

# FREQUENTLY ASKED QUESTIONS

# 1. What Corrosion Protection is used on the Remote EasiClamp Product?

The body to the products is fully coated with Black Rilsan Nylon 11, a thermoplastic polyamide produced from a renewable raw material of plant origin (Castor Oil) that meets WIS 4-52-01 part 1 and EN 10310. Rilsan has excellent resistance to impact, abrasion, weathering, many chemicals and with good thermal stability and flexibility to accommodate rough site handling.

The unique patented hinge design incorporated in the clamp means that there are no additional pins required, thus preventing any bimetallic corrosion from different metals.

The bolts / nuts are coated with Sheraplex to WIS 4-52-03.

### 2. What is the working pressure?

The working pressure of the Remote EasiClamp range is 16 bar, with a site test pressure of 24 bar.

### 3. What is the maximum working temperature for the Remote EasiClamp?

The Remote EasiClamp product range has been designed for use on cold potable water applications and as such will function up to a temperature of 40Deg C.

#### 4. Can the Remote EasiClamp work on gas pipes?

The Remote EasiClamp product is only available with an EPDM gasket for use on potable / dirty water applications and can not be used on any gas applications or where there is the possibility of oil in the dirty water.

### 5. What pipe materials can be repaired with the Remote EasiClamp?

The Remote EasiClamp product can be used on Steel, Cast Iron, Ductile Iron PVC and AC (depending on actual outside diameter) materials.

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### 6. Can the Remote EasiTap product be used on PE Pipe?

PE pipes are not "rigid" and variations in pressure will cause changes to the outside diameter. So, if after installing the under pressure tee there is a reduction in pressure then the outside diameter may reduce resulting in gasket relaxation and over time a leak. In addition, even if the pressure remains constant another characteristic of PE pipe is that when subjected to an external load (from the gasket in the Remote EasiTap used to form a seal) they want to deform away, again resulting in a loss of gasket pressure and in time a leak. Hence, installing a one of our Remote EasiTap fittings on a perfectly good pipe potentially introduces a long term liability (a leak path) albeit at a later date and therefore for these reasons Viking Johnson do not recommend the use of mechanical under pressure tee products on PE pipe.

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### 8. What sizes are available?

At present the Remote EasiClamp product can be supplied in 3", 4" & 6" sizes, which account for circa 80% of all repairs to pipelines.

# 9. What if I need to repair a pipe whose size is not covered by the Remote EasiClamp range?

The standard EasiClamp products range compliments the three sizes available at present (3", 4" & 6") and whilst these can not be installed remotely the product do offer the same features and benefits to the end user from a functional perspective.

In the event the pipe to be repaired does not fall in the OD range covered by the EasiRange then a bespoke HandiClamp (stainless steel) product can be manufactured to repair the pipe.

#### 10. What gasket design is used in the Remote EasiClamp products?

The Remote EasiClamp and EasiTap products incorporate many of the proven design features of the current EasiRange fittings, some of which have been improved to accommodate the new capabilities of the product. For over twenty years the wide tolerance EasiClamp fittings with their 100% circumferential Waffle gasket have been used to repair damaged pipes and this proven design has been included in the new fittings.

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# 11. What are the key Health and Safety features offered by the Remote EasiClamp?

Recognising the drive in the construction industry to identify and remove risk of injury to operatives, Viking Johnson has incorporated the following features in the new Remote EasiClamp and EasiTap products:-

- Remote Installation, allowing the operator to work well away from the potential hazard of a damaged pipe under pressure.
- Patented self retaining bolts, nuts, washers and clip that automatically drop into position once the product is fully wrapped round the pipe, meaning that the operator can use both hands to handle and position the fitting over the leak.
- Use of two bolts on the fitting providing added structural security ensuring that once positioned on the pipe there is a double locking mechanism holding the fitting in place reducing the risk of personal injury.

# 12. What are the Environmental Benefits offered by the new Remote EasiClamp product?

The remote EasiClamp and EasiTap products require a substantially reduced trench size for their installation, thereby:-

- Minimising traffic disruption and diversions so reducing fuel use.
- Minimising spoil sent to landfill.
- A reduction of construction vehicle movements.
- Reduced energy usage due to smaller equipment requirements

In addition, the fittings are:-

- Manufactured using the latest technology minimising raw material usage.
- Coated in Rilsan Nylon, a thermoplastic polyamide produced from a renewable raw material of plant origin (Castor Oil) providing a responsible coating solution that also helps to protect our environment.
- Supplied in biodegradable shrink wrapping packaging that ensures the fitting arrives on site in a free from any contamination.

## 13. Is the repair a permanent or temporary repair?

Incorporated in these new products is Viking Johnson's unique 100% circumferential 'Waffle' gasket, which not only provides a leak tight seal but also caters for circumferential or longitudinal cracks guaranteeing a reliable, permanent seal even on badly corroded pipes.

The Remote EasiClamp and EasiTap products are constructed from ductile iron housings, giving them the benefit of high strength. The products will support and seal around the pipe for the full length of the body, thereby ensuring that the effectiveness of the gasket seal is maintained in all circumstances over the design life of the fitting. The inherent strength of the products will cater for circumferential pipe shear and also realign pipes ensuring that the finished repair is stronger than the existing pipe.

Hence, the repair can be considered as a permanent one.

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# 14. <u>Do Viking Johnson Remote EasiClamp Products Have To Conform To PED – European Pressure Equipment Directive?</u>

The pressure equipment directive, applies to the design, manufacture and conformity assessment of pressure equipment and assemblies of pressure equipment with a maximum allowable pressure greater than 0.5 bar.

The Remote EasiClamp & EasiTap products are not defined as pressure equipment or pressure accessories but are defined as component parts for pressure equipment for which the PED specifies no specific assessment procedure. Their suitability where applicable will be checked on the occasion of conformity assessment of the complete pressure equipment or assembly.

E.g. A compressor set may be defined as pressure equipment made up of component parts including tubes, flanges, couplings, and valves etc. The tubes, flanges and couplings will not require individual assessment to the PED or require CE marking but when assembled to form the "whole", the compressor set will require assessment at that final stage. This will be the responsibility of the manufacturer or assembler of the compressor set. Valves, however, are considered by the PED to be pressure accessories and require separate individual assessment and consideration for CE marking. This will be the responsibility of the valve manufacturer.

Hence, Remote EasiClamp & EasiTap products for all applications exempt from PED assessment:

# 15. The casting in the new Remote EasiClamp seems to be much thinner, do we have confidence it will not break?

The casting in the new Remote EasiClamp is actually the same thickness as that used in the old design, but this was not evident as the old casting had a lip around the edge which masked the thickness of the housing.

# 16. There are only three threads on the retaining nut, is this adequate?

The nut is over 10mm thick and the thread pitch is 2mm. Calculations and testing to over 1.5 x the working torque have proved the thread engagement as being more than satisfactory.

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