

(Entrusted test organization: Harbin Welding Institute Huatong Welding Industry)

3.2. Sliding wear performance

- ✓ △Test material /WKL-B, MNB, Swedish HARDOX400, HARDOX500 and American XGG SA1750CR; friction object: GCR-15 bearing steel
- ✓ △Test equipment: multi-functional friction wear test machine of model M-200
- ✓ △Test parameters: test load: 600N, rotation speed: 200 rpm, sliding wear time: 2h, quartz flow rate: 1.5-2.0kg/h
- ✓ WKL-B is comparable to American XGG and is improved by more than 90% and 70% compared to HARDOX 400 and 500 respectively as shown in the table below.

• Wear resistance comparison of different materials

Sample No.	Material	Wear loss (mg)	Volume wear loss $W_v(\times 10^{-6} \text{mm}^3/\text{Nm})$	Wear rate (Yanzhan, XGG, HARDOX)
1	WKL-B	174.53	12.23	1
2	American XGG	173.97	12.21	1
3	Swedish Hardo*450	464.81	26.13	2.13
4	Swedish Hardo*500	421.52	23.54	1.92

Based on the above test comparison, the composite wear-resistant steel plate of Wuxi Weikelai is comparable to American XGG, and is even better than American XGG wear-resistant material concerning certain process index.