EXTEND CATALYST LIFE, PROTECT EQUIPMENT AND ENSURE THAT PRODUCT SPECIFICATIONS ARE MET

Adsorbent Solutions in Refining
**Adsorbents for Catalytic Reforming**

- **CLR-204**: Premier, highest capacity product with very low green oil production for net gas and LPG treating.
- **9139A**: Workhorse product for net gas and LPG treating.
- **CLR-454**: Good capacity in net gas treating, also makes NO green oil.
- **PCL-100**: For use in stabilizer feed treating, also removes organic chlorides along with trace HCl.

**Adsorbents for Isomerization**

- **HPG-250 & HPG-429**: Use in feed treaters to remove a broad range of impurities. Add to make-up H₂ dryers for both H₂O and removal of CO₂, H₂S or methanol.
- **PDG-418**: For moisture removal in make-up H₂ dryers.
- **ADS-120**: New, cost-effective, non-regenerative sulfur removal adsorbent for treating Penex and Reforming feed streams.

**Adsorbents for HF Alkylation**

- **GB-346S**: Hg removal from hydrocarbons in feed to alkylation units.
- **ADG-401**: Use alone to remove water or with HPG-250 or HPG-429 to remove H₂O and oxygenates in feed dryers.
- **ORG-E**: Used to purify etherification raffinate streams, used as alkylation feedstocks.
- **P-188**: Premier, highest capacity defluorination adsorbent resulting in longer effective bed life.
- **A-202HF**: Widely used and considered the industry standard in defluorination adsorbents.

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**UOP HF Alklation Process**

**Simplified Penex Flow Diagram**

**Simplified Butamer Flow Diagram**

**Chloride Treating in Reforming**

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