

Abstract: During iron processing, pelletizing is one of the necessary steps. Iron ore pellets are burned on pellet burning line, which consists of individual pellet cars. Due to constant temperature changes, pellet cars get damaged.

This thesis focuses on an optical analysis of pellet car damages. The algorithm presented can find individual ribs of pellet car and perform analysis of their shape, position and look. Such analysis can provide basic information for damage evaluation, same as the material for further research of pellet car damage causes.