

## **Tribological characteristics of high strength low alloy steel under various environmental conditions**

### **ABSTRACT**

High strength low alloy steel has excellent heat resistance and high strength. As it is commonly used as gun barrel material, a long service life and superior wear resistance are necessary for steel components. Here we investigated the wear characteristics of high strength low alloy steel surfaces under various environmental conditions, using a pin-on-disk wear test. Oxidation and wear debris effects on the coefficient of friction (COF) of the alloy steel were examined under air and argon (Ar) gas flow at atmospheric conditions.