



## Piston Ring Clearance 3zz Fe

**Koppers Company (1927- ). American  
Hammered Piston Ring Division,  
Baltimore**

### **Piston Ring Clearance 3zz Fe:**

Engineers' Hand Book Bartlett Hayward Company. American Hammered Piston Ring Division, Baltimore, 1935

*Engineers' Piston Ring Handbook* Koppers Company (1927- ). American Hammered Piston Ring Division, Baltimore, 1939

**NACA Wartime Reports. Series E.** J. C. Nettles, Andre J. Meyer, United States. National Advisory Committee for Aeronautics, Aircraft Engine Research Laboratory, 1945 Tests were made to determine the stresses and bending moments required to break pieces 1 inch or less in length from the ends of cast iron keystone compression piston rings Piston rings were fatigue tested at amplitudes related to ring clearance With the piston ring vibrating in the free free condition strain gages were used to determine the stress pattern for various modes of vibration The natural frequencies corresponding to these modes were calculated and frequencies that might break off short pieces were found to be very high All information necessary to calculate the natural frequencies of piston ring vibrations in the free condition is included Observations and high speed motion pictures were made of vibrating rings assembled on a piston and confined inside a Lucite cylinder

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