Time Systems in Manufacturing Plants

A PRACTICAL ARTICLE WRITTEN FOR THE CANADIAN MANUFACTURER BY J. A. T. DUNDAS,

I do not intend to write a time system that can be taken in its entirety and applied to the individual need of any establishment for the individual morning a new card is used as though the individual morning a new card is used as though the individual morning a new card is used as though the individual morning a new card is used as though the individual morning and the individua tablishment, but will describe a system that can be adapted with more or less change to meet conditions to any class of manufacturing establishment. Being best acquainted with the manufacture of machine tools will use this line to illustrate what I may have to write.

The first thing necessary in a manufacturing plant is a reliable time recorder. There are several reasonably reliable ones on the market. Place it in a convenient position at the work-



Fig. 1.—Ca:d as Filled out, for First Operation.

man's entrance, where each man may record his own time, thus making him his own timekeeper. If your works are his own timekeeper. If your works are large and divided into sections or de-partments it is then advisable to have partments it is then advisable to have a recorder in each of these departments, bringing your employees into the immediate vicinity of their work before they register in. You can easily see the advantage of this. Your pay-roll hours are made up from the record each man has made for himself. This also prevents any differences between man and timeleously. timekeeper.

Having secured an accurate system fraving secured an accurace system for checking the pay-roll hours of the employees you how proceed to arrange for the time in the manufacture of the alich you manufacture, also the time taken on the individual pieces and the distriction of the control of the c different o erations on each of these parts. The time can be easily and sys-tematically taken care of by each piece



Fig. 2.—Card as Filled out for Second Operation.

having a number and an card" being used to indicate the process through which the piece is put. The machine to which the piece belongs machine to which the piece belongs should also have a number, and it would be wise to give each job or lot a number as well, so that a job or lot going through your works would be described to the job or lot number, then by the job or lot number, then by the

Now to illustrate we will say that you are manufacturing machine tools and you wish to manufacture twelve 30-in. engine lathes, standard design. Your 30-in. lathes are designated by the num-30-in. latties are designated by the num-ber 100. Your last job or lot number was 7,284, so this order would be for job or lot number 7,285; the machine number 100; twelve wanted. Now each piece having a number the part to be machined would be known as job 7,285; machine number 100; piece or drawing number 1. The operation is turning, so that an operation card is furnished as in Fig. 1, upon which the operator puts the date, his shop number, his name, the job number (in this instance called the order number); the machine number and the piece or drawing number are which he is a way of the time on these while you ber upon which he is at work, also, when completed, the number of hours occupied in performing the operation. The hours are recorded by a check mark when completed (say at 4.30 p.m.), he piece will be recorded the same on each

There are many pieces that occupy but a small amount of time, possibly only five minutes. The wish is to keep



record of the time on these while you do not charge less than fifteen minutes against any one piece, hence when two or more pieces of different numbers are (V) under the hour of commencing the machined in the fifteen minutes the time operation (in this case 7 a.m.), and of commencing and leaving off each

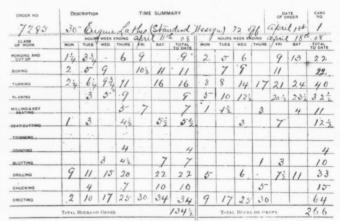


Fig. 5.—Summary Sheet Listed in the Office.

also after the nearest fraction of the hour as measured in quarters in the line headed "minutes," the lapsed time being 8½ hours, which is placed on the lower right-hand corner of the card, under "hours on job" as shown in Fig.

1. The operator then proceeds with his next piece, which may be designated as order or job number 7,285, machine 100, piece or drawing number 5. This time he marks the time of beginning on another card (only one entry being made on a card), with a check mark (V) as before. A card succeeding Fig. 1 is shown Fig. 2, where the check mark is under the hour IV, and also in front of the minute 30. If the operation on Day,

places a cross (X) under the hour and card, but the time card for the second



Day.