

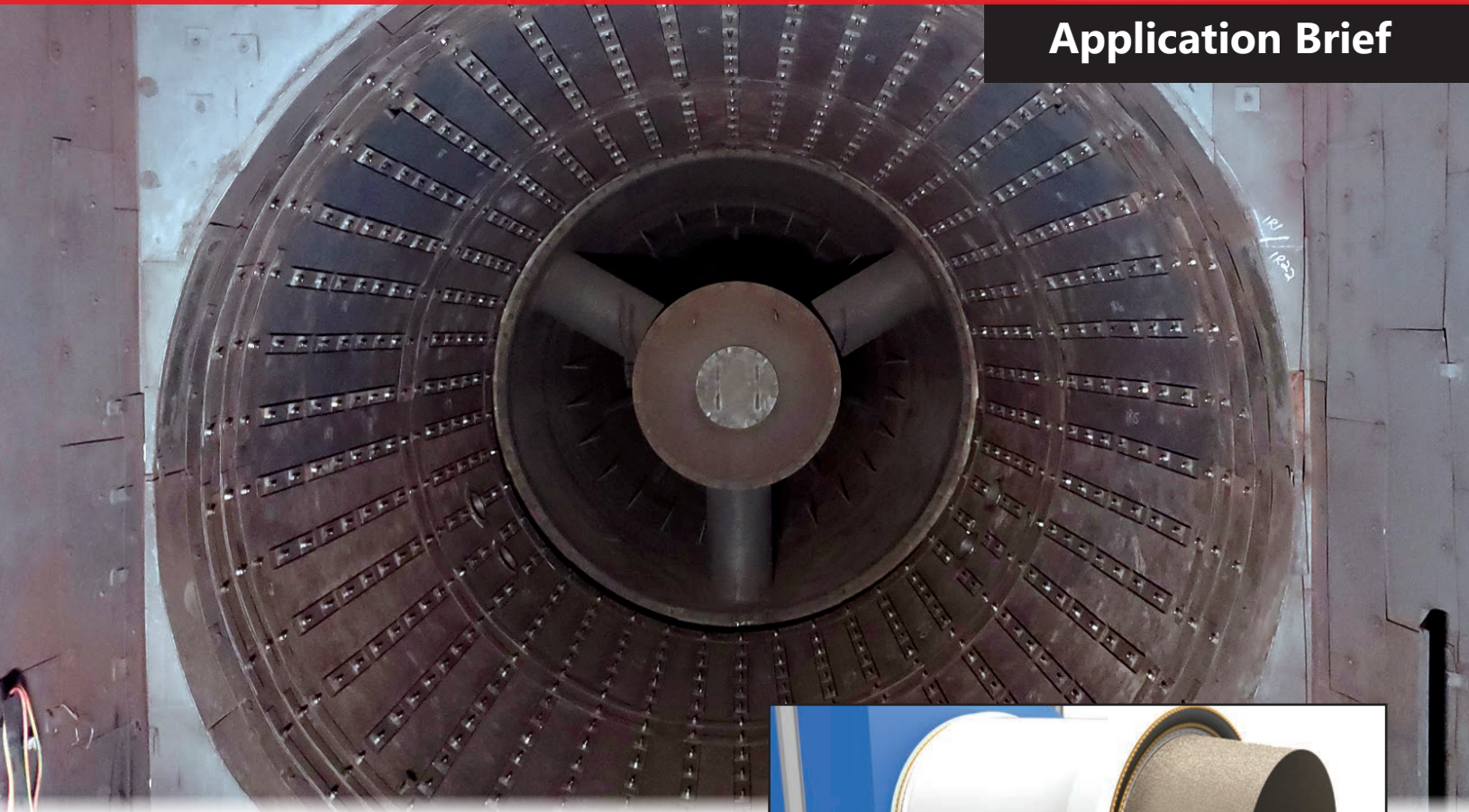


EXPANSION JOINTS

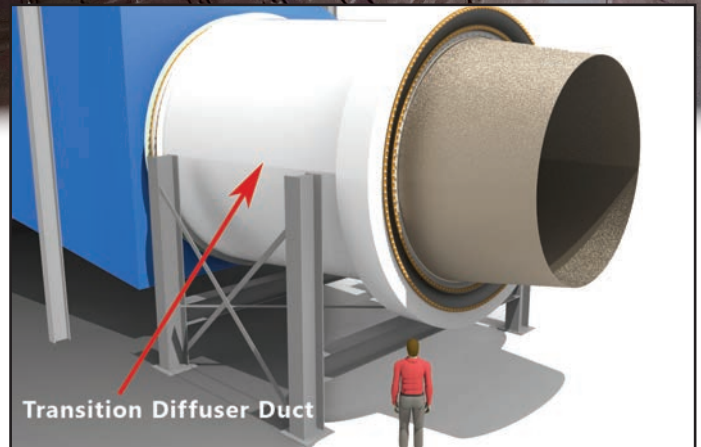
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# GE 7F Transition Diffuser Duct Repair

## Application Brief



As with most equipment installed near the turbine exhaust, repair or replacement is often inevitable. Over time, the high gas flow velocities and operating temperatures, up to 1200°F, wear down material and create overheating issues potentially causing premature equipment failures or exhaust leaks. The transition diffuser duct is one area, in particular, that is susceptible to this type of damage.



Located between the Flex Seal and the HRSG Inlet, the diffuser duct is comprised of insulation covered by thin gauge stainless steel liner plates that are secured in place by studs welded to scallop bars. There are hundreds of studs welded to the scallop bars that hold the liners in place while allowing them to expand and contract during cycling. The studs and bars are imbedded in dense high-temperature insulation.

### Typical damage found in the diffuser duct:

- Loose or broken studs
- Scallop bars cracked or detached
- Liner plate distortion and fatigue cracks
- Insulation breakdown and voids
- External hot spots and missing/flaking paint





### 7F Transition Diffuser Duct - Typical Damage



*Typical scallop bar crack*



*Scallop bar distortion and cracks*

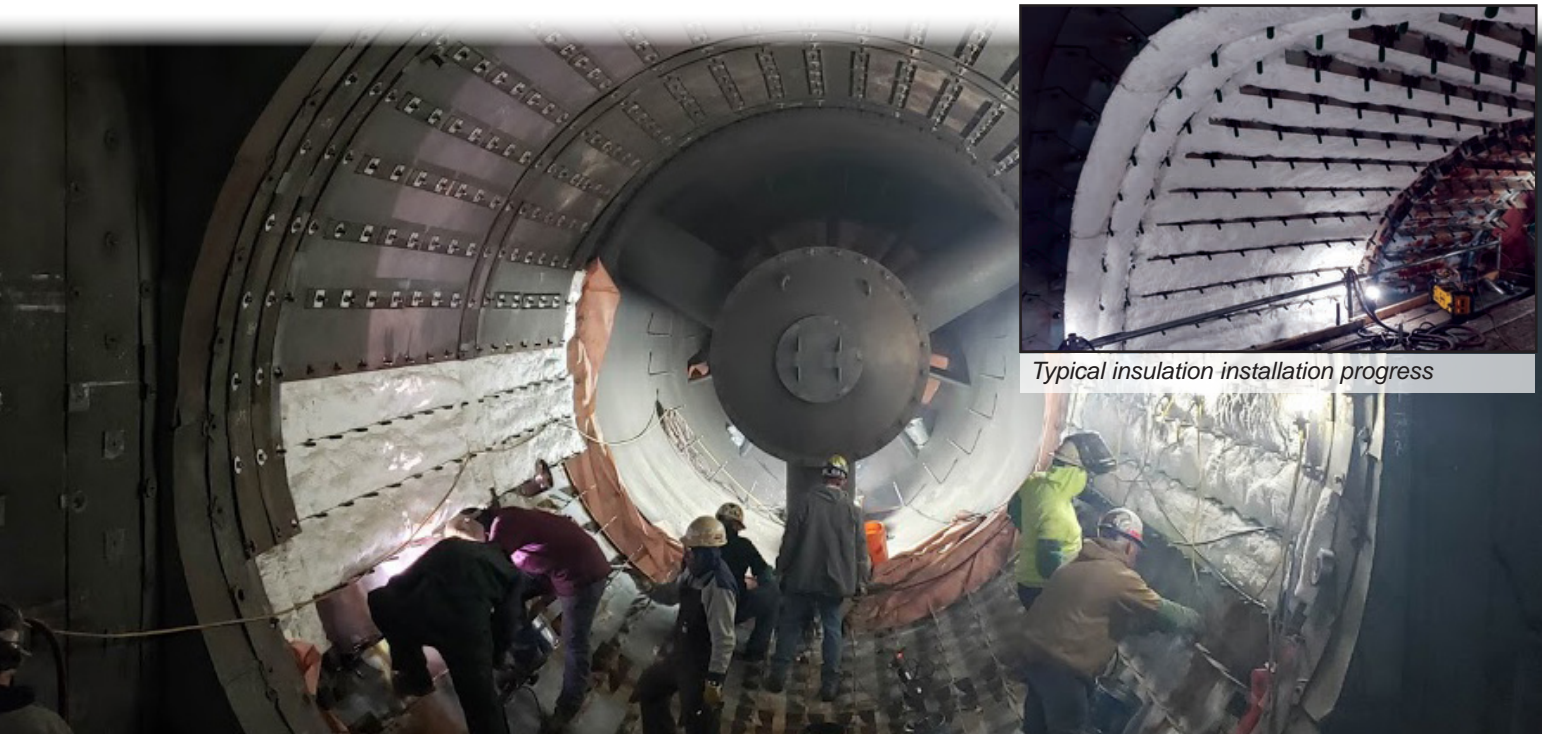


*Insulation void*

Choose **BADGER** for your **COMPLETE TURNKEY** installation and repair of your transition diffuser duct

Maintaining the internal liner system in the duct is important to protect the expansion joints and other connected equipment downstream. **BADGER** performs On-Site Service for inspection, turnkey installation, and repair of your 7F transition diffuser duct, Flex Seal and the HRSG inlet expansion joints.

**BADGER's** experienced On-Site Service Team and project managers provide complimentary inspections to help your team implement best practices for repair and installation. Developing and implementing the right maintenance plan in advance, reduces outage budgets and helps avoid costly forced shutdowns.



*Typical insulation installation progress*