



KEEPING BEARING AND SHAFT TOGETHER

! SITUATION

A cement manufacturer was faced with repeated cases of bearing loosening on shaft due to high temperature and torque load. This led to costly repairs, hardfacing the shaft which was costly and led to 5 hours of production downtime everytime the bearing spun.

🔧 CONVENTIONAL METHOD USED

Shrink Fit

? WHY DOES IT NOT WORK

Shrink fit produces fit on the principle of friction. However there's only 20-30% metal to metal contact and the rest is gap. This gap allows dynamic loads to loosen the bearing.

LOCTITE SOLUTION

LOCTITE 638

Loctite 638 was applied by maintenance personnel, which filled all the gaps between the bearing and the shaft unitizing the assembly against dynamic rotational loads.



RESULTS



Eliminates the risk of potential damage to the shaft



Eliminates skilled labor costs for welding and machining



Reduces production downtime