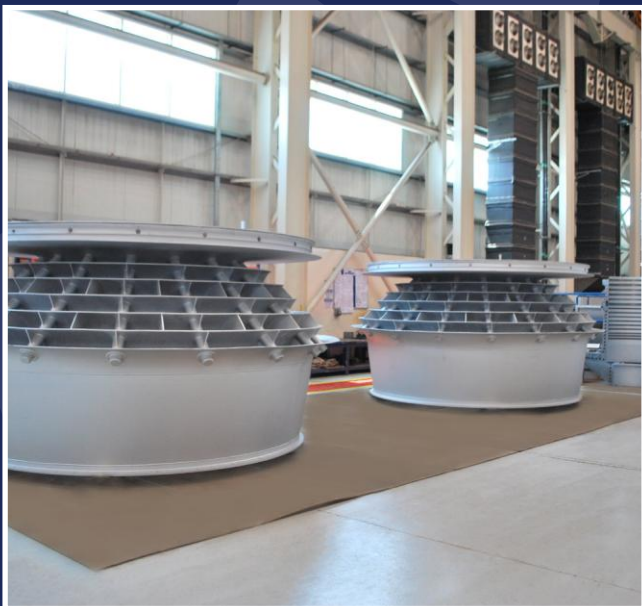


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MJB offers advanced exhaust diffusers for the Frame 9001E Gas Turbine.

The experience gained from servicing and repairing Heavy Frame gas turbine exhaust systems has provided MJB with the knowledge to be able to carry out a detailed evaluation of your existing system to ensure suitability for replacement or upgrade to the advanced exhaust diffuser solution.

The diffusers are made from 304L material coated with a high temp aluminium paint and incorporate adjustable aft flexi seal clamps and a refined internal liner design that reduces insulation degradation.



Frame 9001E Advanced Exhaust Diffuser

The advanced 9001E Exhaust Diffuser includes the following enhancements over the previous standard Diffuser:

» Scalloped Circumferential Ribs

Potential circumferential & radial cracking on the inner drum of the Aft Diffuser assembly has significantly been reduced by applying additional scallops on the circumferential ribs on the load tunnel side of the aft diffuser, which reduces thermal stresses in the drum wall area.

» Addition of Gusset Plates between Turning Vanes

To stiffen the turning vane sub-assembly, some gusset plates are added between certain turning vane rows.

» Elimination of Structural Ribs and Associated Welds

The objective of this is to avoid the cracks that develop at the rib-to-barrel weld toe. These cracks, once they develop, propagate circumferentially around the inner barrel. Eliminating the ribs and the weld associated with them is critical to eliminating the cracks caused by the weld.

» Addition of Pipe Struts between Turning Vanes

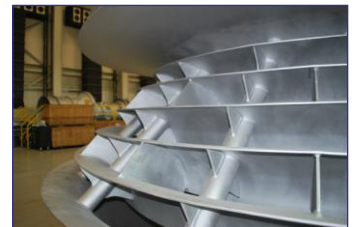
Cracking occurring in the turning vanes has substantially reduced by welding pipe struts between turning vane rows 1 & 2 and 3 & 4. This greatly increases the stiffness and reduces stresses in the turning vanes which in turn helps reduce cracking significantly.

» Thinner Retaining Washers

Cracking due to thermal mismatch is reduced in the advanced design. This is done by reducing the thickness of the retaining washers. These upgrades act to lower the stress, thereby reducing cracking significantly.



Eliminated structural ribs and associated welds



Gusset plates added between turning vane rows



Adjustable aft sealing ring



Reduced thickness of retaining washers