

Evaluating the Performance of Construction Equipment Operators in Egypt

Abstract:

Problems in operating construction equipment were perceived as resulting in low productivity. Productivity was considered in this study as a measurement dimension that sufficiently describes operator's performance. The two objectives of this study are to provide an analytical approach for identifying causes of productivity loss and evaluating their effects, and to evaluate the performance of equipment operators. The performance ability ratio (PAR) compares the actual productivity against the estimated productivity to demonstrate the amount of loss of productivity and, thus, judge the level of operator productivity. The study was conducted at 11 jobs concerning 11 pieces of earthmoving equipment: three bulldozers, three elevating scrapers, three off-highway trucks, and two hydraulic backhoe excavators. The analysis led to basic conclusions concerning the amount of downtime and its variation according to equipment type, and the average PAR values for operators of the four types of equipment.