

# Maintenance Costs

By:

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In a maintenance management system, the *cost* contributes both to quantify financially the use of a given maintenance item or the loss of not being able to use it as required.

The term *cost* has, therefore, a wider scope in maintenance than it has in a purely administrative management situation (this probably explains why the dialogue between both actors is so often difficult.) In administrative management the term *cost* is associated with an accounting document, such as an invoice or receipt, whereas in the environment of maintenance, cost may have different sources, such as human effort, expressed by man-hours involved in the work; parts out of store; contractors' services; costs of inefficiency; loss of activity due to a failure, and so on. In most cases, in the logical sensitivity of the maintenance manager, the accounted costs express poorly the real figures of the overall maintenance cost. Imagine this dialogue:



Maintenance manager: - *This year maintenance performed very well. Practically no break downs; no stoppages; costs were much better than last year!*

Chief accountant: - *What!?! You do not know the figures. We have spent much more with contractors and the overall maintenance costs were scandalous. 16 % above last year's!*

In another conversation, the Chief Accountant: *This year yes, it was good. We have spent 22 % less than last year.*

Maintenance manager: - *I beg your pardon! Main generator has been inoperative for 3 weeks; no supply of energy and steam; we still have a 20 day repair in front of us! Your figures have gone mad!*



These dialogues illustrate the different perspectives of both managers and could take place around many subject matters: energy production plant, industry, fork lift fleet, vehicles, ships, hospitals, hotels, golf course, to name just a few.

Let us settle the matter this way:

- Before anything else a minor semantic precision: the Maintenance Manager is concerned with the *costs related to maintenance* and not with the actual *costs of maintenance*; the former belong to his domain, the latter to the accountant's.
- The Chief Accountant is responsible for the financial management of the organization and should, as far as necessary, obtain cost information generated by other functions, namely, the Maintenance.
- The Maintenance Manager may assist in the allocation of the maintenance costs whose path is subject to his analysis and validation, such as contractor services; parts used and the like.
- The Maintenance Manager should implement a costing system providing an accurate and consistent sensitivity to *costs related to maintenance*, introducing procedures to quantify man power costs, through the use of standard man-hour rates, materials and contractors' costs. Furthermore, unavailability costs due to failures should also be quantified. All these costs should be able to be controlled within a *balanced scorecard* framework where maintenance performance could be connected with the costs related to maintenance.

- Once the strategic objectives of the organization are established as well as the goals for costs related to maintenance, cost control should be carried out by the Maintenance Manager in accordance with *his* philosophy and not anyone else's.

Bibliography:

- ⌞ CABRAL, José Paulo Saraiva, *Gestão da Manutenção de Equipamentos, Instalações e Edifícios*, Lidel, Lisbon, 2012.