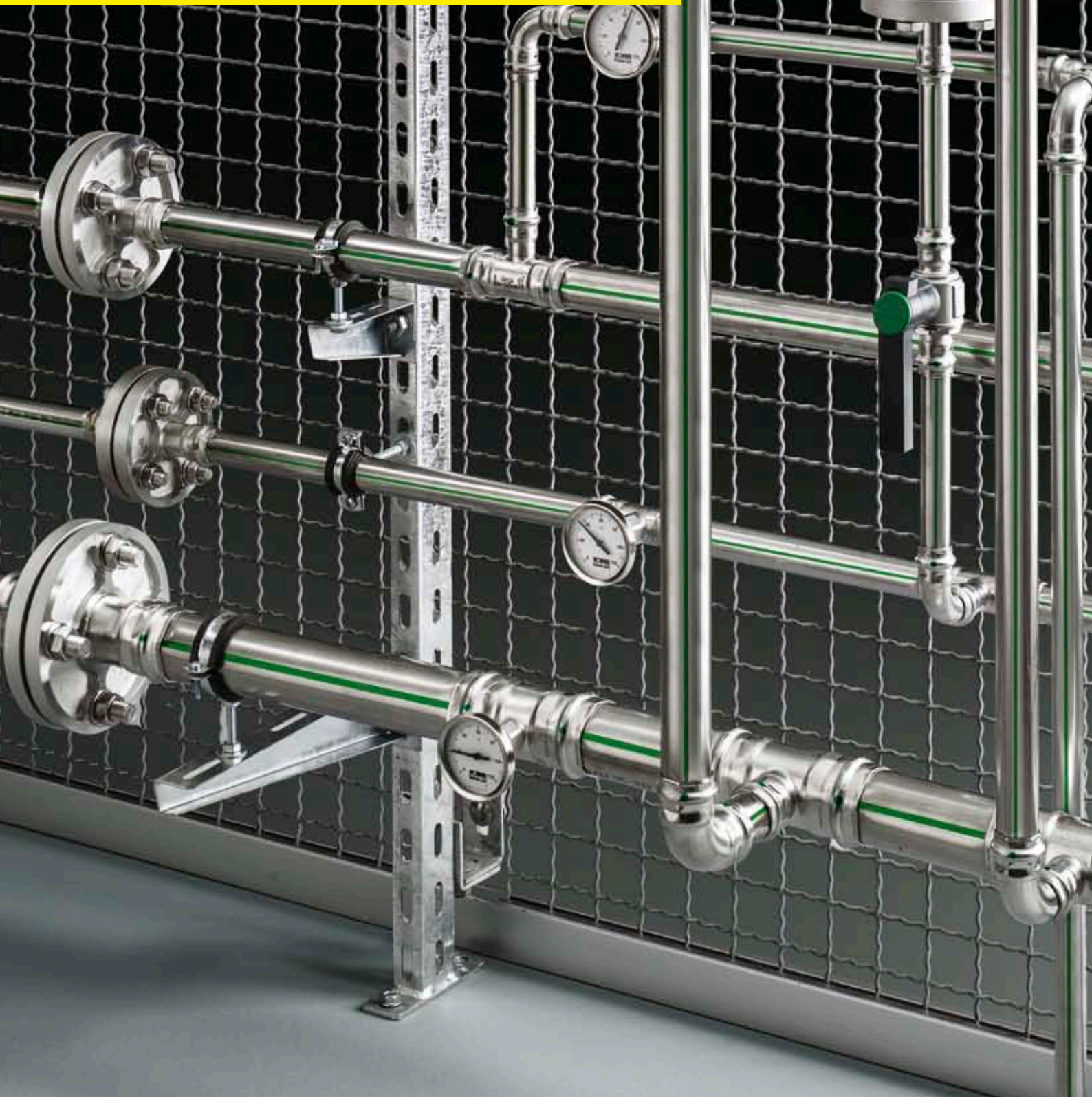
For this reason it is recommended that the piping systems should only be pressed when cold.

High-grade steel 1.4521 (444) – Stainless ferritic chromium steel

High-grade steel 1.4521 is a real innovation in the use of high-grade steel pipes in drinking-water installations. The use of nickel-free chromium steel 1.4521 provides the same corrosion-resistance and application possibilities in the field of drinking water as nickel alloy material. However, it is more economical and the price is more stable.

Cooling circuits	Sprinkler systems	Fire protection	Drinking water	Process water	Special application	Heating and cooling
x	x	x	x	x	Shipbuilding	Cooling line
					x	x
x				x		

**Able to withstand any
pressure – even rising hygiene
requirements**



Viega in industrial use

It is especially important that the highest material quality requirements are fulfilled in industrial systems. Piping systems must be adapted to the corresponding medium – no matter whether it is gaseous or in liquid form.

Water is not just water

Whether partially or fully desalinated, softened or treated for chemical, procedural or other processes, water is not just water. In industrial and unit construction, different qualities of water are used. But no matter how much the media may vary, the Viega Sanpress Inox stainless system always offers an ideal solution.

Meeting the highest hygiene requirements

Sanpress Inox is not only capable of dealing with aggressive and abrasive fluids, it is Watermark-certified and ideal for use with the sensitive medium of drinking water, even under stringent conditions, as when drinking water is disinfected in accordance with the Drinking Water Ordinance.



Reliability under the toughest conditions

Where material and equipment are exposed to the most difficult conditions, Viega systems have given a particularly good account of themselves in industrial environments. Viega systems are used among other things in industrial cooling and process-water-piping systems as well as in compressed-air systems.

Sanpress Inox for plant engineering

Sanpress Inox and Sanpress Inox G satisfy all the requirements to be met by intelligent piping systems in industrial systems. They are ideal for the transportation of special media and remain stable throughout changes in the operating conditions in industrial plants. With high-quality sealing materials (EPDM and HNBR) in the Sanpress stainless steel press fittings, the systems can be relied on even when employed in supply systems and exhibit the highest operational and long-term safety in difficult practical applications.

Installation safety with technical gases

Sanpress Inox and Sanpress Inox G are preferred for the transportation of various gases in industrial applications. This shows the superiority of the systems even during installation: thanks to the cold pressing tools, they can be mounted quickly, efficiently, and most importantly, without any risk of fire or explosion, even in specially protected areas.

Stable compressed air installations

Compressed air is a compressible medium, which places high demands on the connection points of pipe and press connectors. All press connectors of the Sanpress Inox and Sanpress Inox G systems are therefore equipped with a special sealing element that meets these high material and quality requirements. With their outstanding material properties, Sanpress Inox ensures the permanent reliability of security systems.



The best thing that can happen to drinking water

When it comes to drinking water, hygiene, quality and safety are paramount. Sanpress Inox is the perfect system for all types of drinking-water installations. The pipes consist of high-alloyed, non-rusting stainless steel and meet all requirements for safe drinking water. Available in sizes from 15 mm to 108 mm, the system offers maximum flexibility and is the ideal solution for all drinking-water systems: from domestic installations to industrial scale plants. For Viega, drinking water hygiene does not just start with the installation of a piping system. A great deal of importance

is attached to hygiene during production. The pipes are then sealed with caps, fittings, and other components parts are packed in protective bags. This ensures that even during storage or transportation no contaminants enter the interior of the system components. The highest standards of hygiene are maintained at all times.

Safe beyond measure

Sanpress Inox is not only the first choice in traditional drinking-water installation. In areas with particularly high hygienic requirements, such as hospitals, pipelines must be more than just clean. Sanpress Inox allows all permissible disinfection procedures such as shock or basic disinfection to be carried out in accordance with the Drinking Water Ordinance. Thus safety and hygiene are paramount.

Drinking water – solutions for special cases

In addition to its wide standard range, Sanpress Inox offers a multitude of special solutions for problems connected with drinking water hygiene and the particular demands of drinking water installations. In this way, rarely used extraction points can be hygienically optimised or internal circulation implemented.

The Smartloop inliner technology from Viega

In general, circulating water passes through a separate pipe next to the hot water pipe. In the case of the one-pipe principle of the Smartloop technology from Viega, supply and return takes place in one pipe. An additional pipe is no longer required. This reduces both material and assembly costs.





Hygiene and Reliability: Sanpress Inox is in its element.

The Viega press-in nozzle incorporating the Venturi principle

Rarely used extraction points, such as sinks or heating fillers, carry a high risk of stagnation, which can affect the water quality of the entire system. To avoid this, a Viega press-in nozzle can be used in accordance with the Venturi principle as an economical and simple solution. In the dimensions of 22–64 mm they can be placed in the main distribution line between two T-pieces which branch off the loop and lead to the extraction point.

When water is removed, a small pressure difference is created behind the press-in nozzle, which replaces the entire volume of the ring piping system within 24 hours.

Water-rinse drinking-water connection (1)

Simple extraction points, which are rarely used, can be integrated using a T-piece with an internal thread directly into a ring or series system. This ensures hygienically optimised routing with regular water exchange.

Easytop system fittings (2)

Shut-off valves are essential to regulate the flow of water in the drinking water installation. High-quality Easytop slanted seat valves and Easytop ball valves can be easily and quickly integrated into any system.

**Viega pressing tools.
The technology that brings everything together.**



Practical note:

Sanpress Inox is dimensioned using the metric system. For this reason, only use Viega press jaws intended for metric systems.

Pressing tools from Viega prove themselves in the most difficult working conditions. They belong to the safest and most reliable in Europe and are certified by TÜV. Long service intervals make them more economical.

**Light, practical, fast:
Viega Pressgun 4B**

With the Pressgun 4B, you have a pressing tool of the highest standard. They are lighter, faster and easier to handle. The battery-operated machine 4B (18 V) has a highly modern lithium battery and is suitable for the sizes from 12 to 108 mm. The Pressgun 4B is compatible with all large format Viega jaws including the Viega Propress jaws for copper installations. Their pressing time of 3 seconds places them among the fastest of their kind. Unrivalled flexibility is achieved via the hinged press ring with the 180° rotatable press head for the sizes from 12 to 108 mm. Their exceptional price/performance ratio is also to be noticed in the minimal maintenance costs. A service check is not required until 32,000 pressings have been made.

**Small, light, flexible:
The new Viega Pressgun Picco**

The name says it all with this pressing tool range. The Viega Pressgun Picco for sizes up to 35 mm distinguishes itself through its small dimensions and its minimal basic weight of only 2.5 kg. It can also be used with the 180° rotatable press head. The practical Picco case comes with a pressing tool and 3 press jaws. There is room in the case for the storage of additional press jaws.



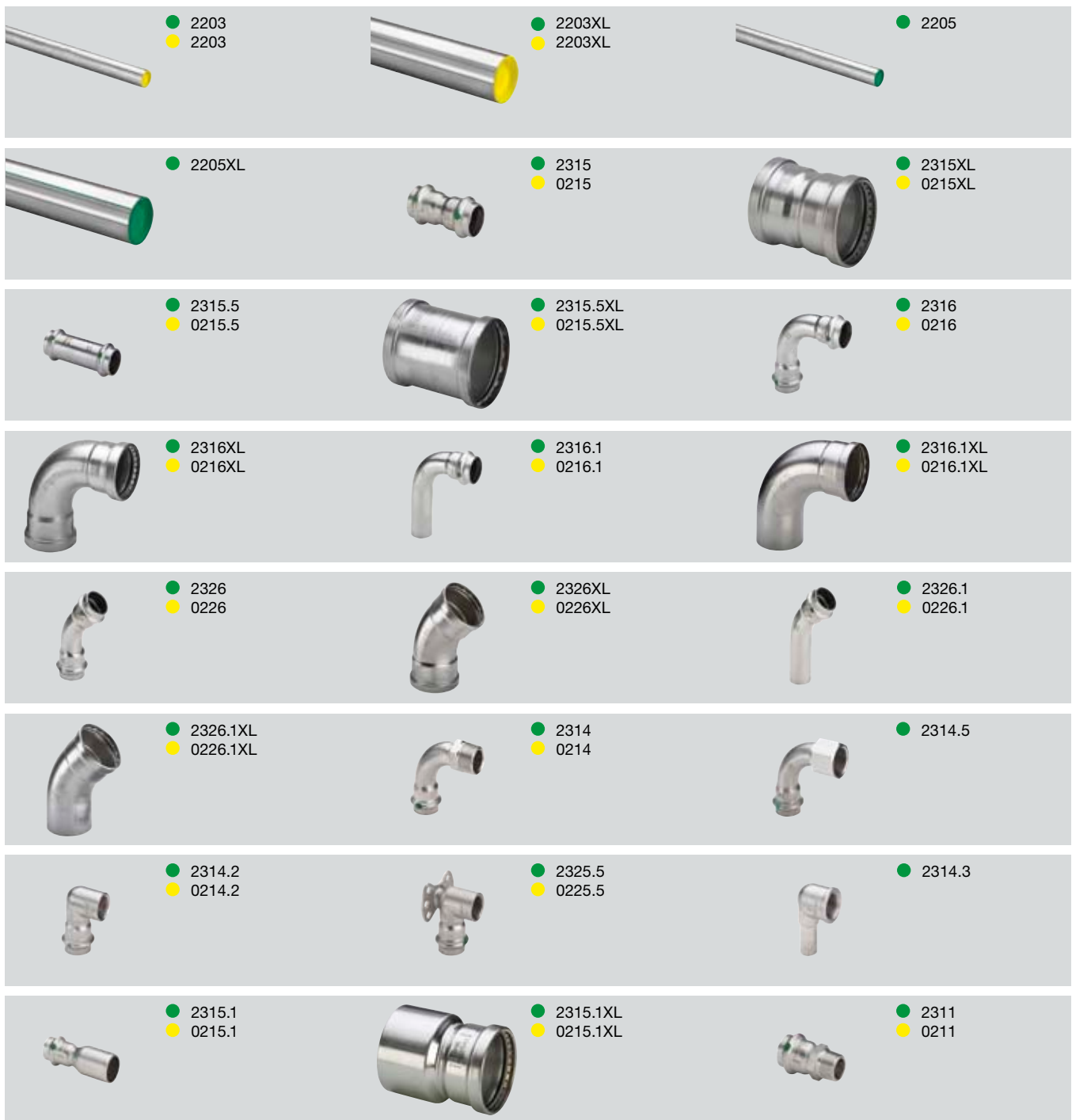
Viega Sanpress Inox.

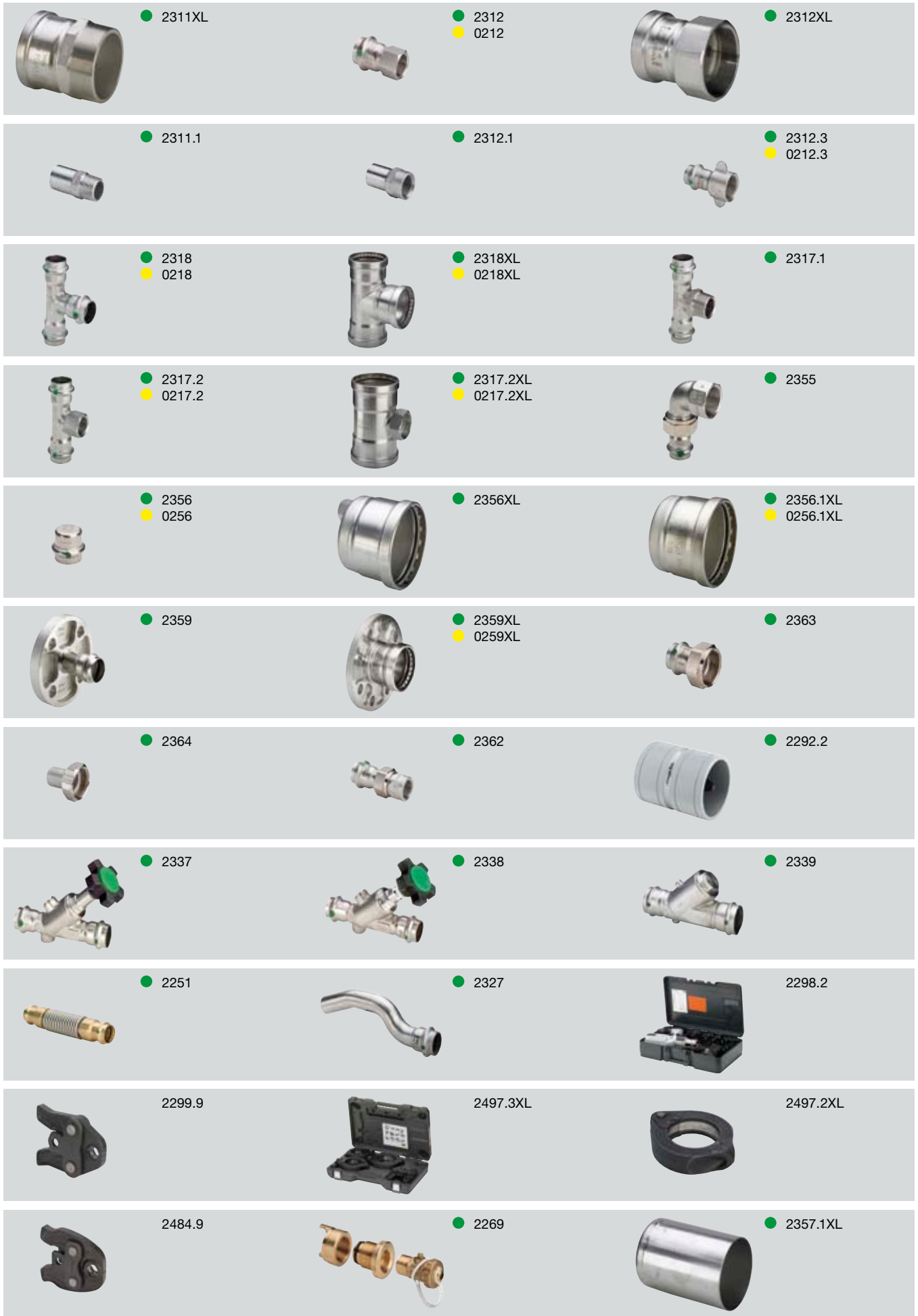
Overview of products.

The following overview of individual elements from the Sanpress Inox product line illustrates the wide range of possible uses. The specified number is the model number and describes the

shape of the fitting or component. The dots before the model number indicate possible applications. Green stands for drinking water and yellow for gas. More detailed information is available from the

model number index in the product catalogue.





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