ASPECTS ABOUT PLANNED UNEVEN CHARGE OF WORKSTATIONS

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Abstract: Technical line balancing is a mean of economic efficiency increasing of some industrial activities. Essentially, to balance a technical line means to organize the human operator's activity, to establish manufacture flux, to draw the line so to minimize breaking time of equipments and operators, through a charge of these, as better as possible. Usually, balancing aims the minimization of total pause time maintaining the restrictions of precedence and fitting to a fixed rhythm. Minimization of total pause time has as consequence, in this case, a better charge of every station in what concerns diminution or even cancellation of rhythm deviation from operating time. In this work there is studied the type of balancing problem with established times and unique model corresponding to the case when we don't desire operating times of workstations to be equal to one another but to given different constants. In consequence, a planned unequal charge of workstations appears, that allows building of stations that, however they are not balanced, they assure a more flexible using of work power.

There is also shown am heuristic method for solving balancing problem. The way of approaching is like that used in similar case wherein the rhythm is fixed, the main change consisting of the kind of assignation phases to workstation which is during building. Building of a workstation will be made through marking a criterion for deciding which technological phase to be added to the station that is built just then, phase which will fill in the prefix of acceptable permutation that will be finally got.

According to [3], this selection criterion will be named *optimization measure* and this can be different from objective function**.** Optimization measures correspond to different kinds to establish the order wherein the phases are processed during their assignation in workstations. Thus, there is build a list wherein the phases are ordered according to chosen optimization measure. For solving studied balancing problem we presented *three variants of general scheme of solving*, variants gained through the choice of different optimization measures.

However they give the inconvenient that they don't warrant the optimality of purposed solutions, heuristic methods give satisfactory solving for the problems put in industrial practice.

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