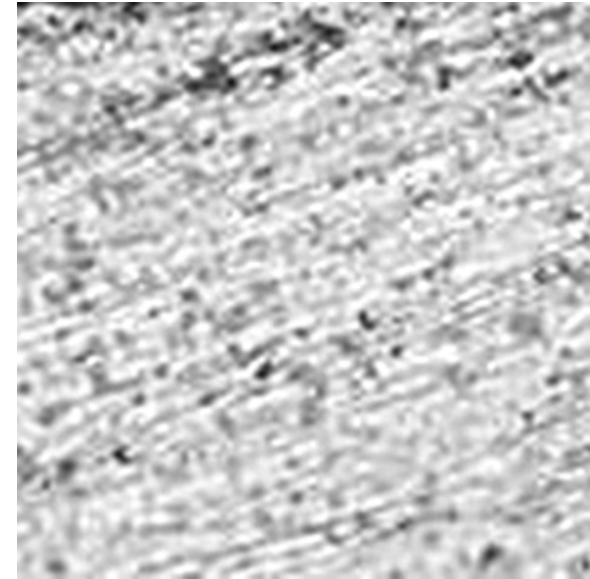


Performance Steel™



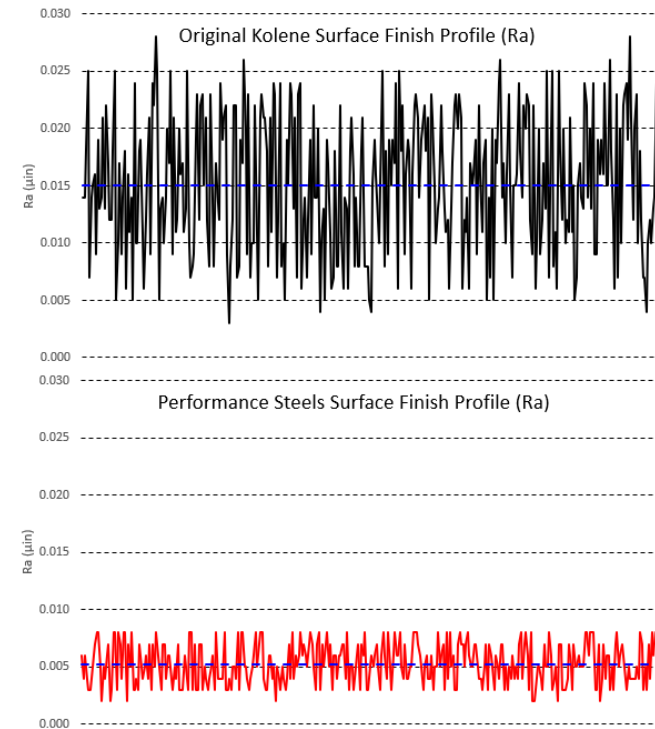
# Steel Surface Facts

- **The surface of a steel plates is measured in Roughness (average) commonly known as Ra**
- **Most steel plates have a commercial surface finish of 15 to 25 micro inches ( $\mu\text{in}$ ).**
- **This surface viewed by eye looks smooth but under a microscope has many peaks and valleys and has a rough finish.**



# Performance Steel Clutches

- **Alto's surface refinement process controls the surface finish.**
- **Lowers the average Ra value to a range of 2 to 10  $\mu\text{in}$ .**
- **Reduces the peak Ra values while reducing the overall variation in Ra.**



# Performance Steel™ Advantages Vs Kolene®

- **Minimizes damage for the clutch housing or transmission case**
- **Eliminates discoloration / contamination of oil**
- **Provides a uniform appearance**
- **Reduces brittleness of the clutch**



# Performance Steel™ Enhancements

- **Reduces wear on mating friction surfaces**
- **Improves durability of friction clutches**
- **Reduces noise, vibration, and harshness of shifting (NVH)**
- **Increases boundary layer lubrication**
- **Reduces chance for hot spotting, warpage, and coning**
- **The Alto Performance Steel surfaces are primed and ready for your extreme performance, heavy duty, and shift sensitive applications.**

