POLYGLIDE® DRY FILM LUBRICANT may be applied to all metallic substrates to improve stamping and formability performance. POLYGLIDE has been proven effective on stainless steel, carbon steel and aluminized-coated products.
POLYGLIDE® DRY FILM LUBRICANT

Product Description

POLYGLIDE is a polymeric dry-film lubricant coating with air-dry attributes. After application, it is completely dry to the touch and provides a low coefficient of friction that is superior to conventional oil lubrication. The coating creates a 100% film protection that does not migrate like oil. The polymeric film prevents die-to-part contact which enhances die life, reduces heat, and removes metal-to-metal contact contraints allowing material to more easily flow through dies. POLYGLIDE is weldable via metal inert gas (MIG) and spot-welding techniques. POLYGLIDE creates no discernible odor as verified by industrial hygienists. POLYGLIDE is detectable under UV light for inspection purposes.

AVAILABLE FORMS:

POLYGLIDE can be applied to material in gauges from 0.010 – 0.125 in. (0.254 – 3.175 mm) and widths up to and including 72 in. (1828.8 mm).

For specific gauge and width capability, please contact your AK Steel sales representative.

ADVANTAGES

• Applicable to all metallic substrates
• Thermoplastic
• Water based, dry to touch, polymeric dry film lube
• Must be dry stamped
• Low coefficient of friction
• Coating weight range = 125 – 175 mg/ft.²
• Surface protectant properties
• Formable
• Weldable
• Removable with an alkaline cleaner
• Can be temper rolled
• Detectable under UV light
Properties

POLYGLIDE® has a lower coefficient of friction than typical mill oils or prelubes, minimizing migration in high-pressure areas and ultimately, the undesirable metal to metal contact within a die. The lower coefficient of friction also indicates less risks for fractures, tears, or cracks. Stainless Steel material coated with POLYGLIDE exhibited higher Limiting Draw Ratio and Limiting Dome Height results, indicating better flow and formability than the same material coated with mill oil and prelubes. The higher flow and formability inherent to POLYGLIDE support improved stamping consistency.

![Figure 1 – COEFFICIENT OF FRICTION](image1)

![Figure 2 – STAINLESS STEEL LIMITING DRAW RATIO](image2)

![Figure 3 – STAINLESS STEEL LIMITING DOME HEIGHT](image3)
Founded in 1847, Cleveland-Cliffs is among the largest vertically integrated producers of differentiated iron ore and steel in North America. With an emphasis on non-commoditized products, the Company is uniquely positioned to supply both customized iron ore pellets and steel solutions to a quality-focused customer base. AK Steel, a wholly-owned subsidiary of Cleveland-Cliffs, is a leading producer of flat-rolled carbon, stainless and electrical steel products. The AK Tube and Precision Partners businesses provide customer solutions with carbon and stainless steel tubing products, die design and tooling, and hot- and cold-stamped components. In 2020, Cliffs also expects to be the sole producer of hot briquetted iron (HBI) in the Great Lakes region. Headquartered in Cleveland, Ohio, Cleveland-Cliffs employs approximately 11,000 people across mining and steel manufacturing operations in the United States and Canada.

Additional information about AK Steel is available at www.aksteel.com.

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