Surface quality of hardened steels after grinding

Martin Novak, MSc., Ph.D. Faculty of Production Technology and Management, J. E. Purkyne University in Usti nad Labem. Czech Republic. E-mail: novak@fvtm.ujep.cz.

Problems about hardened steels grinding is presently very important part of engineering. Many applications of these materials using in practice, machine, devices and in different industry like automotive, aviation, cosmonautics and in area of health, safety and protection of passengers in vehicles, planes, aircrafts, ships, trains and many others. Because of these areas that used the passengers is very important surface quality and durability of these parts of machines. Topic of surface quality changes in working of the parts is especially important in dynamic load parts. These parts are very loaded by alternating stress in cases of double axis stress (torsion and bend). Such materials are for example bearing, shafts and gears. In all cases the production technology influences surface quality.

Keywords: Cutting Conditions, Grinding, Microstructure, Residual Stress, Surface Quality

Acknowledgement
This experiment appears by means of specific research of J. E. Purkyne University deals with automotive parts machining.

References