

COEFFICIENT OF FRICTION

C-110 Cerakote™ MicroSlick is an ambient cure coating specifically designed to increase lubricity in areas of low tolerance. C-110 is commonly used on engine components, such as piston skirts, valve stems and timing chains, as well as a wide range of objects including saw blades, bolt threads, gears, and ball-bearings. After 2000 wear cycles the average value of “ μ ” increased to 0.417. This indicates that as the surface of the C-110 MicroSlick began to wear, the coating was broken in before settling into an average value for the coefficient of friction. For high use and extended wear applications, “ μ ” should be taken as 0.417. For single or lower use applications the value of “ μ ” is lower. This study indicates that Cerakote™ C-110 can be successfully used as a dry-film lubricant.

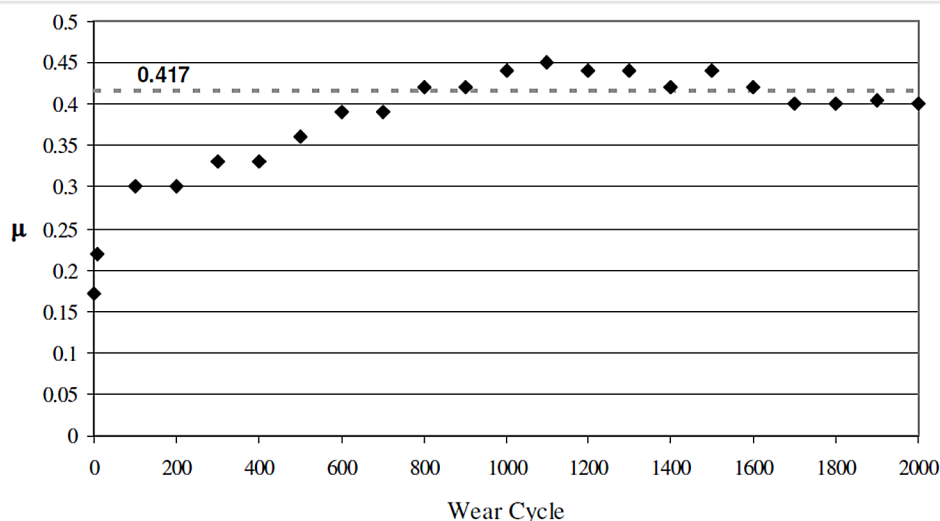


Figure 2. Variation in the coefficient of friction as a function of wear for Cerakote™ C-110 MicroSlick.

Table 2. Coefficient of kinetic friction (μ), with and without wear, for Cerakote™ C-110 MicroSlick

Sample	Initial coefficient of friction (μ)	Coefficient of friction with wear (μ)
C-110 – Stainless Steel	0.171	0.417
Steel-Steel	0.57-0.80*	-
Aluminum-Aluminum	0.8-1.2*	-

*Average coefficient of friction without wear.