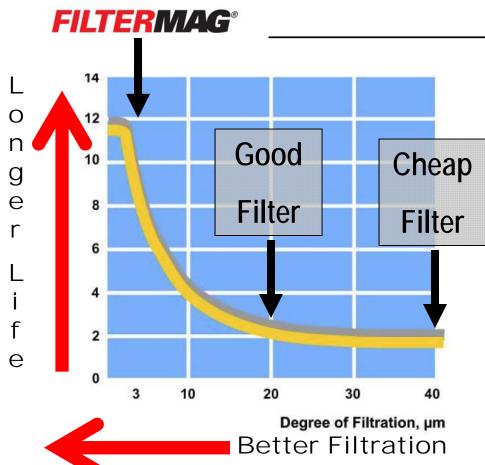
## MacPherson Study

## Clean Oil is Essential to Life Extension & Improved Reliability



## **MacPherson Graph**

MacPherson proved that removal of very small particles (<10 micron) from lubricating oil has a very useful effect on the life of bearings: **The finer the filtration, the longer the life.** 

The MacPherson Graph is based upon an accelerated test of 10 rolling element bearings. The oil was contaminated with particles from gearboxes.

Sayles, R.S., and Macpherson, P.B., "Influence of Wear Debris on Rolling Contact Fatigue," Rolling Contact Fatigue of Bearing Steels, J.J.C. Hoo, editor, ASTM STP 771, ASTM 1982, pp. 255-274.

