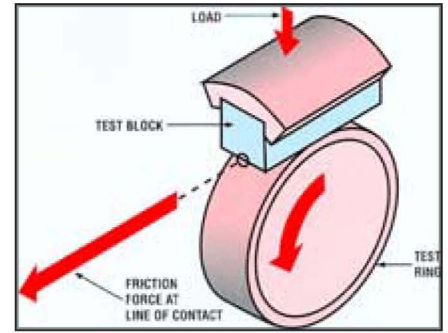


## TRIBO/COMP vs Steel - Friction/Wear Test

The following test data was conducted on a LFW-1 test machine. The surface sliding speed was 223 rpm (80 ft/min). The starting load was approximately 20 ksi and was maintained near that load by applying more weight as the wear scar increased in size. When the wear depth reached 0.001 inch, the weight was decreased to lower the load to around 3 ksi.

The tests were conducted at room temperature and at 50-55% R.H. The temperature of the block was measured with a thermocouple placed in a small hole in the center of the block about 0.2 inches from the wear surface.

The rotating ring material was steel at a hardness of Rc 58-63. The wear block was fabricated from the lubricative bearing material or had the bearing material laminated to a metal block on the wearing surface.



Bearing Material	Wear Rate at 20 ksi mils/1000 sliding feet	Wear Rate at 3 ksi mils/1000 sliding feet	Coefficient of Friction at 20 ksi dynamic range	Coefficient of Friction at 3 ksi dynamic range	Max. Block Temp. at 20 ksi °F
TRIBO/COMP IMFC-1Z	0.29	0.047	0.27-0.09	0.10-0.19	116
TRIBO/COMP PMFC-F4	0.31	0.037	0.30-0.09	0.14-0.17	127
OTHER COMPETITIVE BEARING MATERIAL	0.40	0.230	0.30-0.21	0.30-0.26	144

## TRIBO/COMP vs Titanium - Friction/Wear Test

This test was conducted on a LFW-1 testing machine. The rotational speed was 223 rpm (80 ft/min) which equates to approximately 965 in/min. The load on the block was constantly increased to maintain approximately 20,000 psi at the block interface. When the wear scar depth reached 0.001 inch, the load was decreased to maintain the load at approximately 3,000 psi. The wear rate of the bearing was determined at both 3,000 psi and 20,000 psi.

RING MATERIAL	BLOCK MATERIAL	NUMBER OF CYCLES	APPROX P.S.I. LOAD	WEAR RATE
TITANIUM 6 Al-4V BARE	TRIBO/COMP IMFC-1Z	3,789	20,000	$2.9 \times 10^{-3}$ in/1000 sliding ft.
		13,151	3,000	$8.5 \times 10^{-4}$ in/1000 sliding ft.