

**Since 1966
Engineers knew that particles smaller than
five microns
caused most engine wear!**

“Eight hour radio tracer tests were conducted on a six cylinder internal combustion engine to establish the relationship between wear rates and filtration levels....”

“The wear rates were measured using radio tracer techniques, ie., the chrome plated compression rings and standard bottoms rings were activated (made radioactive) and the oil was surveyed for radioactive chromium, Cr 51 and Iron, Fe 59.”

“Wear rates observed on the test with unfiltered used oil were 6 to 10 times higher than wear rates with new oil, ie., 6 times higher on the oil rings and 10 times higher on the compression rings. When filtering through a 5 micron filter, the wear remained almost unchanged, but 1 micron filtration significantly reduced the wear by one-half on the oil-rings and one-fifth on the compression rings.”

SSE 650316, “A Modern Approach to Poston Ring Bore Assembly Determination,” DenBeston, Leverenz and Bloom, International Harvester Company, January, 1966.