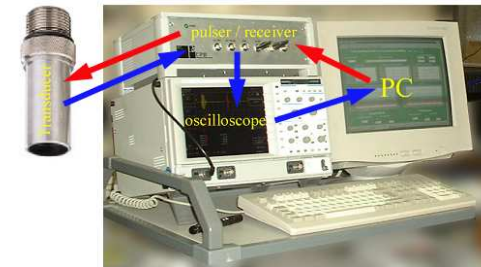
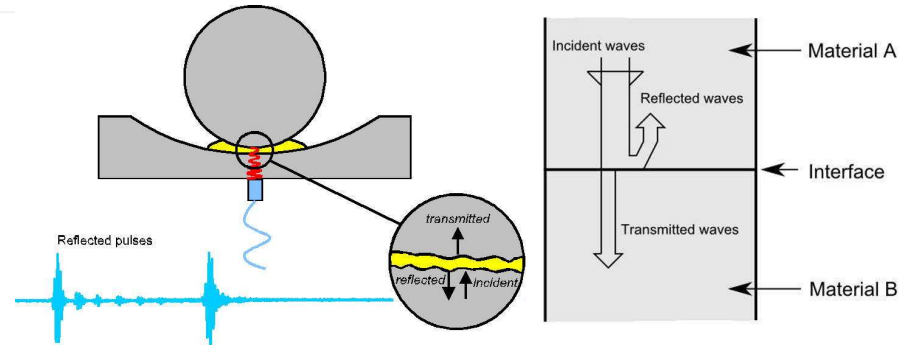


Ultrasonic Measurement of Oil Films

A New Technique for Oil Films

- Oil films tend to be very thin and hard to measure
- This is a new technique to measure the film by the reflection of ultrasound.
- A piezo-electric transducer is used to bounce a sonic wave off the oil film
- The reflected pulse depends on the thickness of the oil film



Results

- Ultrasound is a non-invasive way of measuring oil films
- The method has been used on ball bearings, thrust bearings, journals, and face seals
- There is no upper limit. Films as low as 50nm are possible.

