## Installation Guide

## Introduction

WIKA Instruments Ltd. support ring thermowells are designed to provide maximum support for thermowell in <u>severe vibration and bending</u> <u>applications</u>. Please read these installation instructions completely and consult the applicable drawings prior to attempting installation. Due to the variety of applications some of the suggestions made here may not be appropriate. The end user must determine if these instructions are suitable for their unique situation.

The outside diameter of the support rings, provided by WIKA Instruments Ltd., is slightly larger than the inside diameter of the nozzle that the thermowell is to be installed into. This allows the thermowell to be customized for the best possible fit into the nozzle, for maximum support. Proper installation may require removal of material from the support rings, which should be completed as follows:

- 1. Carefully slide thermowell into nozzle. If the thermowell fits into the nozzle without binding or with little friction, no further machining is required. Please note that an interference fit between the support rings and nozzle is ideal. Please contact WIKA Instruments Ltd. immediately if the thermowell does not fit snugly into the pipe nozzle.
- 2. If the thermowell is restricted from full insertion into the nozzle, try rotating the thermowell to allow complete insertion. If the thermowell will not slide fully into the nozzle, gently remove the thermowell for modification.

- 3. Apply a layer of machining bluing or similar marking substance on the thermowell rings. Install thermowell, noting orientation. Once the thermowell begins to bind, stop and remove the thermowell and inspect for spots where the bluing has been removed from the rings. These locations will require further machining.
- 4. If interference is present around the entire circumference of the support ring, place the thermowell in a manual lathe with a steady rest holding the bar. To prevent damage to the flange, do not grip the termowell by the flange. Machine (field grind or file) approximately 0.003 inches from the outside diameter of the ring.

If intererence is indicated over only a portion of the diameter of the ring, careful grinding may be used to remove excess material at those locations only. Please note that **extreme care** must be taken to ensure that a minimal amount of material is removed to provide a proper fit.

5. Re-install the thermowell in the same orientation as noted in Step 3. If further binding occurs, repeat Steps 3 and 4 until the thermowell slides easily into the nozzle.

For more information contact:

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