The Onyx Syringe Kit

A simple method to prepare instruments for attaching to the Onyx Isolator Ring.

The problem: Any device that isolates pressure instruments from the process, such as a diaphragm seal or isolator ring, must be vacuum filled to work properly. If an air bubble becomes entrained inside the instrument assembly, it will collapse to a smaller volume under pressure. This causes a gross error in the pressure reading, or the instrument stops working altogether.

If a conventional isolator has a gauge, switch, or transmitter that has to be replaced for any reason, the normal procedure is to remove the entire ring and instrument assembly and transport them to a service center equipped with a vacuum filling facility. This leaves a gap in the process piping, effectively shutting down the entire process.

The Solution: The Onyx Syringe functions as a miniature vacuum pump and oil reservoir. Light weight and requiring no external power, this field service kit provides a simple method to vacuum fill gauges, switches, and transmitters in a matter of minutes, minimizing down time and eliminating the need to remove the isolator ring from the process pipe.

Simply remove the instrument from the isolator rings and turn the instrument assembly upside down and connect the syringe to the pressure instruments. The filling procedure is a simple 2-step process:

Pull up on the plunger to extract the air. Push down on the plunger to inject the instrument oil.

The transparent syringe body provides visual indication when all the air bubbles are extracted. This syringe can generate a vacuum equal to the highest grade of motor operated vacuum pumps, insuring that instrumentation prepared with this kit performs comparably to instruments shipped direct from the factory.

The Onyx Syringe Kit includes everything necessary to vacuum fill instruments or isolator rings, including a 1/4 liter bottle of silicone instrument oil.







CAUTION: NEVER ATTEMPT TO REFILL AN ISOLATOR RING UNDER PRESSSURE.

REFER TO THE INSTRUCTION MANUAL FOR DETAILED INSTRUCTIONS ON HOW TO SAFELY REFILL ISOLATOR RINGS IN THE FIELD.