

- When the superfinish time increases, the quality of the surface is better, and hence the average surface roughness decreases. After a certain value is reached, the roughness remains almost stable. the peaks of the surface are cut down and now the stone is acting like a grinding stone, removing a quality of material from the work piece [2].
- In analyze of every displacement point on the contact surfaces between the bearing rings and balls, tensions are dependent from the pressure distribution on the contact surface, and that are influenced by the bearing ratio obtained through superfinishing process.
- To optimize analyze of bearings reliability it must take into consideration the new theoretical models of machining through superfinishing proposed in [5], which explains the cutting fluid and impurities action that are sedimented in surface micro channels and that conduct to hardening of the surface layer on the depth of 1 μm .
- The superfinishing process has a number of significant benefits, such as:
 - decreased wear rates;
 - higher load bearing surfaces;
 - improved sealing capabilities;
 - increased part life.

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