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Official Publications

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130 WEST 42nd STREET, NEW YORK

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COST ACCOUNTING IN A METAL STAMPING PLANT

PUBLICATION'S DEPARTMENT NOTE

This article is an outline of a cost system in a Metal Stamping Plant. It deals with the cost procedure from the original classification of accounts through the development and application of burden, time accumulation and distribution, cost summaries and operating reports. It presents, therefore, a survey of a cost structure aplicable to a metal stamping plant. Several of the forms used are reproduced and the columnar arrangement of most of the other forms is indicated.

E. H. Wildt, the author of this Publication, was at one time Cashier and General Accountant for the Monroe Glass Co., Monroe, Mich. Later he occupied a similar position with the J. B. Moos Co. a branch of the American Tobacco Co. in Toledo, Ohio. He then became General Accountant for the Denton Sleeping Garment Mills, and the Centreville Water & Electric Co. both in Centreville, Mich. In 1913 and 1914 he organized and promoted the Lansing Foundry Co., Lansing, Mich. In 1915 he became the first city Comptroller of Lansing, a position which he held for several years. He installed the accounting system of that city which is still in use and was instrumental in securing the adoption of the first budget for the city. His next position was with the Gier Pressed Steel Co. as Auditor and Assistant Treasurer. In 1920 he assumed his present duties as Auditor and Treasurer of the Motor Wheel Corp. which is a consolidation of the Geir Pressed Steel Co., Prudden Wheel Co., Auto Wheel Co. of Lansing, and the Weis and Lesh Mfg. Co. of Memphis and Jackson, Tenn.

In a short article of this nature it is obviously impossible to cover the subject of costing the product in any industry in detail.

The metal stamping plant which operates under the cost system outlined in this article does a general job shop business in the manufacture of pressed metal parts of all kinds for the automobile industry in particular although considerable business is done for implement, display fixture, tractor and gas engine manufacturers.

The general manufacturing scheme requires first the manufacture of the requisite dies for producing the part on order. This part of the work is done in Dept. A-1 Tool-room and Pattern Shop. Sets of dies usually consist of a "blanking" die, various "forming" and "drawing" dies and in some cases a "trimming" die. The number of dies necessary depends upon the kind of parts to be produced. An automobile wheel "flange" naturally requires very few dies as the shape is not radically different from the original "blank." A "rear axle housing," however, is of such a nature as to require numerous operations and a corresponding number of dies, in order to "form" the "blank" into the finished part. Frequently, a finished article is made up of two or more pieces welded together, and in those cases either spot welding is resorted to, or the acetylene gas welding method is used. In many cases, steel is of such a consistency that it is necessary to anneal for the purpose of softening

before further operations can be performed without cracking the metal, and a battery of oil burning furnaces is maintained for this purpose in Dept. A6-Annealing. The cleaning of raw steel to free it from rust and dirt is done in Dept. A7-Pickling.

Production Order Method

The production order method of compiling cost is used because all orders received from customers cover a specified amount of parts, and each order, unless a re-order, covers product which may require a different method of manufacture than anything made before. Furthermore, the production order method allows a very simple method of accounting for scrap. The raw material is all charged to the specific order on which used, and the total material consumed, divided by the parts produced, furnishes an absolutely accurate material cost with very little clerical effort. The production order method also provides an automatic accurate transfer of cost of production from Work in Process to Finished Goods stores without the necessity of work in process inventories. When work in process inventories are desired, the cost of parts in process is accurately and easily determined by reference to the operation and material costs shown on the uncompleted order cost records. The uncompleted order cost records serve as a perpetual inventory of Work in Process.

Classification of Accounts

The following is a classification of accounts:

Controlling

22 General Ledger

Departments and Departmental Burden Accounts

A1 Tool Room and Pattern Shop (Die manufacture and repairs)
A2 Light Press (For the production of small stampings)
A3 Heavy Press (For the production of heavy stampings)
A4 Sheet Metal (Only large parts made from light gauge steel made in this department)
A5 Production Lathe (Trimming and requisite machinery operations)
A6 Annealing (Softening hard steel)
A7 Pickling (Removal of rust and dirt from raw steel)
A8 Welding—Acetylene
A9 Welding—Electric
A10 Grinding (Where required on welds)
A11 Assembly
A12 Cleaning
A13 Receiving and Shipping
A14 Stores and Purchasing
A15 Die Storage and Maintenance
A16 Power Plant (Steam)
A17 Electric Generator
A18 Switchboard
A19 Air Compressors
A20 Salvage

A21 Scrap
A22 Inspection
A23 Maintenance
A24 General Factory

A241 Fixed Charges
A242 Time and Cost Salaries and Wages
A243 Time and Cost Expense
A244 Welfare and Employment
A245 Supervision Salaries
A246 Engineering and Production Salaries
A247 Engineering and Production Expense
A248 Restaurant Loss or Gain
A249 Janitors
A250 Inventory Adjustment
A251 Miscellaneous

A25 Fixed Charge Variation
A26 Clearance Account

Inventories and Deferred Charges

A30 Steel Stores
A31 Parts Stores
A32 Finished Goods
A33 Miscellaneous Stores
A34 Scrap
A35 Restaurant Stores
A36 Finished Dies and Tools
A37 Work in Process—Material
A38 Work in Process—Labor
A39 Work in Process—Burden
A40 Dies in Process—Material
A41 Dies in Process—Labor
A42 Dies in Process—Burden
A43 Factory orders in Process
A44 Undistributed Freight, Express, etc.
A45 Miscellaneous Deferred Charges

Reserves

A50 Reserve for Repairs—Land Improvements
A51 Reserve for Repairs—Buildings
A52 Reserve for Repairs—Building Fixtures
A53 Reserve for Repairs—General Machinery
A54 Reserve for Repairs—Welding Equipment
A55 Reserve for Repairs—Shafting, Hangers and Pulleys
A56 Reserve for Repairs—Furnaces, Forges and Tanks
A57 Reserve for Repairs—Belting
A58 Reserve for Repairs—Trucks, Barrows, Crates, etc.
A59 Reserve for Repairs—Power Plant Equipment
A60 Reserve for Repairs—Restaurant
A61 Reserve for Repairs—Furniture (Factory)
A62 Inventory Adjustment Reserve

Cost of Sales Accounts

A70 Cost of Metal Stamping Sales
A71 Cost of Dies Sold and Absorbed
A72 Cost of Misc. Sales
A73 Unearned Burden
A74 Purchasing Loss or Gain
A75 Inventory Depreciation
A76 Cost of Scrap Sales

All invoices covering purchases are sent to the Cost Department with Receiving Slip attached, the Receiving Clerk having noted thereon the amount of transportation charges, and the Purchasing Department the advice as to whether the shipment was purchased delivered or not

A clerk in the Cost Department checks the freight against the Freight Distribution Sheets. This form has the following columns: Date Received, Pro. No., Name, We Pay, Charge Back and Account or Debit No. If the material is not purchased delivered, the cost clerk adds the amount of the freight to the invoice cost of the items purchased; notes on the invoice, for the information of the Accounts Payable Department, the controlling account number to which the invoice is to be charged; posts the total of the invoice plus freight to the detail card under the control affected; lists the amount of the invoice and the freight in two separate columns on a Checking Sheet headed with the name and number of the account, and returns the invoice to the Accounts Payable Department. The checking sheet has the following columns: Date of invoice, Receiving Record No., Invoice No., From, Amount of Invoice and Freight.

The total of the invoice column on the Checking Sheets checks with the total charged against this account through the Purchase Register of the General Accounting Department each month.

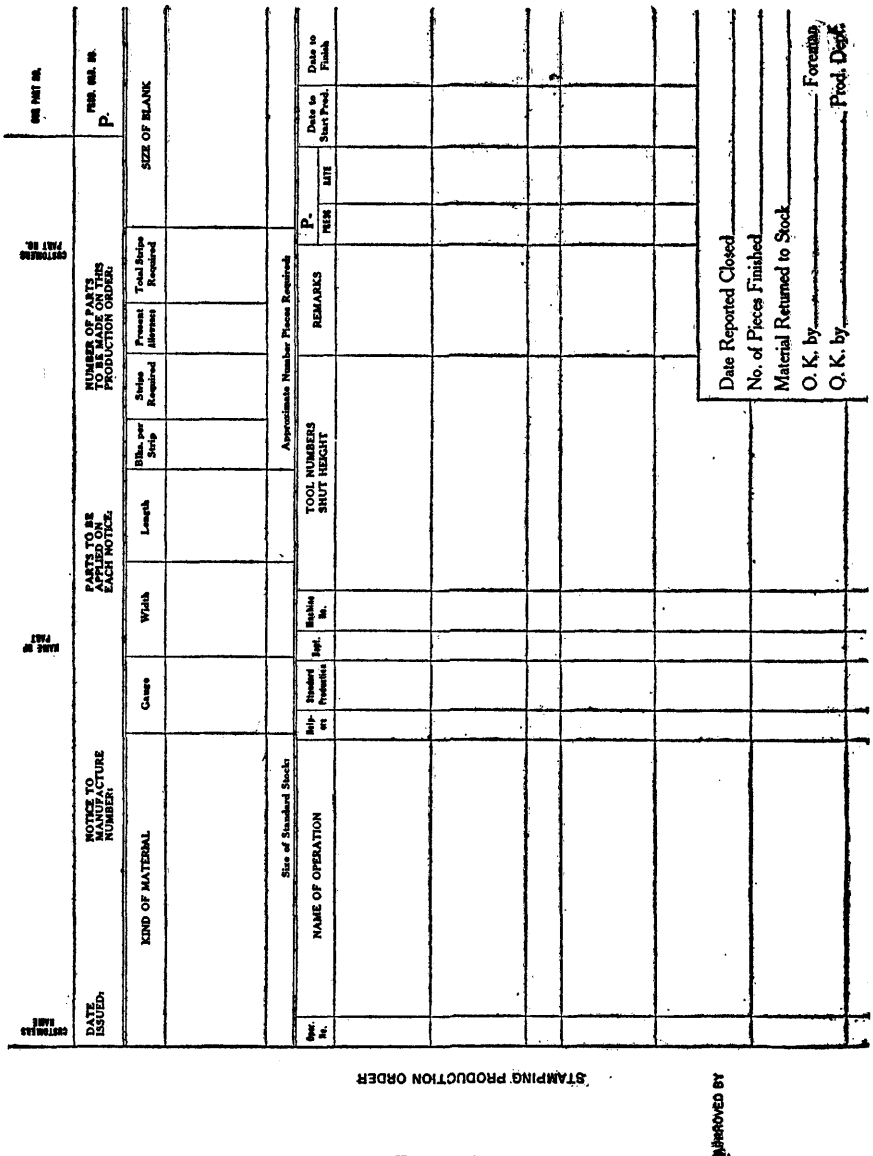
All transportation charges are paid immediately upon presentation to the Accounts payable Department and charged against Account No. 48—Freight, in the General Ledger. The transportation invoices are then turned over to the Traffic Department the duty of which is to check the extensions and rates, and from a duplicate Receiving Slip received by them through the Purchasing Department, which also shows who stands the transportation charges, a Freight Distribution Sheet is made up in duplicate and the original is forwarded to the Cost Department after having issued Debit Instructions covering all items to be charged back to vendors or overcharges against the transportation company.

The Checking Sheets are checked against the Freight Distribution Sheets by the Cost Department and the Account No. and Distribution Sheet No. columns are filled in. The Debit No. items are filled in from the Cost Department's copy of all the Accounts Payable Debits issued.

A journal entry is made at the close of each month, charging the total of the "We pay" columns on the Freight Distribution Sheets against the Account A-44—Undistributed Freight, Express, etc., in the Factory Ledger, and crediting Accounts A-48—Freight, in the General Books. A journal entry is also made charging the various controls as indicated with all freight shown in the freight column of the Checking Lists, and crediting Account A-44 Undistributed Freight, and Express. The difference between the unchecked items in the "We pay" column on the Checking Sheets and the Freight Distribution Sheets should be the balance in Account A-44 Undistributed Freight, Express, etc.

WORK ORDERS

Work Orders are of three kinds, namely, (1) Production Orders, (Form 1, see page 7), (2) Tool Orders, and (3) Factory Orders.



Form 1

(1) Production orders are issued by the Production Department only and sufficient copies are issued so that the foreman of each department that does any work in connection with the order receives one (including the Stock-keeper and the Cost Department). Such orders cover all work of whatever nature that is to be ultimately charged against a customer, with the exception of tools and dies.

(2) Tool Orders are issued to cover the cost of manufacturing any tool or dies which are either new or for replacement. These orders are issued by the Engineering Department.

(3) Factory Orders are issued either by authority of the Engineering or Maintenance Departments and cover all repairs which are estimated to cost in excess of $25, and all new construction, changing of equipment, rearrangement of departments, installations, etc.

Requisitions

Requisitions are of two kinds: production material and expense material.

It is an undeviating rule that no material purchased of whatever nature is charged directly to the expense or asset accounts from the invoice. All must pass through the store's records and be covered by requisitions. All requisitions must indicate the material or supplies issued, and the disposition made thereof, and be signed by the foreman of the Department ordering out or using. Requisitions are forwarded directly to the Cost Department daily.

From the information shown on Production Orders, the Stock-keeper prepares the material for issuance to the department wherein the first operation is to be performed. As soon as the foreman of the Producing Department is ready for the first lot of material, he notifies the Stock-keeper who issues the material and delivers it to the point in the department where the first operation is to be performed, makes out a requisition to cover, indicating thereon the production order number against which it is issued, and posts such requisition on the back of his copy of the Production Order, in this way assuring against the delivery of material in excess of the quantity required. This is very essential as the first operation where sheets or plates are used, is the blanking operation and a 2% allowance is made to cover scrap. If too much steel is issued, there is danger of cutting up too much and possibly incurring a large loss. There is another safeguard against excess blanking which will be mentioned later.

Stock-keepers are held responsible for seeing that each requisition carries the information required, but the foremen signing are held responsible for the accuracy of such information except in cases of Production Orders where it is the duty of the Stock-keeper to see that no material is drawn out in excess of quantities called for by a Production Order.

When requisitions are received in the Cost Department they are first passed to the Stores Record Clerk who prices and extends them at the average unit cost shown by the stores record; posts to the record; totals and records the total credited out from each section of the Stores Records and turns over to the sorting clerk, who sorts the requisitions according to the information thereon to correspond to the various Process Accounts, Repair Reserves, and Departmental Burden accounts. The sorting clerk adds up the various divisions and turns over to the process clerks all requisitions affecting Process Accounts.

The process clerks post, (except when an interim cost is desired) 4 days at a time to the "In Process" records controlled by Account No. A-37—Work in Process—Material, A-40—Dies in Process—Material, and A-43—Factory Orders in Process, proving the postings back with an adding machine.

The balance of the requisitions are filed according to the Account Classification. All requisitions effecting Departmental Burden accounts are again classified at the end of each month for statement purposes, into the various expense classes, such as Oils, and Grease, Rags and Waste, Small Tools, Washing Supplies, Drawing Compound, etc.

The totals of requisitions as determined by the stores record clerk and the sorting clerk are turned over to the factory ledger clerk who records the information on a summary sheet, which totaled at the end of the month is the basis of an entry relieving Stores and charging the Process, Repair Reserves and Departmental Burden accounts.

Labor

All factory employes when entering or leaving the factory are required to record the fact on a Time or Attendance Clock Card.

All time of direct labor employes who work on Tool Production or Factory Orders is kept by factory time clerks. Work is assigned by the foremen or sub-foreman who makes out a Job Slip (see Form 2, page 10) indicating thereon the clock number of the employe, machine number if working on a machine, order number or kind of work just completed, time, and order number of work starting whether the employe is a machine operator or helper, or else kind of work to be performed if transferred to indirect labor. These job slips are turned in immediately if possible to the time clerks who pull from the time rack the Time Cost Card (see Form 3, page 10) under which the employe has been working, note thereon the time stopped, and make out a new card, placing thereon the information shown on the Job Slip. If the worker is on "Production" and operating a machine on which a counter is attached, he immediately reads the counters, (no counters are set back; all are locked and accumulate), notes the reading on the Operator's Production Record, if it has not already been recorded by the production clerk, enters the counter reading on the

Operator..... **JOB SLIP** Date.....

Helper No.....

PART No.....Register.....

Machine No.....

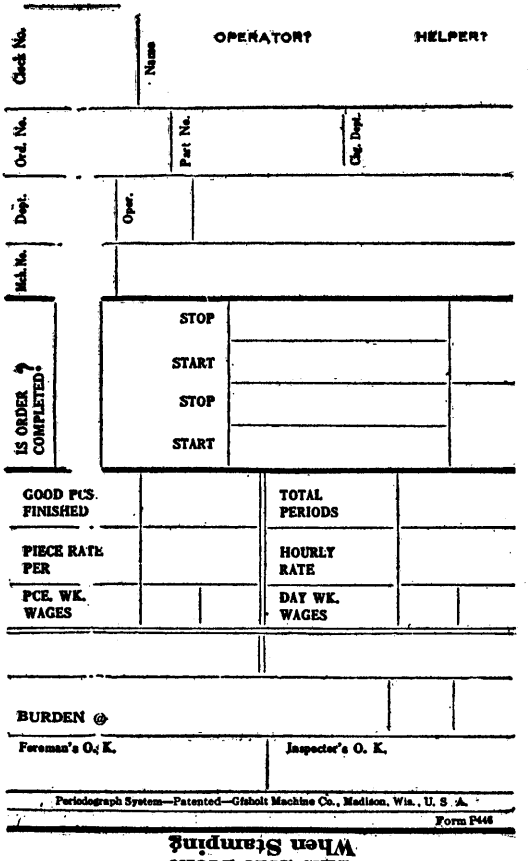
Operation .....

Set up die ☐ Repair die ☐ Parts Made.....

Take down die ☐ Repair press ☐ Time .....

Waiting { Tool Room Repairs ☐ / Inspection ☐ / Stock ☐ } Reclaim ☐ Job Changed?.....

Form 2



This End Up
This Side Front
When Stamping

Form 3

new card and files in the time rack under the employe's number. If this is a change in a job, he uses the counter reading to figure the parts completed on the closed run and completes the Time Cost Card which was pulled at the time of the change. By the use of job slips in this manner the time clerks are advised of all changes in jobs and the time of such changes and are enabled to keep records up to the minute rather than to have an accumulation of foreman's or employe's reports at the close of the day; and to catch errors in reporting wrong count, clock numbers or job numbers at the time of occurrence.

At the end of the day, employe's Time Cost Cards (see page 10) are all pulled from the rack, and readings are taken from counters or from the Operator's Production Record, where no counter is available, and entered thereon; new cards are made out and inserted in the rack ready for the beginning in the morning. No cards are pulled at noon, the noon hour being taken into consideration in figuring lapsed time on jobs which carry over the noon hour. There are numerous time recording devices on the market for automatically recording lapsed time on Time Cost Cards.

The operator's Production Record shows on the heading machine number and operation and has the following columns: Time, Register Reading, Parts Produced, Employe's Clock No., and Part No. and Name or Remarks. The Time column has the following sub-columns: Register Read, Start and Stop.

All indirect labor or idle time accumulated through the regular direct workers will have been recorded through the routing explained in connection with direct labor accounting. All indirect labor employes' time is reported by the foremen when the work changes during the day or in some instances the foreman makes out the Time Cost Cards for the indirect employes and turns in to the time clerk each morning the cards covering the previous day.

In the morning as soon as all employes punch "in" on Time Cost Cards, the time clerks take all the Attendance Cards from the Attendance Clock Racks and extend the hours the various employes have worked the previous day, enter these on a Checking List. The checking list shows the Department, Date, Clock No., Total Hours Overtime, Remarks. The latter four columns are repeated on the form. The time clerks then sort all the Time Cost Cards by employe's number and check the total time shown by the Time Cost cards against the hours shown on the checking list, any discrepancies being taken up with the foremen and adjustment or correction secured.

Production Records

At the desk of each time clerk who has any production time to record are copies of all Production Orders issued affecting the department for which he keeps time, together with a Production Record Sheet, with the operations to be performed in those departments entered at the head of appropriate columns. On the heading of the Production Record Sheet appears the name of part,

quantity, department, order number and part number. The sheet has the following columns: Date, Hours, Parts Production Today, and Parts Production To Date. The Production Order indicates the number of parts to be produced and as rapidly as Time Cost Cards covering production are completed those which cover time of "operators" are used to post to the "Record Sheet" the number of parts which have passed through the indicated operations. This constitutes not only a check against a "set up" being taken down before a run is completed, but is also a check against overpayment where it is necessary to secure production count from piece workers where counters are not in use. Frequently, errors in job slips are located in this manner, as only the number of pieces that have passed through a previous operation can possibly pass through subsequent ones.

The Operators' Production Record previously referred to, is attached to each machine or to the bench of each employe engaged in productive labor, and Production Department Records are primarily used by them to keep track of the operating time of each machine and the pieces produced per hour. Where attached to machines they are in fact a medium for recording the daily history of the performance of the machine as the reason for all break downs or delays in production is noted thereon by shop clerks working for the Production Department. Close co-operation is obtained between the foreman, production department, shop clerk and timekeeper in order to keep correct records. A copy of instructions covering time, cost and production records reads as follows:

Instructions Governing Maintenance of and Fixing Responsibility for Correctly Recording Direct Labor and Production

Foreman's Duties

1. To see that changes in jobs are reported promptly through the medium of job slips on all production and tool orders. All information called for by the job slip is to be furnished in all cases with the exception of the register reading—job slips to be made out always covering each man whose work is changed.

2. To see where counters are not in use, that the Operators' Production Records are properly filled out and to okeh the number of pieces recorded thereon as being correct.

3. To see where production reports have been recorded in excess of pieces possible to produce, (after the time keeper has proven back the postings against Operators' Production Records) that the necessary adjustments are made in the payroll cards to avoid overpayment of employe.

4. To assist the time keeper when necessary in determining the reason for over or under runs in excess of 3% over the previous operation.

5. To okeh promptly all production orders submitted by the time clerk after the last operation is completed.

Timekeepers' Duties

1. To see that all time shown on attendance clock cards is accounted for and allocated against either production, tool or general factory orders or against repair accounts, departments, etc.

2. To read registers immediately upon receipt of job slips from foremen *wherever* counters are in use on machines—all register readings to be noted on job slips for information of the production department.

3. To see that foreman has not forgotten to properly fill out aud start Operators' Production Record *where* counters are not in use.

4. To keep posted up to date the production sheets by operations and to immediately investigate any over or under runs in excess of 3% of previous operation. (Timekeepers will have available at the completion of each job all Operators' Production Records to use in checking production postings. These records to be forwarded at the earliest possible moment direct to the production department office.

5. To see that where over runs or under runs are found to be due to errors in count, that proper correction is made in the pay of the employe effected thereby.

6. To pull all orders from binder as rapidly as last operation is completed, secure foreman's okeh and forward promptly to production office for closing.

Production Department

1. To see that all timekeepers and storekeepers effected receive written advice of jobs started together with the order number controlling the work, before the work is started.

2. To see that Operators' Production Records are properly made out and kept posted promptly and to note on such records any unusual condition in the operation which will tend to cause an apparent over run or under run.

3. To deliver all Operators' Production Records promptly to the timekeeper as soon as the operation is completed.

4. To close all production orders promptly, indicating thereon the number of pieces finished and checking up material to see that all material used has been covered by a requisition and all unused material has been returned to stock and covered by a returned material requisition.

5. To see that any diversion of steel or semi-finished parts from one job to another is covered by a memorandum from the production department to the cost departments, advising fully in regard to the latter.

Inspection Department

To see that a scrap report is furnished the production department daily of all parts scrapped after the final operation has been performed.

Burden

A pre-determined burden rate is used, based upon an estimated normal production. A burden revision is made at least every six months in order to keep pace with changes in manufacturing conditions.

Burden, as will be noted by reference to the Time and Cost Card, (see page 10) is figured on each individual card which is necessary owing to the fact that in this plant nearly every accepted scientific method of applying burden is used.

The following rates are used:

(a) The man-hour rate is used in Dept. A-1 Tool-room, A-11 Assembly, and A-23 Maintenance. Man-hour rate is used in Dept. A-1 Tool-room as a large part of the work in producing dies is bench work and inasmuch as machines are used intermitently and not regularly it would be impossible to estimate what "normal" machine hours would be, but it is known approximately how large a volume of man hours will be required normally. Man-hour rate is used in A-11 Assembly Dept. as this is line bench work as a rule and if machines are used, they are comparatively inexpensive to operate and are "in the line."

(b) The machine-hour rate is used in Depts. A-2 Light Press, A-3 Heavy Press, A-4 Sheet Metal, A-5 Production Lathe, A-9 Welding Acety., A-9 Welding Electric, A-10 Grinding, and A-14 Stores for Shearing. Machine-hour rates are used in these departments because machines are used in all operations and no bench work of any consequence is performed. Machines vary greatly in capacity and cost of operation in the "Press" departments A-2, A-3, and A-4, so that it is necessary to create production centers within the departments for the various types of machines, and thus arrive at "class" burden rates within the departments in order to correctly allocate cost of production.

(c) The process-hour rate is used in connection with the Hardening Furnaces in Dept. A-6, Annealing. Regardless of what is in the furnace, this rate is used because the cost of operating the furnace each hour is the same and must be spread over the product passing through the furnaces on a basis of furnace hours consumed.

(d) The unit-rate is used in Dept. A-7, Pickling, and on the Annealing Furnaces in Dept. A-6. Racks, baskets and pans are used in these departments to handle the product, and the cost varies or is applicable on a basis of time consumed in "pickling" a rack or basket or passing a "pan" of product through the furnaces.

All burden is figured by the shop time clerks.

Scrap

All scrap sales are credited to a Scrap Sales account and the entire expense of handling scrap is accumulated in Account A21—Scrap. This account is closed out monthly to Account A76—Cost of Scrap Sales.

In reporting actual costs, the Cost Department deducts the total weight of parts finished on an order from the weight of the steel charged to the order, values the result at average current market price less an average actual cost per hundred weight for handling, and reports the result as a reduction of material cost.

Office Routine

After piecework labor has been extended and burden figured on the Time Cost Cards, the cards are forwarded daily to the payroll clerk in the Time and Cost Dept., together with the checking lists to cover.

As indicated previously, all Time Cost Cards covering the time of the factory employes, are received daily (with a checking list attached) by the payroll clerk. The payroll clerk and an assistant inserts the day work hourly rates on all cards other than piecework, and extends, checks all the piecework rates and extensions, and posts to a Payroll Card.

A proof is then taken of the totals posted to the payroll cards in order to see if they agree in total with the total labor extensions on the Time Cost Cards. The payroll clerk then turns the cards over to the Sorting Clerk who sorts them first into Direct and Indirect labor. Direct labor is any labor, the allocation of which results in a charge against some specific production, Tool or Factory Order. All direct labor does not carry a "burden." Hence the sort cannot be controlled in this manner but must be controlled by order numbers.

The direct labor cards are then sorted by departments and departmental totals taken of all burden earned as shown by the cards, in each department. This burden allocation is entered on a summary sheet which is the basis of a journal entry crediting the Burden Accounts and charging the Process Controls.

For convenience in sorting and time keeping, all Production Order numbers are prefixed with the letters P, Tool Orders with the letter T and Factory Order numbers with the letters F. O.

After the second sort is completed and burden information recorded, a sort is then made of the direct labor cards into labor applicable to Production, Tool and Factory Orders. Totals are then made of the cards in each classification and these totals are totaled in order to see if they check with the payroll totals for the day. The direct labor cards are then turned over to the posting clerks, who sort the cards by Order Numbers and post to the Detailed Production Card, Tool Cost Record, and Factory Order Record Card, and prove the postings daily. The Production Card, is used for each operation under a Production Order. The material is posted to the Cost Summary Sheet Form (Form 4, see page 16). In closing a Production Order, the totals from the Production Card are transferred to the Summary Sheet. The indirect labor cards are then sorted by Departments and Repair Reserve account numbers.

PART NAME

PRODUCTION ORDER NO.

DATE ISSUED

PART NO.

DATE CLOSED

NO. PARTS ON THIS ORDER

Oper No.	Name of Operation	No. of Parts on Each Operation	Labor Cost		Burden Cost	
	No. Good Parts Finished					
	No. of Parts Blanked					
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
	Set Up Time					
	Take Down Time					
	TOTAL					

MATERIAL RECORD

Date	No. of Pieces	Weight Lbs.	Amount	
TOTAL				

Form 4

All labor performed by Production Departments, which is chargeable against Repair Reserves, but which is not covered by a Factory Order carries the regular departmental burden but is classified as Indirect. The labor cards which carry a Repair Reserve number must therefore be sorted by departments and a total made of all Burden appearing thereon. These Departmental Burdens totals are entered on a summary sheet and a journal entry at the end of the month relieves the Burden Accounts and charges the Repair Reserves accordingly. Totals are then taken of the several sorts of Indirect labor and the grand total must agree with the total Indirect labor for the day.

The Sorting Clerk now has available totals which enable him to post the following information to a summary sheet.

Direct Labor—			
To Production Orders	$.....		
Tool Orders	.....		
Factory Orders	.....		
Total Direct	$.....		
Indirect Labor—			
To Departments			
A1—Tool Room	$.....		
A2—Light Press, etc.	.....		
To Repair Reserves			
A50—Land Imp.	$.....		
A51—Buildings, etc.	.....		
Total Indirect		$.....	
Total Payroll for Day			$.....

At the close of each month this summary sheet acts as the basis of a journal entry distributing the payroll for the month to the different controls and expense accounts.

Closing Orders—In Shop

As rapidly as production postings, made by the various Time Clerks, indicate that the work which was to be performed in the various departments has been completed, the attention of the foreman is called to the fact, and if he finds that the work is actually completed, okehs the order for closing. The time clerk then pulls the order from his file and forwards it to the Production Department together with the Production Record Sheet. As rapidly as the departmental copies of the orders are received, they are checked against the Operators' Production Record and approved. When all copies are in, indicating that an order has run its course and is completed, the Production Department sends the copies of the Production Record Sheets together with a notice that the order is closed, to the Cost Department, noting thereon the amount of good pieces that have actually been completed and have passed final inspection. Tool Orders are reported closed by the Engineering De-

partment and Factory Orders by either the Engineering or Maintenance Departments depending upon their origin.

Closing Orders—In Office

When the Production Orders are reported closed by the Production Department, a clerk in the Cost Department notes the date of the last labor performed and, if the Posting Clerks have posted through the date indicated, pulls the Cost Record Cards covering the Order closed, transfers the Labor and Burden to the Final Summary Sheet showing cost in detail by operations, makes out a cost report and forwards it to the Estimating Department and lists the Production Orders thus closed on a Summary Sheet showing Order number, parts finished, and Material, Labor, and Burden Cost. The total of the Summary Sheet acts as the basis for a journal entry crediting the Work in Process Accounts and charging Finished Goods Acct. A-320.

Tool Orders are closed in a similar manner as Production Orders excepting that they are charged against the Finished Die and Tool Account A36, which is either cleared by spreading the costs into A71, Cost of Dies Sold and Absorbed on the basis of Production, or by charging against the same account when billing is made to a customer covering die or tool costs.

Factory Orders are closed as reported and journalized monthly, crediting the control and charging the indicated Departmental, Expense, Asset, or Repair Reserve account, as the case may be.

Costing Sales

As rapidly as invoices come through covering sales of product they are listed on a summary sheet showing part numbers and quantity shipped. The totals of the quantities thus indicated as being shipped and billed during the month are priced at the average cost shown by the Finished Goods Ledger, and A70—Cost of Metal Stamping Sales charged, the credit being to A32—Finished Goods.

Invoices covering Die Sales are costed individually, a "recap" is made and journalized each month charging Act. No. A71—Cost of Dies Sold and Absorbed and crediting Acct. No. A32—Finished Dies.

Invoices covering Misc. Sales are costed and "recapped" each month, charging Acct. No. A72, Cost of Miscellaneous Sales and crediting any inventory account which is effected thereby. It is necessary to post directly to the detailed inventory cards from each invoice covering sales of dies by miscellaneous items due to the variety of the items covered thereby.

Returned Product

When for any reason, finished product is returned by a customer, the Inspection Department is notified by the Production Department, which immediately makes an inspection and advises

what part of the returned product is dead scrap and what amount, if any, can be reclaimed. The Production Department notes this information on a copy of the Receiving Slip, and forwards it to the Cost Department. This furnishes the Cost Department the necessary information for costing the credit issued to the customer. The quantity which can be reclaimed is charged back into Finished Stock at cost. The reclamation is either accomplished in the Salvage Department or is done on Reclaim Production Orders. Frequently, the parts are thrown into process with a regular order at the necessary operation. In such instances this work is designated "Reclaim" so that it may be identified when the order is closed.

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