

period, divided into five sub-divisions: Wages, Salaries, Stores, Miscellaneous Items and Prorated Items. Wages and salary items are furnished by the Payroll Division in the form of a tabulated recapitulation of the payroll for the period. Stores items are obtained from stores issues, or requisitions on the stores division, for stores used during the period. Miscellaneous items are those involving expenditures other than for labor and material, such as telephone and telegraph charges, drayage charges, subscriptions, and outside services of various kinds. Prorated items are miscellaneous items paid or estimated in advance, such as insurance, taxes, interest, etc., which must be distributed over an entire season or year. Both miscellaneous and prorated items are furnished at the close of each period by the Accounting Department.

After all expenses have been collected and posted opposite their proper account symbol on the analysis sheet, the figures in each column are added into sub-divisional totals, which are then added into divisional totals, and these are finally added into totals for their main headings, A, B, C, D or E. The illustration shows figures opposite and symbols representing individual accounts, totaled for each sub-division, totaled again into main divisions (A, D & A, E) and finally totaled opposite the main heading (A). On the right hand side of the sheet, and opposite each account are figures comparing the present period with the previous one, and the cumulative total to date with the budget to date.

The value of this Detailed Expense Analysis for the purpose of making an intensive study of the cost of any activity or group of activities is self-evident. It is also invaluable as a basis for budgeting expense for any future period of time.

Now that we have gathered the expenses under their proper headings we can proceed to the other two groups, Product and Construction, and distribute the expenses over these groups. Figure 7 shows the Expense Distribution Sheet for one period. This form, as you will recognize, is based on the familiar Taylor Distribution Sheet as perfected by Mr. Carl G. Barth. In fact we are greatly indebted to Mr. Barth for his personal assistance in making the final revision of this form. The symbols at the head of the various columns indicate the class of expenditures to be entered in each column, and are also used for reference purposes in the instructions appearing on the left side of the page. The columns are arranged in order so that the distribution, beginning with the left hand column E, proceeds systematically toward the right by consecutive steps, as in-

dicated by the line numbers and explained in the instructions. This process of distribution continues until all expenses find their way into totals to be added to inventories of Construction, Work in Process, or Finished Product.

To facilitate the explanation we have divided the sheet into six horizontal sections marked 1 to 6 (under heading "Posted by"). In Section 1 we list all expenditures for the period under their proper headings. The items to be posted in this section are obtained from the detailed analysis of expense just explained, from stores issues for materials for construction or product, and from the payroll division for direct labor used on construction or on product. This information as to wages for district labor is furnished by the payroll division in the form of individual daily summaries for each employee so engaged, and is distributed by the Statistical Division over the various types of product manufactured before being entered on the Expense Distribution Sheet.

In Section 2, all expenses, except selling expense, are distributed over Construction and Work in Process Accounts. In Section 3 are computed the various rates to be used in making the distribution in Section 2. In Section 4 the selling expense is distributed over finished product accounts. In Section 5 is computed the rate to be used in distributing Selling Expense in Section 4. Section 6 is a supplementary one for the purpose of demonstrating what part of each main expense group might logically be charged to profit and loss instead of to the product itself, because, due to lack of orders, lack of materials or other contributing causes, a certain part of the time available for manufacturing has not been used for that purpose.

In leaving this expense distribution, which serves as a basis for journal entries to the general accounting system, I should like to touch briefly on what might properly be called one of its by-products. In the individual summaries of wages paid for direct labor furnished by the Payroll Division, we have the data for an extremely interesting and valuable comparison of divisional performance. In addition to the piece work wages, which is the basic payment for production, quality, attendance, etc., there is a number of different kinds of bonuses and retainers. By means of the summaries referred to above, we collect data showing the proportion of the total payroll devoted to piece, work, bonuses, and other forms of remuneration, for each manufacturing division. These data are charted to show the comparative performances of the various divisions, as well as the