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Abstract

In this study, the tribological behavior and interfacial evolution of GCr15/Mild steel tribopairs lubricated by inorganic sodium metaphosphate was investigated under different applied loads at 800^{o}C. The results show that sodium metaphosphate lubricates the contact effectively at the load ranging from 5 to 30 N, with higher loads causing increased friction and wear. A layer of glassy phosphate film formed between the contacts is responsible for the improved tribological