The temperature of the grain mass is an important indicator that characterizes the grain mass during storage. According to grain storage technology, it is necessary to control the temperature of the grain embankment in order to prevent deterioration of the quality and loss of grain as a result of self-heating.

Grain storage is one of the most important stages that determines the quality of grain during processing and the quality of the seeds during sowing. It can produce both a positive effect as a result of post-harvest achievement and a negative one, resulting, under the influence of various factors, in reducing the quality of the grain. Modern technologies of high quality grain storage provide a complete complex of protection of the grain mass, focusing on providing condition, the main of which: temperature, humidity, time. The analysis of the safety conditions that guarantee the inhibition of reproduction and activity of insects and as a consequence – reducing grain losses during storage.

When monitoring the grain, you must simultaneously take into account the temperature of the outside air and air in the silo. That it is necessary to take into account both daytime and night air temperatures. Sharp changes in the temperature of the outside air during the day are particularly harmful to grain weights stored in silos.

The study of temperature change of the formed layers of grain millet during storage in metallic silos. Consequently, the safe conditions for the storage of millet grain were determined in the work, and recommendations for its storage in metal silos.

Keywords: millet grain, metal silo, thermometry system, temperature, safe storage conditions.