

Camet Oxidation Catalysts

- Broad Operating Temperature Window, 500°F to 1250°F
- Patented Continuous on-line Corrugating, Catalyst Coating and Honeycomb Forming Process Manufactures Superior Quality Products
 - Produces even coating of catalyst materials throughout metal foils. It eliminates uneven coating distribution (axially and around the cell walls) encountered on post-coating products.
 - Provides longer life with the effective utilization of catalyst materials.
 - Maintains wider cell opening to minimize blocking and pressure drop.

- Herringbone (Figure 1) and Skew (Figure 2) corrugation patterns provide superior conversion efficiency with minimal pressure drop. Foil shown offset to illustrate corrugation pattern.
 - Herringbone – Reduces Power Loss by reducing pressure drop across the catalyst bed (~20% lower pressure drop than parallel flow honeycombs to achieve the same conversion efficiency. (Figures 3 & 4)
 - Skew – Similar performance to Herringbone. Ideal for low pressure drop application.

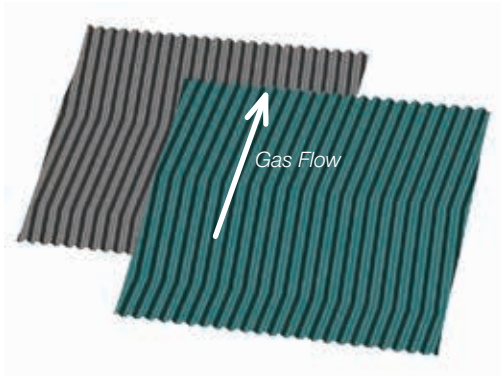


Figure 1. Herringbone Pattern

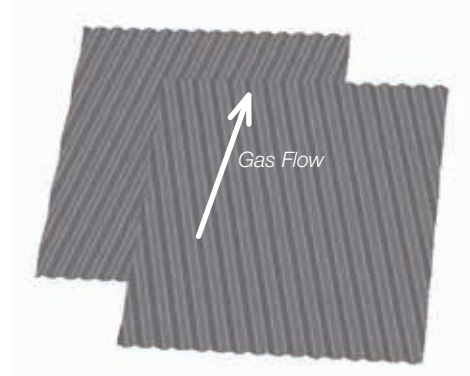


Figure 2. Skew Pattern

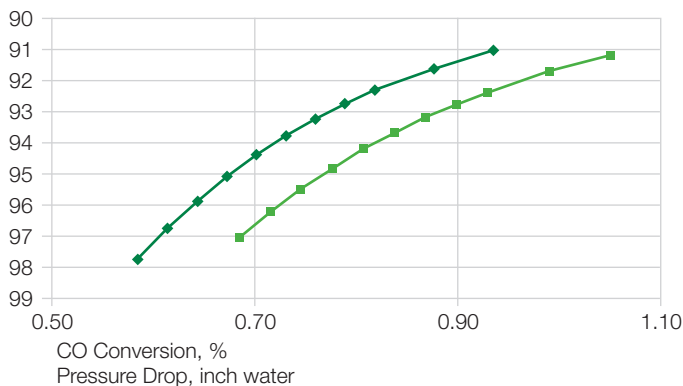


Figure 3. Herringbone gives lower pressure drop than straight honeycombs to achieve the same conversion

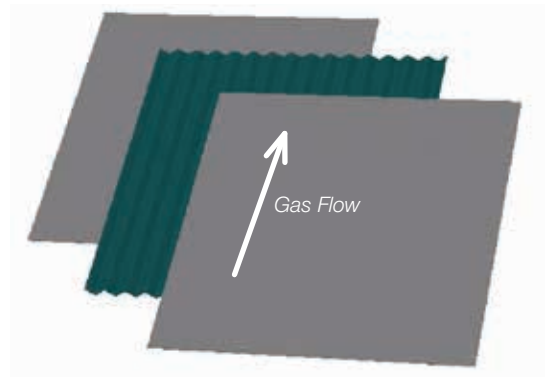


Figure 4. Competitor's Straight Channel Corrugation Pattern

- Camet catalysts have angled channels (Figures 5 and 6) that create turbulence and a tortuous gas path that promotes mixing
 - Provides 45% to 50% higher mass transfer rate than the laminar flow that occurs in parallel channel catalysts

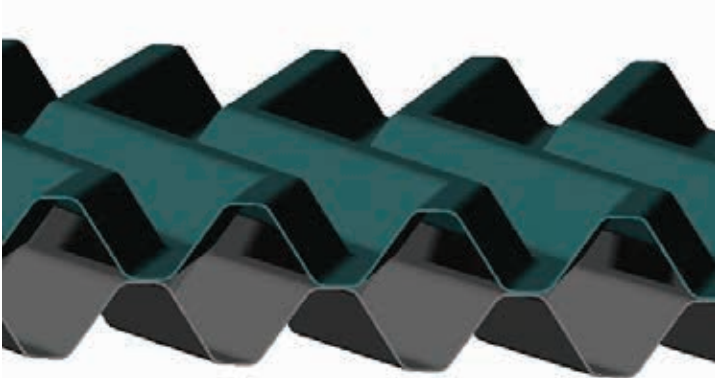


Figure 5. Herringbone

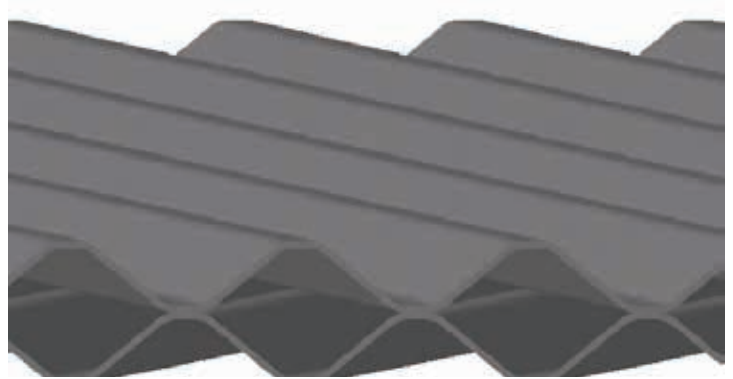


Figure 6. Skew

- Inter-communicating channels enhance gas mixing
 - Herringbone – Zigzag pattern creates turbulent flow (Figure 7)
 - Skew – Provides best gas mixing (Figure 8)

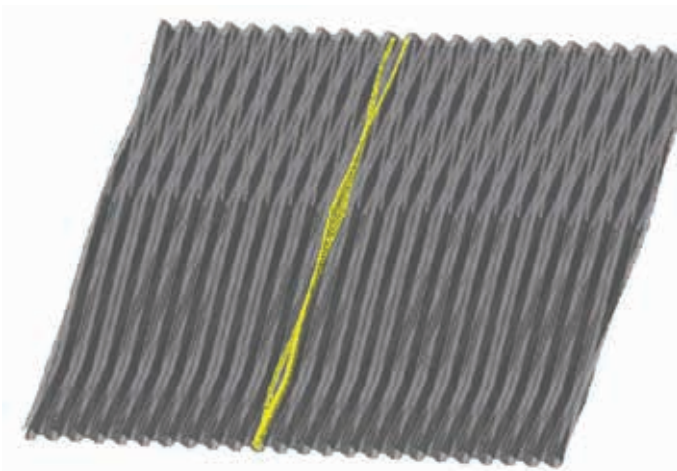


Figure 7. Herringbone Foil with Gas Flow Entering One Channel. 20 Trajectories Shown with Foil Semi-Transparent

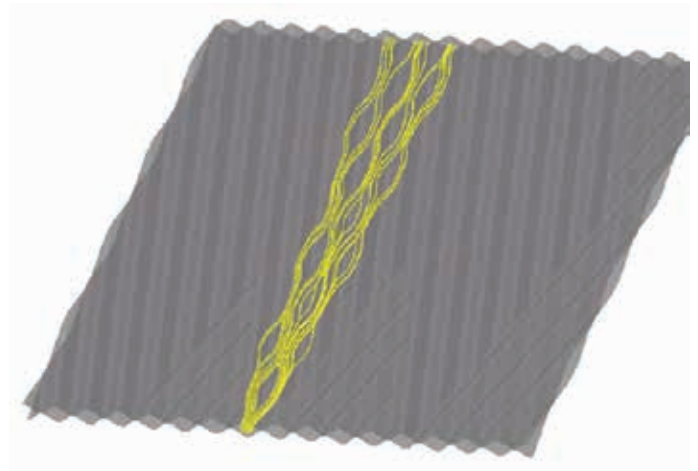


Figure 8. Skew Foil with Gas Flow Entering One Channel. 20 Trajectories Shown with Foil Semi-Transparent

- Interconnecting channels provides great tolerance to surface blockage by particulate, such as loose insulation
 - Resistance to plugging becomes more important as catalyst cell density increases.
 - With Herringbone and Skew patterns, gas flow fills in behind plugged cells (Figure 9 and 10). Catalyst downstream of plug is still active and gas velocity returns to normal levels.
 - With straight channel catalyst. Catalyst downstream of plugged cells is inactive and gas velocity increases. Increases gas velocity reduces catalyst performance.

Patented Corrugation patterns for stable and stronger stacking for catalytic abatement applications

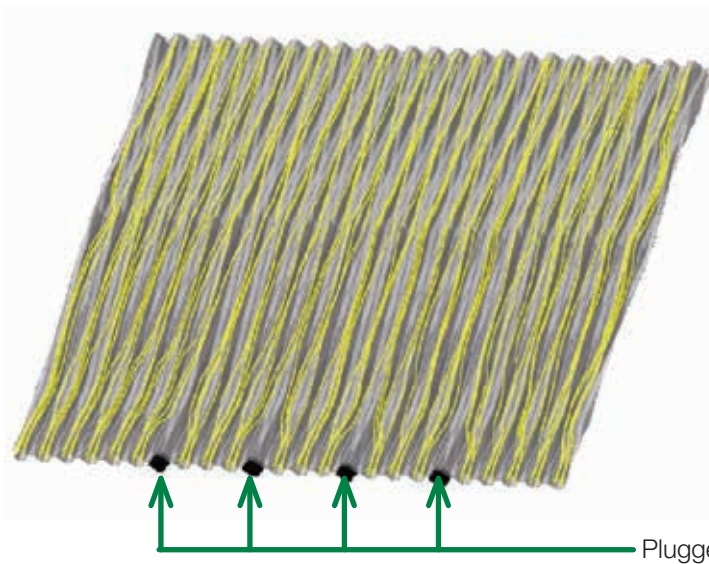


Figure 9. Herringbone Foil Flow with Plugged Cells. 80 Trajectories Shown with Foil Semi-Transparent

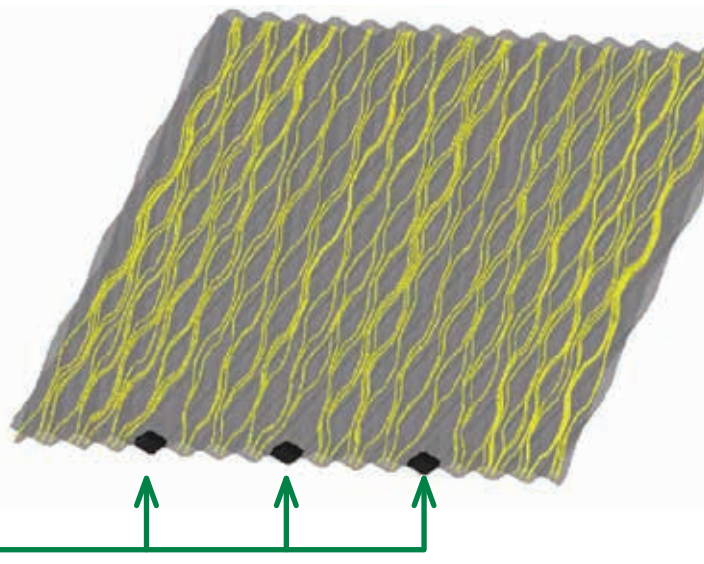


Figure 10. Skew Foil Flow with Plugged Cells. 80 Trajectories Shown with Foil Semi-Transparent

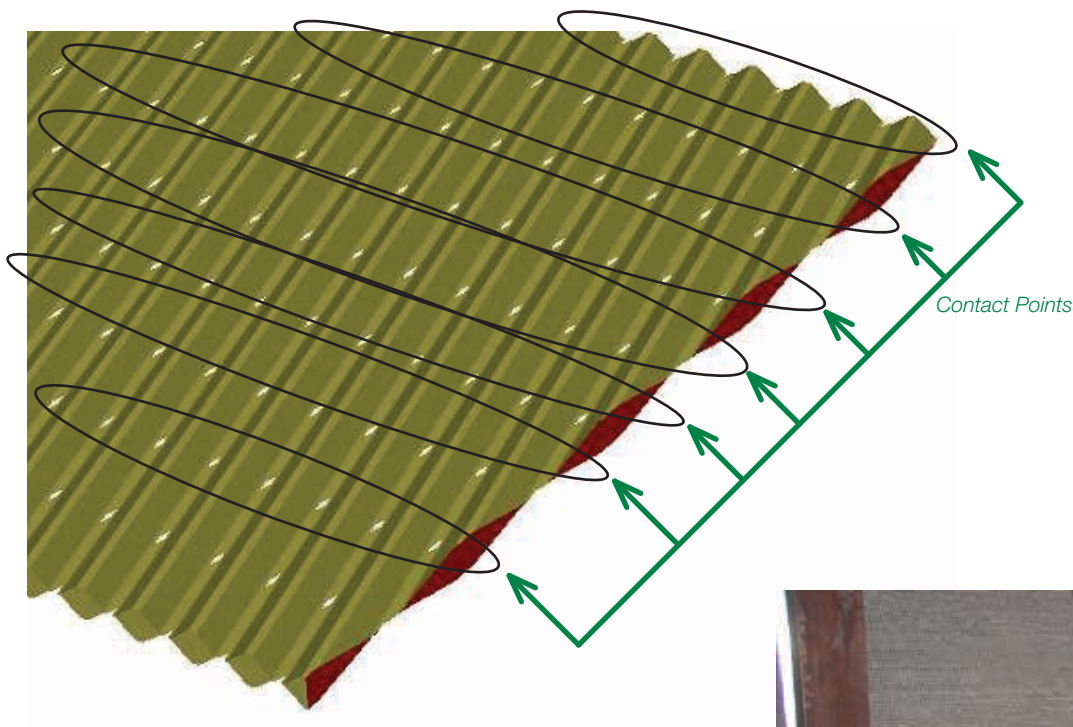


Figure 11. Volume Between Herringbone Plates Showing Contact Points

- Other Camet Features and Benefits
 - Test cores in each unit to evaluate aging accurately
 - Camet catalysts are washable
 - Catalyst is non-hazardous when spent
 - Precious metal in catalyst can be recovered
 - Light weight metal substrate
 - Easy installation (Figure 12)



Figure 12.

About Us

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