Edge bonded gaskets seal flat components where there is no groove for a press-in-place gasket. They comprise an elastomeric sealing bead that is bonded to the thin edge of a metal carrier frame.

Complex designs with multiple elastomeric sealing beads are often used to seal different parts of a module using a single edge bonded gasket.

A selection of design features is available for the metal carrier. These help position or retain the gasket in the application, improve sealing performance, and provide identification/traceability.

- The materials used for the elastomeric seal and metal carrier are matched to both the application conditions and the mating components.
- Rubber-filled bolt holes are used to minimize tolerance stack and as a means of bolt retention to hold the gasket in place before final assembly.
- Plastic retention clips or rubber pins are other options for positioning the gasket. These features are designed to have an interference fit with holes in the mating component, securely locating and retaining the gasket in place.
- Manufacturing details can be stamped on the metal carrier for easier traceability. Tabs on the carrier designed to protrude from the joint can be used to verify the presence of the gasket.

VALUES FOR THE CUSTOMER

The edge bonded gasket provides a robust sealing solution:

- The metal carrier eliminates the need for compression limiters and prevents outside contamination from contacting the elastomeric seal.
- A rigid metal carrier enables easy positioning of the gasket for quick assembly.
- Compatible for sealing many high-pressure applications—typically higher fluid pressures than handled by press-in-place or over molded gaskets.
- Full-service in-house design team available to develop the best gasket for your application.
FEATURES AND BENEFITS

Edge bonded gaskets comprise an elastomeric seal bonded to the thin edge of a metal carrier frame.

- **Applications**— Edge bonded gaskets are used to seal various components including transmission pans, oil pans, intake manifolds, AMT units and water/oil heat exchangers

- **Size**— Edge bonded gaskets are manufactured in a wide range of sizes and measure from just a few inches wide up to four feet across for larger transmission pan applications

- **Materials**— Standard elastomeric gasket compound options include ACM, EPDM, HNBR, and FKM. The metal carrier is typically aluminum, steel, or aluminum-coated steel

- **Performance**— All of our edge bonded gasket sealing solutions successfully pass the ASTM 429 peeling test for gasket strength and adhesion

Edge bonded gaskets maintain the highest standards of sealing performance and durability required for all Freudenberg Sealing Technologies gaskets in extreme conditions.