



### THE VIEGA ADVANTAGE

#### You can trust our products

Viega's standard of excellence demands excellence in every solution we engineer. With more than 1,700 different metal fitting configurations and the Viega Smart Connect feature, the only proven method in the industry to identify unpressed connections, Viega system solutions are backed by written warranties up to 50 years based on application. Whether you choose Viega ProPress for process piping or Viega ProRadiant climate control systems, if it has Viega's name on it, you can trust it, just like millions of professionals around the world have for more than 115 years.

#### You can trust our people

Quality assurance in Viega products is fundamental; the same is true of our employees. Viega provides unparalleled service and support. Your local Viega representatives are supported by the strength and resources of a company that's been going strong for more than a century. When you need sales support, technical support, educational support or business support, Viega can get you the answers you're looking for.

#### You can trust our processes

Viega system solutions don't just happen; they are engineered, manufactured and thoroughly tested over and over again. True quality means never compromising on what matters, like standards, reliability and performance and Viega products aren't ready until they exceed all three. Viega's dedication to excellence doesn't end with manufacturing. With four strategically located distribution centers, Viega delivers to customers faster than our competition, shipping products in 48 hours or less. The Viega Supply Chain provides reliable service to keep wholesalers stocked and projects on schedule.

#### You can trust our promise

To Viega, quality is more than a statement; it's a promise. Viega's dedication to the industry has demonstrated that innovation and integrity can perform without compromise.



# VIEGA RAISES YOUR EXPECTATIONS

Viega system solutions are versatile, meeting the strictest codes and standards for multiple applications within the same project. From process piping to large-scale radiant heating or cooling, Viega provides highly engineered solutions that help keep projects on time or ahead of schedule.

By eliminating the need for flame, heavy equipment or messy joining materials, Viega press fittings can be installed in nearly any project without fire watches or burn permits. Connections can be joined while the system is live, so there is no need to drain down the system completely before installation begins. Since shutdowns are minimized, downtime is significantly reduced, saving tens of thousands of dollars in lost manufacturing time.

Viega offers press fitting systems in multiple pipe joining alloys like copper, two high-quality grades of stainless steel, carbon steel, copper-nickel and Zero Lead bronze. A proven method used around the world for more than 25 years, Viega ProPress is the new standard in pipe joining. Viega

also offers complete plumbing and climate control solutions. Viega can help you accomplish more because all Viega systems are designed to work together.

#### Viega system solutions

- Press technology makes secure, consistent press connections in less than seven seconds in sizes
   ½" to 4"
- Patented Viega Smart Connect feature helps installers easily identify unpressed connections
- More than 1,700 different fitting configurations in alloys like copper, stainless, carbon steel, copper nickel and Zero Lead bronze
- All systems meet the strictest codes and standards in North America
- All systems backed by extensive warranties



## Unpressed Identify an unpressed connection during pressure testing when water or air flows past the sealing element.



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

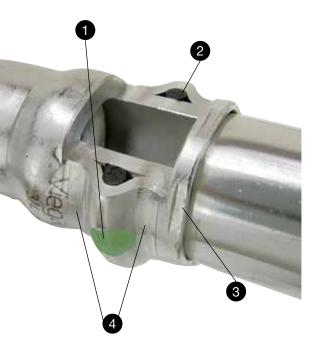


### **Pressed**Viega press connections are fast and flameless.

# SAFE, SECURE SOLUTIONS MINIMIZE SHUTDOWNS

Viega press fitting systems offer the only proven method in the industry to detect unpressed fittings. The Viega Smart Connect feature allows installers to easily identify unpressed connections during pressure testing.

The patented Viega Smart Connect feature is built directly into the press fitting itself, which consistently allows water or air to flow past the sealing element of an unpressed fitting. Connection identification methods based within the sealing element found in other manufacturers' fittings aren't always reliable because sealing elements can be damaged or improperly installed, which can result in a false positive pressure test.



- The Viega Smart Connect feature helps installers ensure that they have pressed all connections.
- Viega offers three different sealing elements suitable for nearly any application: EPDM, HNBR and FKM.
- Viega's distinctive hexagonal pressing pattern connects fitting and pipe to provide a strong mechanical connection.
- Cylindrical pipe guides help installers ensure that the fitting is properly aligned on the pipe.

#### Viega ProPress systems operating parameters

	Stainless	Copper		
Operating pressure	200 psi	200 psi		
Test pressure	600 psi max.	600 psi max.		
Low-pressure steam	15 psi max. 15 psi max.			
Vacuum	29.2" Hg at 68°F max.	29.2" Hg at 68°F max.		
Operating temp.	0°F to 250°F	0°F to 250°F		
FKM max. temp.	284°F continuous	284°F continuous		

Consult Viega on parameters, selection of material and sealing element choices.



Only the highest-quality system solutions can provide safety and ensure the least possible downtime during installation. Viega products can claim high-quality status because we process all components through the strictest quality tests in the industry, checking durability and lifespan under normal operating conditions.

#### Make connections in no time

Viega press technology allows installers to join copper, stainless, PEX tubing and black iron pipe in less than seven seconds. Viega press connections can be made in seconds, wet or dry, so lengthy shutdowns become a thing of the past and system maintenance and repair is easier than ever.

#### Make connections with no flame

You don't need flame, heavy equipment or cutting oils with Viega systems, which provides a safer, cleaner connection everyone can rely on. And that means they can be installed in hazardous environments because no flame means no danger.

#### Make connections with no waste

Messy joining materials and residues are a thing of the past with Viega press technology, which makes clean, secure connections installers can trust. Training needed to install Viega press systems is minimal and the Viega Supply Chain makes sure all products are available so no time is wasted.

### **CODES AND STANDARDS**

#### Tested and approved

Viega ProPress and Viega MegaPress fittings have been tested to the strictest standards in North America. Viega ProPress in copper and in two grades of stainless steel, 304 and 316, is suitable for nearly any application, from potable water in commercial projects to corrosive chemicals in industrial projects. Viega MegaPress is the only press fitting system for black iron pipe that can be installed in both water and gas applications.

#### **Approvals and Certificates for North America**









ASTM A240 ASTM A312 ASTM A403 ASTM A554 ASME B31.1 ASME B31.3 ASME B31.9 American Bureau of Shipping NSF 61 Annex-G Zero Lead Components



CRN - Canadian Registration



Ball Valves for Potable Water



Class 3305 91 Gas Accessory Devices



UL 213



#### Viega ProPress and Viega MegaPress fitting systems are also compliant with the following:

- ICC International Plumbing Code
- UPC Uniform Plumbing Code
- PHCC National Standard Plumbing Code

Contact your local Viega district manager for details on local approvals.

#### **Sealing Elements**

#### **EPDM**



#### **HNBR**



#### **FKM**



# VIEGA OFFERS VARIETY FOR NEARLY ANY APPLICATION

The sealing element is the most important aspect of a pipe connection. Viega press fittings offer three high-quality elastomer sealing elements that are harmonized precisely to specific media, pressures and temperatures in order to ensure ideal operation for a long-term industrial application. With a range of uses that varies from compressed air to corrosive chemicals, Viega sealing elements are designed to suit nearly any application.

#### **EPDM Sealing Element**

The EPDM (Ethylene Propylene Diene Monomer) sealing element is used in applications like potable water, process water, hydronic heating, fire sprinkler and compressed air. EPDM sealing elements can be found in Viega press fittings with green and orange dots. It has an operating temperature from 0°F to 250°F (-18°C to 120°C).

#### **HNBR Sealing Element**

The HNBR (Hydrogenated Nitrile Butadiene Rubber) sealing element is well suited for applications that include propane, diesel and fuel oil, as well as other various industrial gases. HNBR sealing elements can be found in Viega press fittings with yellow dots. Its operating temperature is from -40°F to 180°F (-40°C to 82°C).

#### **FKM Sealing Element**

The FKM (Fluoroelastomer) sealing element is recommended for applications such as solar, district heating, low-pressure steam, various chemicals and compressed air systems. FKM sealing elements can be found in Viega press fittings with white dots. It has an operating temperature from 0°F to 284°F (-18°C to 140°C) with the capacity to withstand heat spikes up to 356°F (180°C).

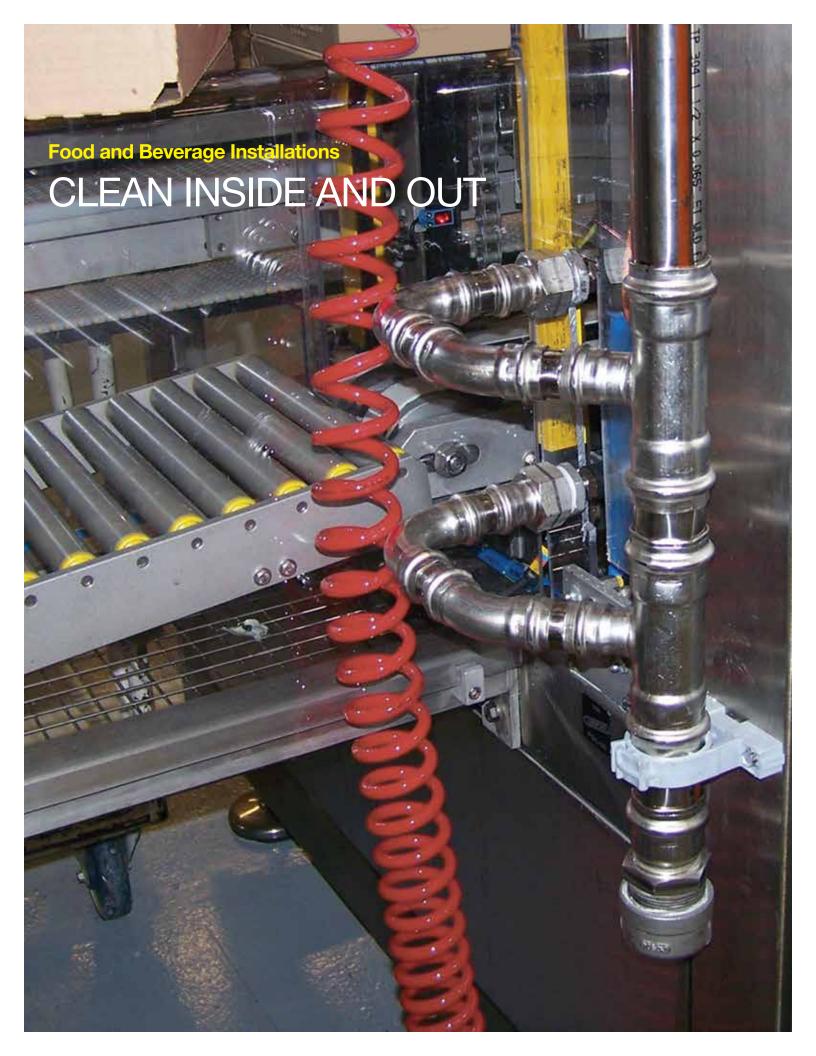


Types of Service	System Operating Conditions			ProPress 304 Stainless	ProPress 316 Stainless	ProPress	ProPressG	MegaPress	MegaPressG
	Comments	Pressure	Temperature	FKM	EPDM	EPDM	HNBR	EPDM	HNBR
Fluids/Water									
Hot and Cold Potable Water		200 PSI	32°F-250°F		√	√			
Rainwater/ Gray Water		200 PSI	Note 3		√	√	√		
Fire Sprinkler		175 PSI	Note 3	√		√		√	
Chilled Water	Ethylene Glycol / Propylene Glycol	200 PSI	Note 3	√	√	√		<b>V</b>	
Hydronic Heating	Ethylene Glycol / Propylene Glycol	200 PSI	Note 3	V	√	√		√	
Cooling Water	Up to 50% Ethylene Glycol or Propylene Glycol solution	200 PSI	Note 3	√	V	√		√	
Deionized Water		200 PSI	158°F		√				
Low-Pressure Steam		Up to 15 PSI	248°F	√	√	√		√	
Isopropyl Alcohol		200 PSI	75°F		√				
Latex Paint		200 PSI	32°F-250°F		√				
Methyl Ethyl Ketone		200 PSI	100°F		√				
Nitric Acid	10%	200 PSI	73°F	√	√				
Phosphoric Acid	25%	200 PSI	Ambient		√				
Paraffin Wax		200 PSI	100°F	√					
Fuel, Oil and Lubr	icant								
Heating Fuel Oil		125 PSI	Note 3	√			√		√
Diesel Fuel		125 PSI	Note 3	√			√		√
Ethanol	Pure Grain Alcohol	200 PSI	Note 3		√	√			
Propane	Compliant with CSA LC4	125 PSI	-40°F-180°F				√		√
Butane	Compliant with CSA LC4	125 PSI	-40°F-180°F				√		√
Kerosene		Note 3	68°F	√			√		√
Lube Oil	Petroleum Based	200 PSI	Note 3	√			√		√
Gases									
Compressed Air	Less than 25mg/m <sup>3</sup> oil content	200 PSI	Note 3	√	√	√	√	√	√
Compressed Air	More than 25mg/m <sup>3</sup> oil content	200 PSI	Note 3	√			√		√
Natural Gas	Compliant with CSA LC4	125 PSI	-40°F-180°F				√		√
Oxygen - O <sub>2</sub> (nonmedical)	Keep oil and fat free / non-liquid O <sub>2</sub>	140 PSI	Up to 140°F		√	√	√	√	√
Nitrogen - N <sub>2</sub>		200 PSI	Note 3	√	√	√	√	√	√
Carbon Dioxide - CO <sub>2</sub>		200 PSI	Note 3			√	√	√	√
Ammonia	Anhydrous	200 PSI	122°F	√					
Acetylene		200 PSI	86°F	√	√				
Argon	Welding Use	200 PSI	Ambient		√	√	√	√	V
Hydrogen - H <sub>2</sub>		125 PSI	0°F-250°F		√	√	√		
Vacuum		29.2 in Hg	Note 3	√	√	√	√	√	√

<sup>1.</sup> All systems are recommended to be clearly labeled with the fluid or gas being conveyed. For further information please consult Viega Technical Services.

<sup>2.</sup> All Viega systems must be used with the manufacturer's recommended sealing element. Contact your local Viega representative or Viega Technical Services for application temperature, pressure and concentration limits.

<sup>3.</sup> System pressure and temperature ranges depend on sealing element.



# VIEGA SOLUTIONS FOR CLEAN, CONTROLLED INSTALLATIONS

Viega stainless steel pipe and fittings are well suited for washdown environments, allowing most chemical cleaners to sanitize every surface without compromising the integrity of the pipe or fittings. And for projects where food products must be kept in a controlled climate, Viega ProRadiant heating and cooling maintains a consistent temperature while reducing energy usage.

#### Viega ProPress

With pipe and fittings in 304 stainless and pipe, valves and fittings in 316 stainless, Viega ProPress is a complete solution. With 600 different fitting configurations in stainless sizes ½" to 4", Viega ProPress for stainless eliminates welding and the 316 stainless alloy is approved for use in NSF 61-G potable water applications.

#### Viega ProRadiant

Viega Climate Mat is a complete, engineered radiant heating and cooling solution. Suitable for frost prevention applications and projects that require consistent climate control, Viega Climate Mat is ideal for industrial food and beverage warehouses.

Viega solutions are backed by written warranties and may be installed in the following systems:

Argon Nitrogen
Chilled water Oxygen

Compressed air Potable water
Fire protection Process water

Gray water Sanitizing chemical lines

Hydronic heating Steam condensate

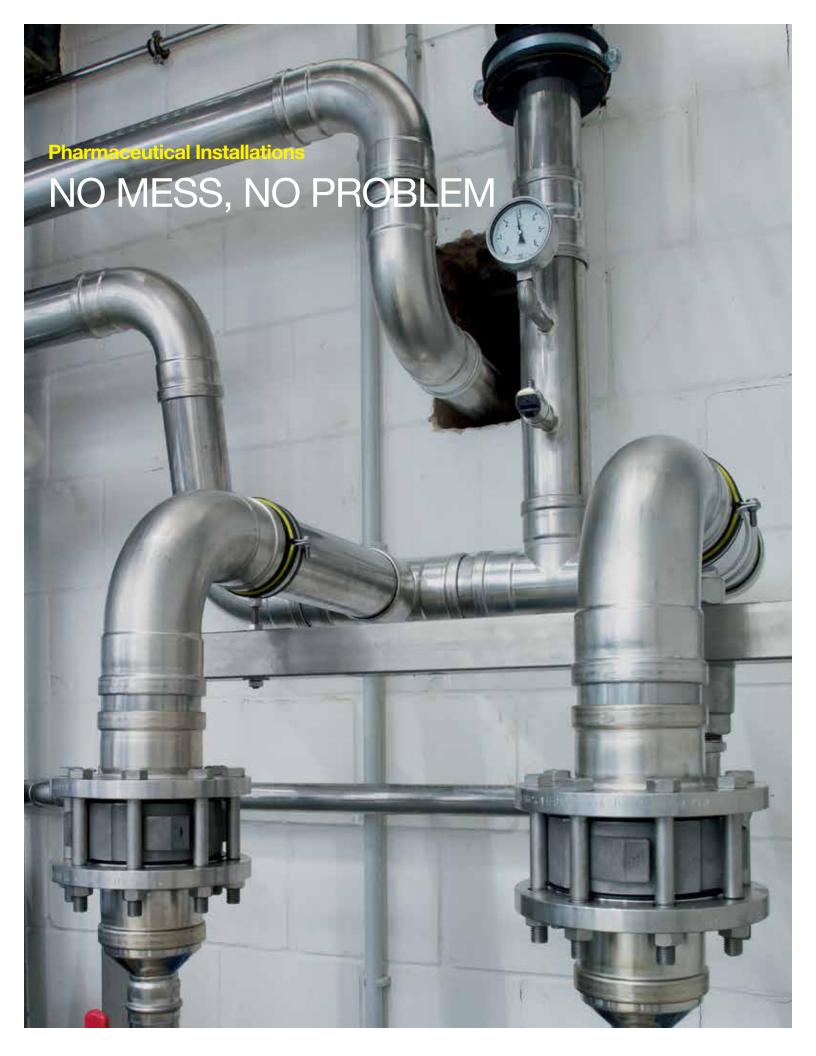
Low-pressure steam Vacuum

"With the Viega ProPress for stainless system, we were able to put everything back online within a couple of hours. That's what really made me a believer in Viega ProPress."

- Dave Ruby, Vice President and Project Manager, Progressive Mechanical, Clackamas, OR







# VIEGA SYSTEMS ARE CLEAN SOLUTIONS

When pipe joining systems must provide clean, consistent performance, Viega press systems offer reliability and efficiency whether the installation is potable water or process piping. Viega ProPress systems are well suited for pharmaceutical applications because installers don't need materials like solder or cutting oils, which can contaminate the entire system.

Available in stainless steel, Viega ProPress systems provide clean, flameless connections that can withstand high temperatures, pressures and corrosive cleaning materials. Viega ProPress systems are also available in copper and Viega MegaPress carbon steel fittings provide fast, clean press connections in IPS sizes.

Viega solutions are backed by written warranties and may be installed in the following systems:

ranties and may be installed

- Mike Feldman, Vice President,
Hart Engineering, Cumberland, RI

Acetylene Instrument air

Ammonia Isopropyl alcohol

Argon Low-pressure steam

Carbon dioxide Nitrogen
Caustic vent piping Oxygen

Chilled water

Condensing water

Process water

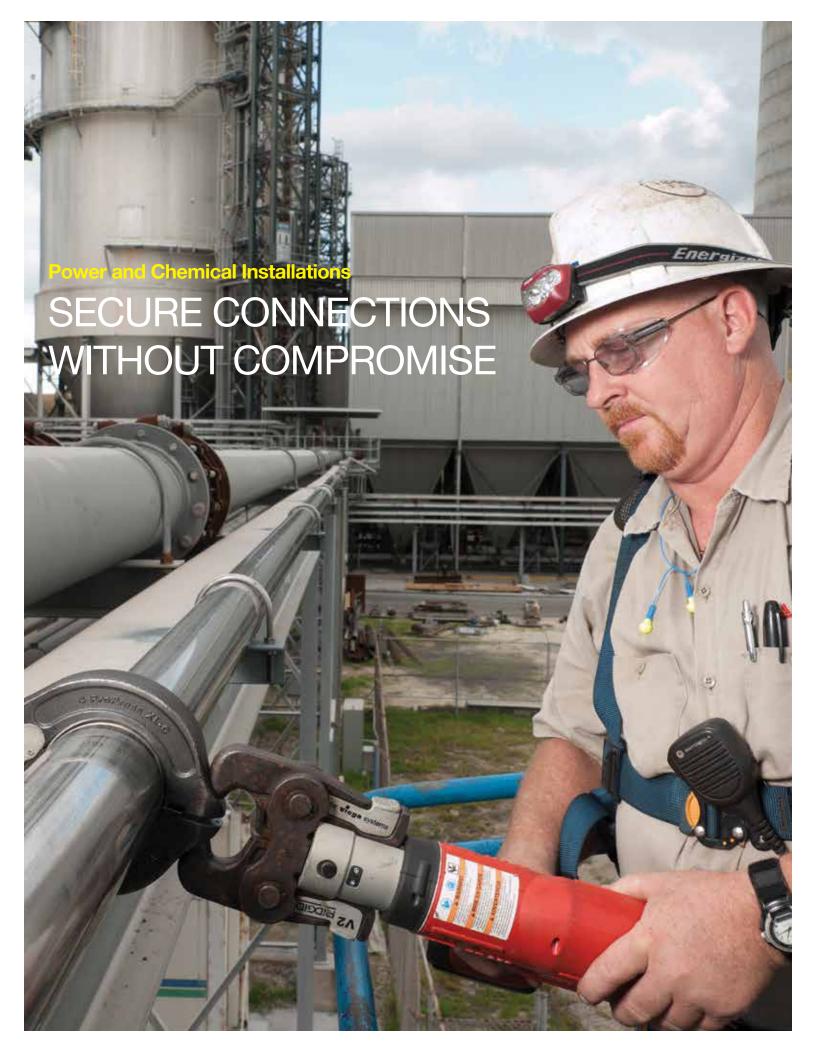
Fire protection

RO/DI water

Gray water Steam condensate

Hydrogen Vacuum Hydronic heating Wax "With Viega ProPress for stainless, you can go into areas that don't allow hot work, even if it's a hostile environment. That's very important, especially in biotech suites."





### VIEGA PRESS SYSTEMS RETAIN PIPE WALL INTEGRITY

The harsh applications in power and chemical installations require pipe connections with uncompromising integrity. Viega ProPress and Viega MegaPress systems allow installers to make secure, consistent connections in copper, stainless steel and black iron pipe without diminishing the pipe wall by threading.

Viega ProPress in copper, Viega ProPress in two grades of stainless and Viega MegaPress are all approved and certified for use in ASME B31 compliant piping systems.



Viega solutions are backed by written warranties and may be installed in the following systems:

Butane Kerosene

Chemical process lines Low-pressure steam

Chilled water

Compressed air

Domestic water

Dust control spray lines

Gray water

Ethanol

Lube oils

Methanol

Motor oil

Natural gas

Potable water

Process water

Fire protection Propane

Fuel oil RO/DI water

Hydraulic oil Steam condensate

Hydronic heating Urea

Instrument air Vacuum lines

"We had almost unlimited options in construction and connections. Viega ProPress will allow us to extend the system and make additional tie-ins in the future. Viega ProPress is just quality at its best."

 Sabina Pryce-Jones, Generation Operations and Maintenance Specialist, JEA, Jacksonville, FL







### VIEGA PRESS SYSTEMS PROTECT AND SAVE

Viega ProPress for stainless steel is approved for more than 225 applications, including many that are common within the mining industry. Viega can provide a dependable solution that can not only withstand many corrosive materials but also save time and labor during installation. Whether the application is pure potable water or corrosive sulfuric acid, Viega ProPress for stainless is a complete solution with pipe, valves and fittings. Since Viega press systems can be joined under flow, full shutdowns are a thing of the past, which reduces downtime significantly.

Viega solutions are backed by written warranties and may be installed in the following systems:

Acetone Hydraulic oil
Acetylene Hydrogen

Acids Hydronic heating
Ammonia Isopropyl alcohol

Argon Kerosene

Butane Low-pressure steam

Carbon dioxide Motor oil
Chilled water Natural gas
Compressed air Nitrogen
Concentrated sulfuric acid Oxygen

Diesel fuel Potable water

Domestic water Process water

Dust control water Propane

Ethanol Secondary containment

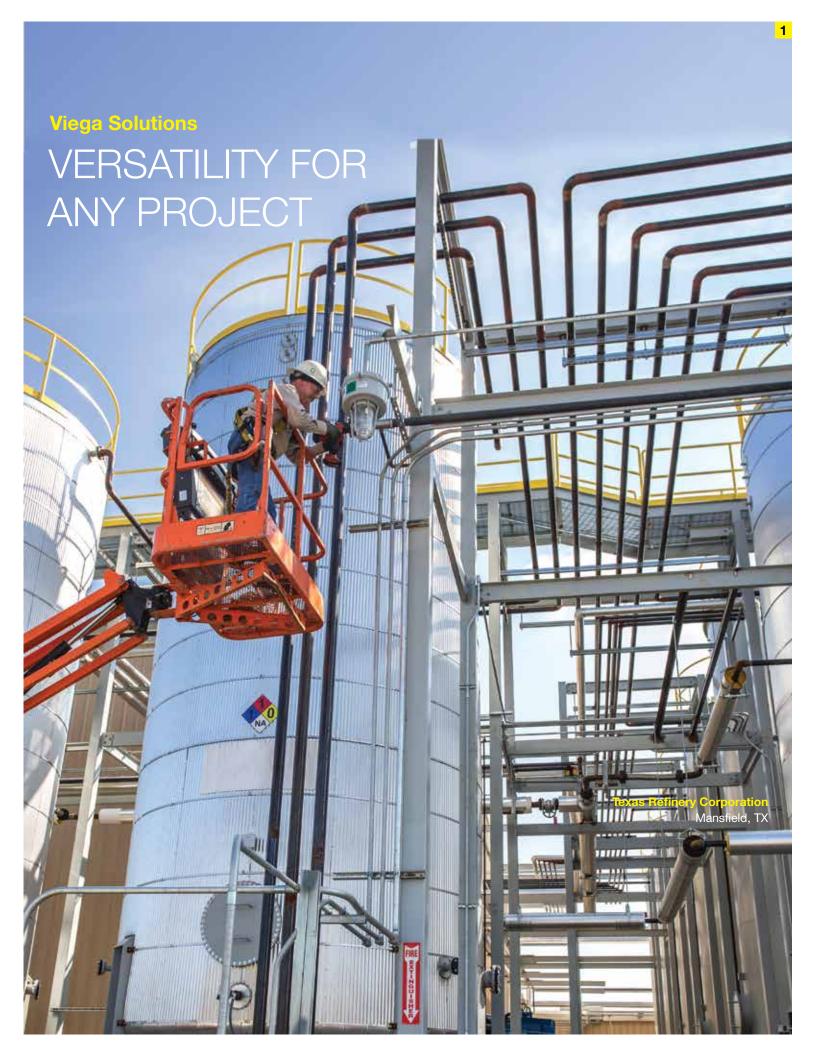
Fire protection Sludge
Fuel oil Toluene
Gray water Vacuum

"We chose the Viega
ProPress stainless system
to eliminate the corrosion
problems. It proved itself
big-time. It's been installed
for two years now with
no problems. And the 98
percent sulfuric acid is
really corrosive."

Ken Pennell, Rio Tinto Group, Kennecott Utah Copper Mine, Bingham Canyon, ID







# THE COST SAVINGS ON LABOR IS HUGE WITH VIEGA MEGAPRESS SYSTEMS. -Tracy Auen, Owner, A&G Piping, Ft. Worth, TX



#### 1. Texas Refinery Corporation

Location: Mansfield, TX Contractor: A&G Piping

**Installed:** Viega MegaPress in  $\frac{1}{2}$ " to 2" for compressed air and Viega ProPress for copper in  $\frac{1}{2}$ " to  $\frac{1}{2}$ " for potable water

Texas Refinery Corporation was the first company to build a lubrication plant in the U.S. in the last 25 years. The family-owned business produces specialty lubricants and protective coatings such as oils, grease, gear lubricants, cleaners and sealants.



#### 4. Gorton's Sefaood

Location: Gloucester, MA
Contractor: Northeast Process

Systems Inc.

Installed: 10,000 feet of Viega

ProPress for 304 for stainless fittings with piping in sizes ½" to 3" for applications including compressed air, hot and cold water and a water/glycol mix.

Viega 3-piece ball valves for shutoffs

throughout the center.

For a new fry line at Gorton's Seafood Center, stainless offered a solution to an environment that needed to stand up to the chemicals used for cleaning.

#### 2. SPLASH®

Location: Ayer, MA

Contractor: P.K. McGuane Plumbing

and Heating

**Installed:** Viega MegaPress for transporting ethanol and methanol

SPLASH® manufactures and distributes windshield washer products, as well as de-icers, ice melt, antifreeze, pressure washer cleaner, wiper blades. They recently created a plumbing system that would transport ethanol and methanol in and out of four, 23,000-gallon rail cars.

#### 3. Founders Brewing Co.

Location: Grand Rapids, MI
Contractor: In-house maintenance
Installed: Viega ProPress for 304
stainless for installation of hot and cold
process water, compressed air, CO2 and
chemical disinfecting lines

With the completion of a \$45 million expansion, Founders encompasses an entire city block and boasts the production space necessary to keep up with the increasing demand for its award-winning beers.



Viega press fitting systems are designed to integrate and our preferred press tools for installing Viega systems are designed the same way. One press tool can make connections on Viega ProPress, Viega MegaPress and Viega PEX Press systems, simply by changing jaw sets.

Viega has partnered with RIDGID since 1999 to offer system-matched tools for each of our engineered press fitting systems. With jaws and rings in sizes ranging from \(^3\epsilon^{\text{"}}\) to 4", these tools can accommodate nearly every type of plumbing, heating or pipe joining project.

Viega and RIDGID engineers develop press tools that work together seamlessly with all Viega press fittings. RIDGID press tools have been used to install hundreds of millions of Viega fittings across North America for more than a decade. The result is a reliable, versatile set of products that work on any job site, in any condition, for any application.

Press tool	RP 340		RP 210-B		RP 200-B		
Capacity	1/2" - 2"	1/2" - 4"	1/2" - 11/4"	3/8" - 11/2"	1/2" - 11/4"	3/8" - 11/2"	
Systems	Viega MegaPress Viega PEX Press	Viega ProPress for copper Viega ProPress for stainless	Viega ProPress for copper Viega ProPress for stainless	Viega PEX Press	Viega ProPress for copper Viega ProPress for stainless	Viega PEX Press	
Form Factor	Pistol Grip		Pistol Grip		In-line		
Battery	18V Li-lon		18V Li-lon		18V Li-lon		
Corded	Optional AC Power Adapter		NA		NA		

### VIEGA DELIVERS FAST, EFFICIENT AND COMPLETE

Viega operates four state-of-the-art, strategically located distribution centers that can ship products complete to the customer within 48 hours of receipt of the order. This innovative supply chain concept keeps distributors stocked and projects on schedule.

To Viega, quality is everything. We want to ensure that customers receive the best products and service possible. The Viega Supply Chain is ISO 9001:2008 certified, along with all Viega manufacturing and distribution facilities in the United States.

Viega's quality assurance goes beyond distribution and encompasses our manufacturing processes as well. Viega emphasizes excellence in our manufacturing, which includes strict standards for product processing from raw materials to finished goods. Each product must pass a strict, unyielding quality testing process to ensure that every system component is reliable. That's how Viega can ensure that the solutions we provide to our customers are the best in the industry.



This document is subject to updates. For the most current Viega literature please visit www.viega.us.

The term Viega does not apply to a specific company within the various separate and distinct companies comprising the Viega group of companies. The term Viega as used in this publication refers to the Viega brand itself or generally to the Viega group of companies. References to activities in North America specifically refer to activities of Viega LLC.

A green dot on a Viega ProPress, MegaPress and PEX Press polymer fitting indicates the Smart Connect feature with an EPDM sealing element. A yellow dot on a Viega ProPressG and MegaPressG fitting indicates the Smart Connect feature with an HNBR sealing element. A white dot on a Viega ProPress (304 FKM) fitting indicates the Smart Connect feature with a FKM sealing element. For a current list of applications, please visit www.viega.us/applications.

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