**Induction Heater Activity**

Please watch the video on the induction heater and then answer the questions below.

1. Why does the shaft have to be prepared and what equipment was used to do this?
2. Why do you have to clean the shaft after the debur
3. Why is oil added to the shaft journals?
4. Why do you need to measure the temperature of the workshop before turning on the induction heater and what will the expansion of the bearing be if 1 deg C = 0.00012mm and the induction heater was set to 115 deg C?
5. Why does the bearing remain in their packaging for as long as possible?
6. Why does the induction heater need to be demagnetised?
7. Why do you need to hold the bearing in place for around 15 – 20 seconds?