



# heat transfer society

WEBINAR FORUM

3<sup>rd</sup> JULY 2026

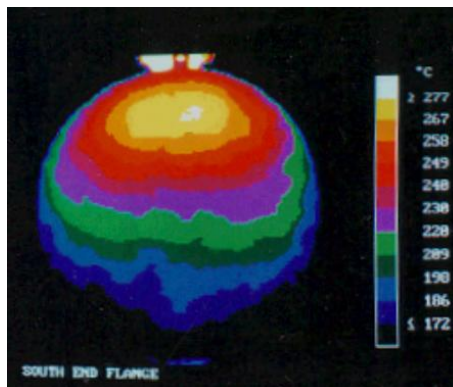
## “Seal Optimisation in Cyclic Service – An Advanced Gasket Technology & Alternative Calculation Methodology”

*Shaid Rahmanwill*

*Flexitallic Sealing technology Application Engineer*



Historically, creating and maintaining a reliable seal in bolted connections subject to load transients can be challenging. Girth flange connections commonly found on shell & tube heat exchangers can prove particularly troublesome. Especially across fixed tube sheet connections that share common, thru bolting.



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Thermal gradients and pressure differentials around and across such connections, during start up and under steady state conditions can be significant. Under such conditions, legacy gasket technologies can lose resilience leading to loss of joint integrity. In addition, many exchangers operate under batch of cyclic conditions, exacerbating further the challenge of maintaining a reliable seal.

An approach based on an advanced gasket design in combination with a holistic calculation methodology has proven to be particularly effective in overcoming the challenge of maintaining long term joint integrity in such difficult applications. The advanced gasket design results in a seal structure that lends itself to minimising plastic deformation, significantly improving gasket resilience under cyclic loading conditions.



The calculation methodology considers the connection in its entirety, elastic interactions between all mechanical components for a defined set of load conditions. Output includes optimum closure force, determination of load limiting components allowing for possible joint improvement and tightness qualification.

To date, the approach has been successfully deployed in a significant number of problematic applications globally.

The presentation will start at **12 noon** (for one hour).

**Free Webinar Registration Link: [HERE](#)**

Shaid Rahmanwill

Shaid Rahmanwill's role is focused on providing Flexitallic's customers with Engineered Sealing Solutions and verification calculations. His efforts are targeted to meet problematic, static sealing applications, improving sealing reliability. Shaid has an extensive knowledge of bolted connection and gaskets standards and static sealing technologies. These provide him with the tools and experience to meet the sealing challenges found in multiple industries and applications.

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*Members are encouraged to share this notice with colleagues who may be interested in this discussion.*

## **Future events**

- ❖ 6th - 9th September 2026 19th UK Heat Transfer Conference, Newcastle University
- ❖ 19th March 2027, 61st HTS Annual Dinner - Grand Connaught Rooms, 61-65 Great Queen St, London WC2B 5DA.

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