

Feedwater Sparger End Pin Repair

Innovative, Yet Simple Design Mitigates A Complex Problem

Repair Solutions to Prevent Wear on Your Feedwater Sparger

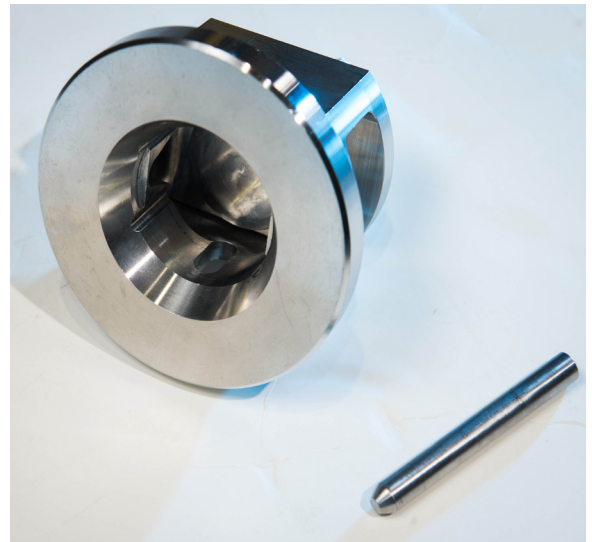
Recent industry events show that vibration has caused wear on the feedwater sparger end bracket and pin. Framatome's innovative repair restores the assembly to allow thermal growth of the feedwater sparger. Our repair provides a new bearing surface 20x greater than the original pin to reduce additional wear. The installation is performed without having to remove the existing pin and can be installed in less than one shift.

Installation Process

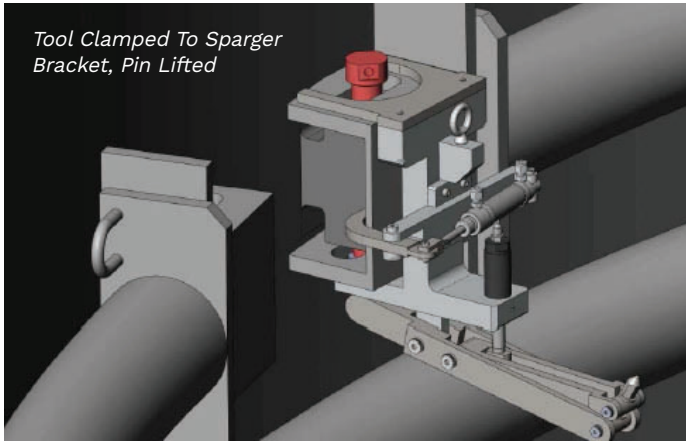
1. Raise the pin out of worn counter-bore and position new hardware on the head of the existing pin
2. The engaging feature is inserted into the hole in the head of the existing pin
3. The repair hardware is tensioned, capturing the engagement feature
4. A crimp cup is then used to lock the assembly in place

What You Need to Know About our Technology

- Prevents damage to feedwater sparger
- Increases bearing surface by a factor of 20
- Installs in less than one shift
- No removal or modifications to existing hardware
- Faster, easier to install than other repair methods
- Designed for life-of-plant
- Remote installation - no divers required
- Proven performance

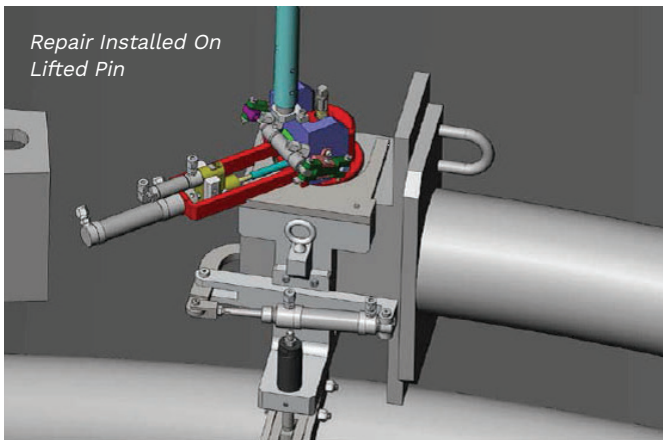


Feedwater Sparger End Pin Repair



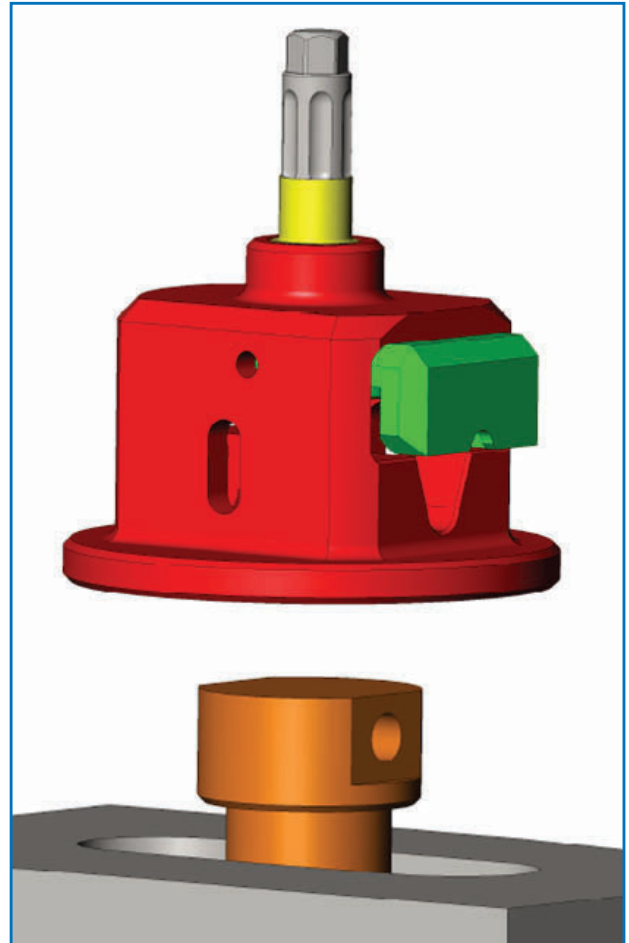
Feedwater Sparger End Pin Wear - What Can Happen?

- Vibration causes wear, creating a counter-bore in the end bracket
- End pin becomes engaged in counter-bore preventing movement necessary for thermal expansion of the feedwater sparger
- Loads from thermal growth now transmitted into the T-box welds which may crack over time due to increased stress of the unplanned load



Repair Advantages

- Returns component to better than original condition
- Accommodates thermal growth without imparting higher loads on the t-box
- In-expensive insurance for your plant



Repair Is Aligned And Lowered On Sparger Pin

Contact:
 component-repair-replacement@framatom.com

www.framatome.com

The data and information contained herein are provided solely for illustration and informational purposes and create no legal obligations by Framatome Inc. None of the information or data is intended by Framatome Inc. to be a representation or a warranty of any kind, expressed or implied, and Framatome Inc. assumes no liability for the use of or reliance on any information or data disclosed in this document. © 2019 Framatome Inc. All rights reserved. PS_US_731_ENG_03-19

framatome