

The IBM Manufacturing  
Accounting and Production  
Information Control System:

Powerful new resources  
to help you reduce costs  
and improve productivity

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## Improving your control over production and accounting

IBM's Manufacturing Accounting and Production Information Control System offers powerful new resources to help you maintain a competitive edge in managing money, manpower, machines and materials.

This system ties production and accounting operations together with integrated, computer-assisted control techniques. It's a system that can have a significant effect on increasing productivity and reducing costs.

Eleven program packages are available—all low in cost, easy to use and economical to implement. This modular IBM system responds to key concerns of the manufacturer in these areas:

- Production Control and Costing
- Material Requirements Planning
- Product Data Management
- Order Entry and Invoicing
- Accounts Receivable
- Inventory Management
- Sales Analysis
- Payroll
- Data Collection System Support
- Accounts Payable
- General Ledger.

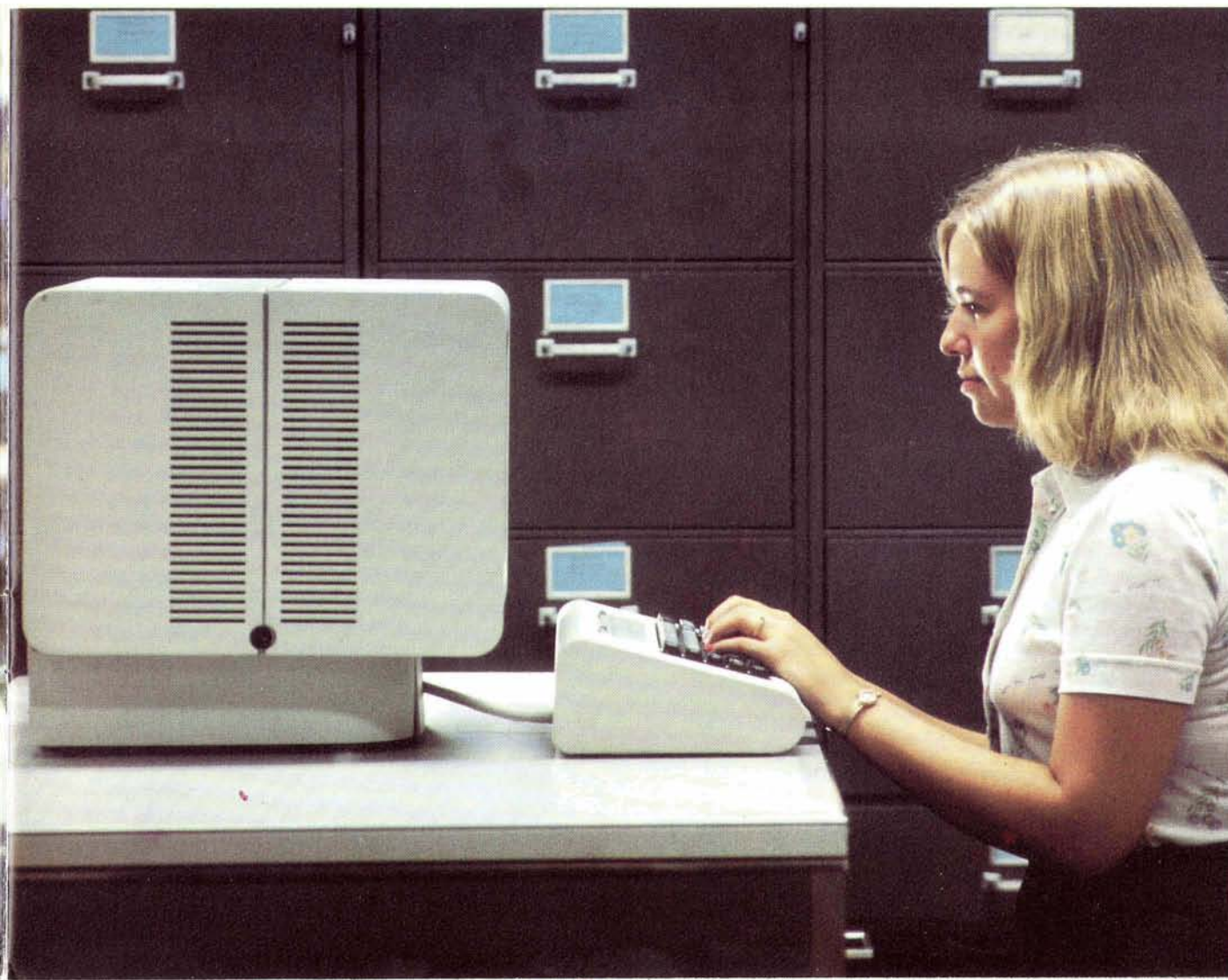




## Look at the benefits

The system can help you:

- Improve customer service and maintain tighter control of profitability
  - Track sales and identify customer buying trends
  - Manage inventory for production needs and cash flow
  - Control shop floor operations and actual job costs
  - Make product and price changing decisions quickly
  - Establish a material plan for each item being manufactured
  - Plan manpower and machine utilization to help reduce production bottlenecks
  - Establish shop priorities to help minimize expediting and improve profitability
  - Track material and labor costs at all levels of manufacture
  - Reduce the paper work and clerical expense of keeping up-to-date order status, receivables, payroll and payables information
  - Determine your company's financial plan and performance every month, not just at year's end.
- And much, much more.







### Receiving the order

A sales order is received from one of your customers for future delivery of a product. You validate the order, check credit, verify availability and book the order for delivery.



### Defining products

Whether you build to order or to stock, bills of material and routings defining each item you sell, manufacture or purchase must be created. Engineering changes are incorporated to keep this information current and accurate.

### Establishing requirements

Your company's master production schedule, bills of material and inventory balances are used to establish the material requirements that must be satisfied to meet your shipping schedule for finished goods.

### From order receipt to shipment

Let's review a typical order as it might move through your company—and see how each of the 11 program packages can help reduce costs and improve productivity.

**Order Entry and Invoicing** allows fast, accurate entry and booking of all customer orders right at a work station—including immediate credit verification.

But that's not all. The package offers manufacturers a range of functions that can result in significantly better customer service and more profitable pricing control. These include:

- Releasing blanket orders at the work station
- Preparing order acknowledgements
- Automatically creating backorder records
- Preparing order-status reports by item, customer or due date
- Producing working documents for tax reporting, commission calculations and sales journal entries
- Specifying optional features on end items at the work station.

**Product Data Management** maintains a single set of engineering and cost records on each item—including product structure relationships for definition of bills of material. It also maintains manufacturing routings. Plus, detailed information on each work center.

Your engineers can describe a bill of material for a new product by simply noting differences between it and an existing product. With a single entry, they can automatically delete a component, or replace it with another item, on every bill of material where the original component was shown. That's productivity.

**Material Requirements Planning** converts product requirements into a detailed material plan—by first generating and maintaining the master production schedule.

Then, it uses the master production schedule, bills of material and lead times to establish the dates and quantities for each component's requirements. It plans and reschedules orders to meet these requirements, applying lot-sizing rules for economy and convenience.

"Net change processing" allows you to replan only those items whose status has been changed.







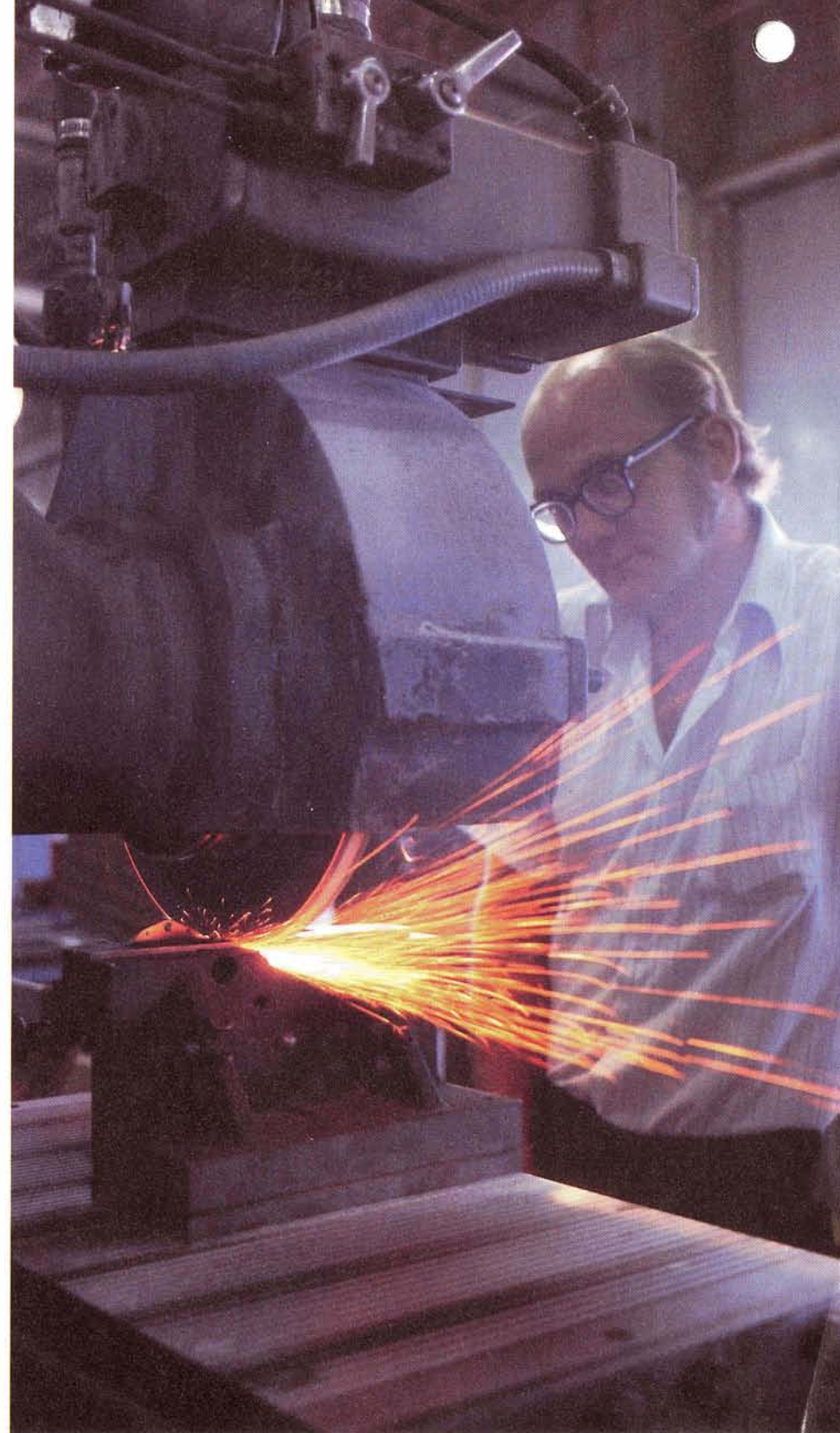
## Coordinating requirements

For each item in an order, the system determines the overall requirements and measures them against inventory balances and released manufacturing and purchase orders. A production plan is developed that indicates what new orders should be released—and what existing orders should be expedited, deferred or cancelled.

**Material Requirements Planning** gives you a fast and efficient way to coordinate material requirements—plus purchase and manufacturing orders—with your shipping schedule or inventory level for the end products. Net change can help you adjust the material plan for an item to account for unexpected changes to inventory, orders or bills of material.

**Inventory Management** can immediately update inventory balances as transactions are entered at a work station. On-hand, on-order and allocated quantities are quickly calculated based on issues, receipts or adjustments and the results are posted to your records.

The ability to “cycle count” your goods will simplify the task of validating inventory figures. And with work station inquiry, the data is easily accessible to key personnel.







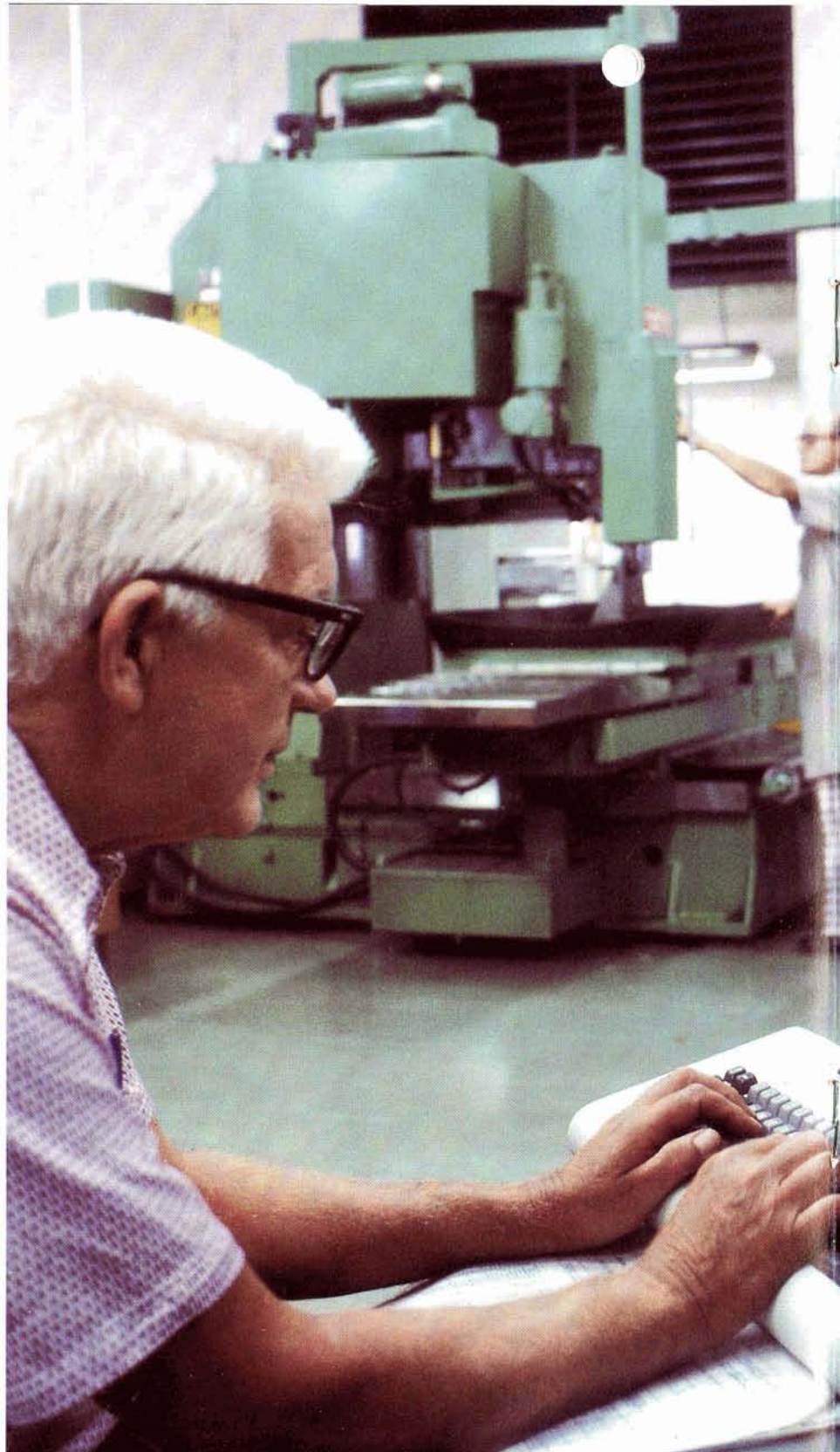
### Managing cash outflow

At some point in the cycle, you evaluate your accounts payable—by due date, vendor, order and amount.

**Accounts Payable** is designed not only to give you such information, but also to provide the flexibility you need in managing cash outflow. For example, it can help you:

- Print and reconcile checks
- Select the sequence in which invoices are to be paid
- Take maximum advantage of discounts
- Analyze vendor performance for renegotiations
- Review cash outflows.

You enter data for customer invoices, prepaid checks, credits and other payables transactions just once. As a result, you can reduce paper work and clerical effort—while you increase office productivity.







## Communicating to the shop floor

To meet your production goals, both releases and adjustments to open orders must be communicated to the shop floor.



**Material Requirements Planning** can help you schedule the release of shop orders and maintain valid priorities as orders change and production plans are altered. This can result in a significant reduction in material shortages and lost-production capacity.

**Production Control and Costing** coordinates the release of production orders and prepares shop paper. You can view the current shop floor status at a work station—or obtain a printed report.

With Production Control and Costing you can:

- Gain control over your critical production operations
- Trace the status of production orders—from work stations on the shop floor if you like
- Assess the value of work-in-process



## Monitoring shop operations

The status of your work centers is described on daily worklists—showing the orders to be worked in priority sequence.

- Measure efficiency by comparing actual plant floor performance and costs with standards and historical averages.

**Data Collection System Support**, together with Production Control and Costing, lets you keep on top of production activities. The package works with the IBM 5230 Data Collection System time and data entry work stations—which are designed to gather information at the points where material is being received, stored, processed, assembled or shipped.

Timely and accurate data entry at the source helps make production data quickly available to the computer for processing. Your management reports can be more reliable. More valuable. And that means your production people will be more likely to use them.

**Production Control and Costing** can take on the burdensome job of creating worklists for each work center—freeing foremen from time-consuming clerical duties and giving them more time to manage their areas of responsibility.

Production Control and Costing can also help you analyze work center efficiency and utilization. Monitor production queues. And calculate current work loads at each work center.



## Getting the payroll out

The same labor transactions that were used to maintain the order status can also be used to record employee activities and time for payroll purposes.

**Payroll** uses information from 5230 entry stations, shop labor tickets, time cards or a combination of these and other sources, to print your payroll records and paychecks. It can automatically calculate:

- Labor distribution by department
- Total hours worked
- Gross and net pay
- FICA, federal, state and local taxes
- Union deductions, taxable and nontaxable
- Miscellaneous deductions.

In addition to performing your routine payroll tasks, the Payroll programs give you reports that can be particularly valuable in analyzing and controlling departmental and company-wide payroll costs, improving productivity and facilitating audit procedures.

## Billing and posting orders

When the manufacturing order for a product is completed, the product is shipped and the customer is billed. The invoices are posted to accounts receivable.

**Order Entry and Invoicing** can automatically price, calculate and print your invoices. Also print shipping paper—like picking lists and bills of lading—at a work station. You can select from a variety of options to:

- Apply special or one-time prices
- Use contract or negotiated prices
- Price selected items by customer class
- Give quantity discounts on certain items
- Deduct a trade discount for any specified customer
- Post to Accounts Receivable automatically.

**Accounts Receivable** lets you quickly find out who owes you how much—and for how long. It gives you an opportunity to realize two major advantages: the timely collection of money owed and the reduction of losses due to bad debts.







## Using business information

The information on your product shipments can be used to generate periodic sales analyses. Similarly, the information posted to general ledger can be used for a variety of important management reports.

**Sales Analysis** gives you the ability to track sales performance by product and salesman or manufacturer's rep, or you can identify customer buying trends—what's moving, what's not. And, you can request valuable reports—based on either 12 months or 13 periods—that can help provide new control over your bottom line profitability.



## An interactive approach

Not only does the IBM Manufacturing Accounting and Production Information Control System offer valuable new management techniques, but it's interactive too. And it runs on an IBM System/34. That means you can enter data, have it edited automatically, update your files and get up-to-the-minute information at work stations located throughout your organization.

In addition, the System/34 supports multiprogramming. So you and your people can be doing a number of different tasks—at the same time, and at different locations and work stations.

For example, one operator can be entering orders. While another is posting cash. While still another is inquiring into the master production schedule or changing the material plan of an item.

You can have a work station printer in the warehouse printing your picking lists. Or in shipping, printing bills of lading.

Accurate, current information can be tracked for multiple companies and remote sites as well. So no matter where your offices are located, you can take advantage of this practical system.

**General Ledger** can print reports that show you where your company stands financially every month, at year's end—or at anytime you need to know. You can get the big financial picture—to help you control the progress and profitability of your company.

The General Ledger package of programs can be particularly useful in helping you to:

- Analyze current conditions for comparison with previous periods and with budgets
- Maintain rigid accounting controls and clear audit trails
- Reduce clerical, accounting and auditing time
- Tighten control of cash flow.









### Select only what you need

The IBM Manufacturing Accounting and Production Information Control System can fit your particular operational and growth patterns.

To reduce the level of start-up investment, you can begin by installing just one package. Add others as the return on your investment grows.

You can take advantage of the system design and programming that has been done for you. And it's likely that your present personnel can quickly learn to use the system effectively. The result: You get the benefits of each package much faster.

### Add programs as you grow

As the diagram indicates, the program packages are interrelated. So information produced in Accounts Payable, Payroll, Inventory Management and Data Collection System Support, for example, automatically updates Production Control and Costing.

With a few exceptions, these IBM resources can work independently, or in any combination that suits your needs. For Production Control and Costing, you must also be using Inventory Management. For Material Requirements Planning, you must be using Inventory Management and Product Data Management. And for Sales Analysis, you must have Order Entry and Invoicing, Accounts Receivable or Inventory Management.

The interrelated design of IBM's Manufacturing Accounting and Production Information Control System lets you add applications easily, quickly and economically—as your volumes demand them, as your business becomes ready for them.

### The next step

Weigh the benefits of this IBM manufacturing system against your present methods of handling production and accounting in your company.

Consider how much more productive your people may be after you've given them one or more program packages in this IBM manufacturing system.

Then call your IBM representative. Together, you can determine how to use the Manufacturing Accounting and Production Information Control System to your best advantage.





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Equipment and programming for IBM System/34 are available under separate agreements.

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