Typical HF Alkylation Units are plagued with flange corrosion because traditional gasket solutions leave crevices & gaps. Crevices remain, even with kammpro inners.

**Problem:**
Crevice Corrosion

**Consequence:**
- Leaks during operation require the need to operate with clamps (run with active leaks).
- Inevitable flange repair and replacement is very costly.

**Solution:**
CPR-HF

Designed to eliminate all crevices and prevent the onset of corrosion.
- Eliminate costly, time-consuming repair
- Avoid the use of clamps
- Also capable of sealing against some existing corrosion

- ¼” Sigma 600
  - Highly compressible PTFE inner ring
  - ¼” thickness designed to the bore eliminates all crevices*
  - Conforms better than kammpro inner ring
  - Reduced load requirements over kammpro inner ring

- Monel Flexpro
  - Primary seal
  - Reduced load requirements over spiral wound
  - Fire Safe graphite facing
  - Carbon steel available upon request

*Pipe schedule required for all designs.
UOP Licensed HF Alkylation Unit

- Flanges that chronically develop leaks after start-up requiring subsequent clamps have now been sealed with the CPR-HF with no leaks or clamps to date since January 2012.
- Most CPR-HF gaskets are in the most difficult service - the Depropanizer.
- CPR-HF is sealing against repaired as well as damaged surfaces.
- No changes or improvements were made to installation procedures. Success is truly from the gasket as opposed to improved installation or controlled torquing.
- "Maintenance and Operations love the new gasket and want to use it everywhere."

**CPR & CPR-HF BENEFITS**

- Eliminate the use of clamps!!
- Prevent the onset of corrosion
- Resist further corrosion and seal existing damage
- Save on expense of in-situ weld build up, machining or flange replacement
- Reduce turnaround time, reduce cost
- Suitable for all standard ASME Class 150 – 2500
- Non-standard sizes available

**CPR**

**Corrosion. Prevention. Resistance.**

Flange corrosion is not only a problem in Hydrofluoric acid service. It is a constant battle in all industries ranging from offshore to chemical processing.

The CPR Gasket utilizes the same design concepts as the CPR-HF, yet the Flexpro core and facing materials are selected to match the application.

CPR standard materials are a 316L core with graphite facing unless specified otherwise.

Please provide pipe schedule with all inquiries.