

# Superlube 3.1 MHD

A lubricant designed for materials with machining additives for medium-to-high density applications

## 一款为含加工添加剂的中高密度部件设计的润滑剂

Superlube 3.1 MHD is a zinc-free lubricant that provides excellent lubricity for medium-to-high density components that include machining additives. It is an ideal replacement for conventional lubricants with Zinc Stearate (ZnSt) and has almost identical properties.

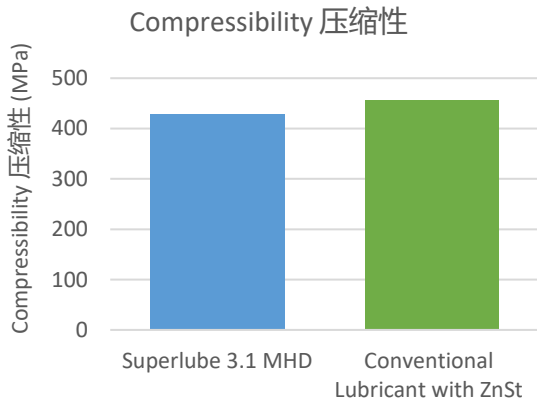
Superlube 3.1 MHD 是一种不含锌的润滑剂，它可为包含加工添加剂的中高密度部件提供出色的润滑性能。它还是含有硬脂酸锌（ZnSt）的传统润滑剂的理想替代品，因为它们具有几乎相同的性能。

	Superlube 3.1 MHD*	Conventional Lubricant with ZnSt*
<b>Apparent Density (g/cm<sup>3</sup>) 松装密度</b>	2.90	3.19
<b>Flow (Hall) (s/50g) 流速 (霍尔)</b>	30	28
<b>Green Strength (MPa) 生坯强度</b>	15	13
<b>Tonnage (MPa) 压力 @ 6.90 g/cc</b>	427	455
<b>Slide Ejection Force (kN) 滑块弹射力</b>	4.3	7.1
<b>Total Size Change (%) 总尺寸变化</b>	0.34	0.35

Superlube 3.1 MHD has similar properties to conventional lubricants with improvements in green strength and ejection force. Superlube 3.1 MHD 具有与传统润滑剂类似的性能，但在生坯强度和弹射力方面有所改进。

\*Composition: Atomet 1001 + 1.9% Cu + 0.9% C + 0.5% MnS + 0.53% lubricant

\*成分: Atomet 1001 + 1.9% 铜 + 0.9% 碳 + 0.5% 硫化锰 + 0.53% 润滑剂



Zinc-free Superlube 3.1 MHD and conventional lubricant with ZnSt have similar compressibility at 6.90 g/cc.

同为 6.9 g/cc 密度下，无锌 Superlube 3.1 MHD 和含有硬脂酸锌的传统润滑油具有相似的压缩性。

### Benefits 优点

- ✓ Does not contain Zinc Stearate  
不含硬脂酸锌
- ✓ Achieve target green densities of 6.9 – 7.3 g/cc  
密度达到 6.9 – 7.3 g/cc

### Best Uses 用途

- ✓ Components with machining additives such as MnS  
需要加工添加剂 (MnS) 的部件
- ✓ Mid-to-high density applications  
中高密度的应用

Superlube 3.1 MHD requires approximately **12% less** slide ejection force than conventional lubricant with ZnSt.

Superlube 3.1 MHD 与传统的 ZnSt 润滑剂相比，所需的滑块弹出力大约少 **12%**。

