

INTRODUCTION

In recent years, the whole philosophy of plant maintenance has been gradually changing. The advent of automation, increased production levels, rigid production schedules, the high cost of capital equipment and increased machine utilization have all imposed greater demands on the plant maintenance function.

Maintenance managers are being called upon to improve the standard of maintenance and the efficiency of working and at the same time reduce their operational cost. It is therefore logical that as much forethought and planning should be devoted to the maintenance aspects as to any of the other engineering activities.

The situation at Neal and Massy Industries Limited is further aggravated by the considerable age and poor condition of much of the plant and buildings that may have been allowed to deteriorate due to lack of attention over the years, plus the relatively low level of importance that has for so long been associated with the maintenance function.

For too long, maintenance has been regarded as a necessary evil and although this philosophy has not been completely eliminated, there is today, a growing awareness that with proper maintenance planning and control systems, maintenance can become a positive profit-contributing activity by savings made possible by the reduction of downtime.

This paper outlines the basic requirements essential for supporting a satisfactory maintenance planning and control system. To obtain control, it is necessary to define, measure and plan the work, set it in motion at prescribed dates and keep records of events. Full measure of control cannot be obtained until the work is approached and performed in a systematic manner.

The use of the computer in the maintenance function is investigated. The factors of economics of competition and availability of manpower may eventually compel the use of computer systems. The opportunities for dramatic improvements in the performance of the maintenance function offered by computer can help meet cost pressures and offer better control of maintenance labour scheduling. Setting up and maintaining a computerised punch-card system is not difficult and a program has been prepared in this paper to handle the very fundamental area of job card issue.

Whatever the system developed and proposed for implementation, it is essential to perform a small scale trial in one particular area to iron out expected problems. The area selected at Neal and Massy Industries Limited is the Body Assembly Shop. The experience gained in this trial will be beneficial when the system is expanded as a total service.

The full beneficial effect of the system developed will not be achieved without unfailing enthusiasm on the part of those concerned with its management. The system, if applied correctly, can become a major factor in raising employee and employer morale. If the results are constantly analysed and methods made open for review, the maintenance techniques outlined will, in most cases, result in a reduction of lost production time and at the same time, produce a decrease in maintenance costs.