

# Company Overview



PIONEERS IN PIPE SOLUTIONS

**CRANE**

BUILDING SERVICES & UTILITIES

## The Company

Viking Johnson is a world leader in the design, manufacture and supply of couplings, flange adaptors, and pipe repair solutions. Part of Crane Building Services & Utilities, Viking Johnson services the international water, wastewater, gas and industrial markets with a range of products that can be used to connect or repair many types of pipe material and are suitable for dedicated and wide tolerance applications, from 40mm to 5000mm in diameter.

The product portfolio offers an extensive and innovative choice of standard products, supplemented by bespoke solutions, manufactured to the most demanding customer specifications.

Viking Johnson operates a quality management system accredited to ISO 9001 combined with an environmental policy accredited to ISO 14001.

In addition, some product ranges have been approved by 3rd party organisations for -

- Marine - Lloyds Register, Bureau Veritas and ABS
- Potable water - WBS, NSF, ACS and Belgaqua
- Specific regions - GOST-R, Bulgarkontrola,
- Belarus Technical Approval and many others

## The benefits

The Viking Johnson pipe jointing system for plain-ended pipes is used throughout the world due to the benefits and advantages it gives to the designers, installers and end users, together with the substantial savings which are made on installation costs.

### Save costs

- No special skills or equipment required
- Assembled in all weathers conditions
- Assembled in narrow trenches
- No mess (jointing paste, welding slag)
- Installed on plain ended pipe
- Rilsan coated (eliminates additional on site wrapping)
- QuickFit design (ready assembled, speeds installation)

### Comprehensive range

- Available DN40 to greater than DN5000 (1½" to 200")
- Suits most pipe materials
- Coupling pressure rating equals or exceeds that of pipe

### Reliability

- Over 80 years worldwide experience
- Designed to last the life of the pipeline

# World leaders *in pipe joints and repair products*, providing the complete *pipe jointing* solution

## The design concept

The Viking Johnson coupling is designed to simplify the design and installation of pipework systems.

Viking Johnson couplings comprise:

- a centre sleeve
- two end rings
- wedge shaped, synthetic rubber gaskets
- bolts, washers and nuts

As the bolts are tightened, the end rings are drawn together, compressing the gasket onto the pipe surface, forming an effective permanent leak-tight joint.

## Plain ended pipe

Removes the need for costly and time-consuming pipe end preparation, as with welding, threading, flanging.

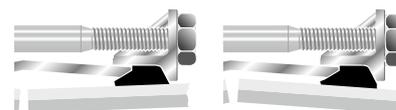
## Expansion and contraction

Each coupling absorbs the expansion and contraction occurring in pipe systems, reducing the need for supplementary expansion joints or bellows.



## Angular deflection

Coupling design allows angular deflection which caters for minor misalignment and ground settlement. Long radius curves can be accommodated without using specialised fittings.



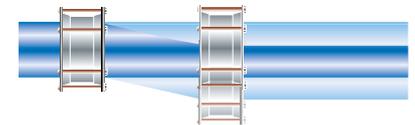
## Flanged fittings

- Flange adaptors allow flanged fittings and valves/meters/pumps to be installed in plain ended pipe systems



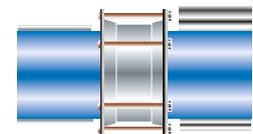
## Misalignment

- Allows for ground settlement.
- Eases pipe laying on rough or uneven terrain
- Precise location of pipe opening through walls and floors is unnecessary



## Absorbs noise and vibration

- Gap between pipe ends isolates noise and vibration
- Resilient gasket helps to absorb noise and vibration



## Each joint is a union

- Loosening 2 couplings permits removal/rotation of pipe section for cleaning/wear reduction
- Allows future pipeline extensions and modifications



*Use of the Viking Johnson system simplifies the design, installation and maintenance of your pipework system*

## The Application

*Viking Johnson couplings are in use throughout the world in a variety of applications, some large and impressive, others small but often very important since they solve problems economically and effectively. A few such applications are shown here.*

### **United Arab Emirates - UAE Fujairah Asia Power Company**

The integrated water and power plant at Fujairah. The complex is capable of processing 591,000 m3 of water per day.



Dismantling Joint - DN2400

### **France - Marseille Martigues EDF Thermal Power Plant**

The Martigues power plant is located on the shores of the Mediterranean 30km from Marseille. The existing power plant comprises of 4 oil fired 250mw units. Two of these are to be transformed into state of the art gas fired combined cycle units.



AquaGrip Flange Adaptor DN350

### **United Kingdom - Lancashire Hodder Aqueduct**

Relining & Cleaning Scheme - The 28 mile Hodder Aqueduct was originally constructed in 1925 by Flyde Water Board to supply water to Blackpool from Stocks reservoir.



MaxiStep Reducing Coupling DN700

### **Australia - Adelaide Desalination Plant Transfer Pipeline**

The Desalination Plant will have a capacity of up to 100 gegalitres and will provide Adelaide with up to half its annual water requirement. The huge size of the plant will be powered by sustainable energy sources and will ensure that the majority of the water supply is sourced from the sea with lesser reliance placed on the River Murray basin.



Large Diameter Flange Adaptor - DN1600

### **Germany - Coesfeld Stadtwerke Coesfeld - North Rhine Westphalia**

Repair of leaking and severely corroded grey cast iron pipe. The 44mm tolerance in the pre-assembled DN400 FriaGrip (UltraGrip) ensured the fittings could be easily positioned on the repair and combined with the captive bolt mechanism meant only a single spanner/torque wrench was needed to fit the product in just 35 minutes.



Next Generation UltraGrip Coupling DN400

## Enhanced Product Integrity & Manufacturing Excellence



Viking Johnson products have a design life of 50 years and contribute significantly to the longevity of treatment, distribution and waste networks. Modern manufacturing tools and processes, along with a focus on R&D, guarantees that Viking Johnson will continue to produce world leading innovative solutions for pipe joints and repairs.

### Flash Butt Welding

Viking Johnson is one of the few manufacturers around the world that uses Flash Butt Welding technique for joining sleeves and rings together, ensuring strength, longevity and stability of products. Even where Flash Butt Welding is not feasible, Viking Johnson utilise Submerged Arc Welding which offers higher deposit rates, does not require gases and most importantly, the bright arc light is not visible to the operator.

### Cold Expansion

A theoretically sound weld is not sufficient and Viking Johnson (in line with AWWA C219 standards) goes a step further by cold expanding all welded sections. This not only tests the integrity of the weld but also:

- 100% tests the material in the section
- Ensures that the section is circular and repeatedly so
- Increases the strength of the piece through work hardening
- Accurate sizing of the component

### Gasket Sealing

Regardless of whether the product is dedicated or wide tolerance or how it grips a pipe, the seal is generally from the compression of an annular gasket. The more dimensionally stable the rings, the more repeatable the quality and hence the more consistent the compression of the gasket becomes. The benefit to the customer is minimising the possibility of leakage.

### Rilsan Nylon Coating

Rilsan® powder coating has been used in the water industry since 1967. It is a unique, high performance, polyamide which provides a high degree of corrosion protection for metal parts whilst being compliant with the most demanding drinking water regulations.

Manufactured from a renewable raw material (Castor Oil) from plant origin *Ricinus Communis*, a Rilsan® finish also provides a smooth surface for optimum flow.

Viking Johnson supplies Rilsan® coating to the majority of product lines so that they will both meet their designated design life and ensure the preservation of drinking water quality.

**RILSAN**  
BY ARKEMA

# Product Overview



**Water Products**



**Gas Products**



**Industrial Products**

**Applications including:**  
Oil based & petroleum products, Chemicals,  
Sewage, General industrial processing



**Dedicated**



**PE Solutions**



**Pipe Repairs**



**Wide Tolerance**



## Wall Couplings

- Through wall connections
- Several end configurations available
- DN80 (3") and larger



## Large Diameter

- Standard range or custom made
- For use with new lay pipes and repair and maintenance
- DN50 (14") to DN5000 (200")



## Dismantling Joints

- Double flanged fittings
- Accommodate up to 100mm longitudinal adjustment
- Bespoke joints can be made on request
- DN40 (1½") to DN2400 (96")



## AquaFast

- For PE & PVC pipe connections
- Quick and easy to install
- Fully end load bearing
- Ideal for pumped sewage pipelines - support liner not required
- 63mm to 450mm
- Suitable on oval or coiled pipes
- Large Diameter for PE pipe connections 355mm to 450mm



## HandiRange

- Stainless steel repair & tapping solutions
- HandiClamp, HandiTap, HandiTee, HandiBand
- Permanent repair on various pipe materials
- DN15 (½") to DN700 (28")



## MaxiFit

- Accommodates plain ended pipes with different outside diameters
- Up to 34mm tolerance on the pipe OD
- Couplings, flange adaptors, large diameter, end caps, stepped couplings
- DN40 (1½") to DN700 (28")
- Allows easy application in narrow trench areas



## FlexLock

- Self-anchoring couplings & flange adaptors
- For ductile iron or steel pipes
- Fully end load bearing
- DN50 (2") to DN300 (12")



## AquaGrip

- PE pipe jointing
- Fully end load bearing
- 63mm to 1600mm



## EasiRange

- Solution for pipe repair & tapping at full operational pressures
- EasiClamp, EasiTap, EasiTee, EasiCollar
- DN50 (2") to DN1200 (48")



## UltraGrip

- Wide tolerance & full end restraint
- Couplings, flange adaptors, reducing couplings, peccatadaptors & end caps
- Grips & seals on a variety of pipe materials
- DN32 (1¼") to DN600 (24")

Distributor details



ISO 14001 • EMS 51874



ISO 9001 • FM 00311



To visit our Video Library go to:  
[www.youtube.com/user/CraneBSU](http://www.youtube.com/user/CraneBSU)



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