Tool-X®

Technical Data Sheet Tool-X 705

Tool-X 705

High Performance High Viscosity Heavy-Duty Cutting Oil For Forming Applications

PRODUCT DESCRIPTION

Tool-X 705 is a high performance high viscosity neat cutting oil with added Tool-X nanotechnology for heavyduty forming and cold heading applications with aluminum alloys and ferrous metals. Tool-X 705 contains a high level of additives including chlorine and active sulfur for exceptional EP lubricity, and esters for high temperature resistance. The Tool-X nano-onions prevent galling and scratching between the part, dies, and tool. **Tool-X 705** is formulated for the most challenging and severe applications while cold heading or forming.

Tool-X 705 can deliver faster cycle times and feeds and speeds, while extending tool life, improving surface finish and dimensional accuracy on the most demanding applications.

BENEFITS

Base Formulation

- High EP lubricity properties
- High level of additives
- Excellent boundary lubrication for extended tool life
- High viscosity provides long lasting oil layers
- Effective in wear reduction
- Suited for high temperature applications

Tool-X Nano-Onions

- Increased feeds and speeds
- Better dimensional accuracy
- Improved surface finish
- Extended tool life
- Prevents galling and scratches on tool and dies
- Lower manufacturing costs

APPLICATIONS

Tool-X 705 is formulated for severe applications. It includes a high level of additives, including chlorine and active sulfur, as well as Tool-X nano-onions, to provide lubricity and boundary layer lubrication in the extreme pressures used in forming applications. **Tool-X 705** is formulated for forming and cold heading applications with steel, aluminum, and titanium alloys.

| Suitability | Cast Iron | Low-Med Alloyed Steel | High-Alloyed or Stainless Steel | Titanium Alloys | Aluminum Alloys | Yellow Metals |
|--------------|-----------|--------------------------|------------------------------------|-----------------|-----------------|---------------|
| Cold Heading | | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | |
| Forming | | $\sqrt{}$ | √√√ | $\sqrt{}$ | √√√ | |

PROPERTIES

| | Ester | Chlorine | Active Sulfur | Inactive Sulfur | Phosphorous | Calcium | Zinc |
|-----------|-------|----------|---------------|-----------------|-------------|---------|------|
| Additives | √ | √ | √ | - | - | - | - |

| | Appearance | Appearance Viscosity | | Flashpoint | |
|------------|------------|----------------------|------|------------|--|
| Tool-X 705 | Dark | High – 500 SUS | 0.99 | 330 F | |

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