Abstract
The present productivity research was conducted by staff and students of Industrial Engineering department at the Technological Institute of Colima, in an iron ore open-cast mine located in municipality of Aquila, Michoacán, at the request of the company, this study was directed toward to loading equipment (two Caterpillar 992 wheel loaders), used for load fragmented ore and waste product of lie down with explosives, in Caterpillar R-120 trucks, in order to determine net utilization, productivity, factors that affect them and provide improve alternatives. Results show a low net utilization of 4.27 hours and low productivity of 673 tph of loading equipment against target mine indicators. On the other hand, the more sympathetic delay on this equipment is the transportation trucks lack, both in time and in frequency with 1.65 hours and 10 events in average for shift of work.

Keywords
Net utilization, productivity, ore, aste, preparation activities, delays, filling up factor, tons per hour.