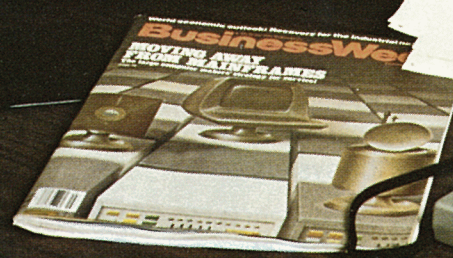
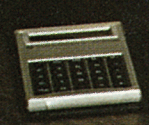


No. 444  
Ekstrom, Carlson  
Rockford, ILL. U.S.



# MCBA's Manufacturing System

in DIBOL<sup>®</sup>



# MCBA<sup>®</sup> Solving business problems with *proven* application software.

MCBA (Mini-Computer Business Applications, Inc.) is one of the world's largest independent suppliers of business software applications for mini-computers. As a software manufacturer, MCBA designs, develops,

documents, quality-assures, markets, and supports its packaged software, knowing that it must stand up to the demands of thousands of users with a wide variety of business needs.

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## Manufacturing System Overview

MCBA's Manufacturing System is a field-proven, quality-assured, complete set of packages written in DIBOL<sup>®</sup>. It is a highly adaptable system that is equally workable in the job shop or repetitive manufacturing environment. Today there are an estimated 3,000 sites using MCBA's DIBOL<sup>®</sup> language accounting, distribution, and manufacturing packages.

Based on knowledge accumulated from over 200 manufacturing installations worldwide, the MCBA Manufacturing System design team has focused on providing the features that manufacturers want and need in a mature and reliable set of packages that solve real problems. The system provides cost-effective solutions for both the user and the reseller. It will save you time and give you solid results.

MCBA's Manufacturing System offers:

- **Modularity** — Although MCBA's packages work together as a fully integrated system, they can be installed in any sequence or combination. This enables users to get exactly the capabilities they need when they need them. Resellers, too, can take advantage of the modularity of MCBA software, licensing a few packages to start with, then expanding their offerings.
- **Flexibility** — The design of the MCBA Manufacturing System is intentionally generalized to make it workable in a wide variety of environments. However, since different businesses have different problems, the system allows for flexibility so that the user or software professional can adapt the system to solve the problems of a specific business with little modification or customization.
- **Ease of Use** — MCBA's Manufacturing System is on-line and interactive. When the user requires special information on short notice, he can specify report parameters to print the needed data, putting concise, timely information at his fingertips for intelligent decision making. Comprehensive and readable reports can be output for nearly all general business needs. For day-to-day operations and reporting requirements, MCBA's complete standardized menus, *Software Reference Manuals*, and *User's Manuals* guide the user through all aspects of the system.
- **Value for the User** — Because MCBA's Manufacturing System is modular, flexible, and easy to use, it can address the user's specific needs and provide him with immediate savings of time and money in his business. But his savings don't stop there. The user also benefits from the fact that the MCBA Manufacturing System is cost-effective for the software installer, who can install a quality manufacturing solution for a far lower price than would otherwise be possible.
- **Cost Effectiveness for the Software Installer** — MCBA's software is designed for ease of installation. It is written consistently from package to package, adhering to strict standards of clarity, readability, and logic. This makes modification and on-going support relatively simple and inexpensive. The MCBA Manufacturing System may be used without modification to serve general business needs, or may be modified for use with specialized vertical applications.

**Security** is an important feature of this system. It provides up to 200 passwords, allowing the user to restrict access at the file level as well as the application level. MCBA's Manufacturing System supports up to eight companies. Even if you do not use eight locations, the **multi-company capability** is useful for internal test files and operator training.

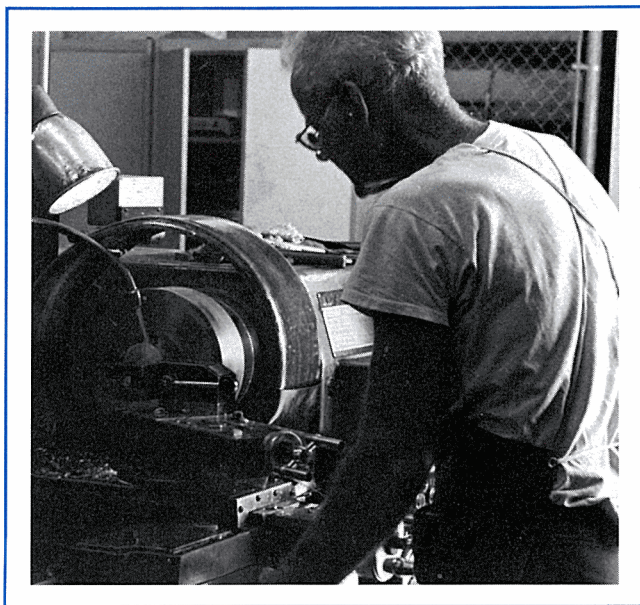
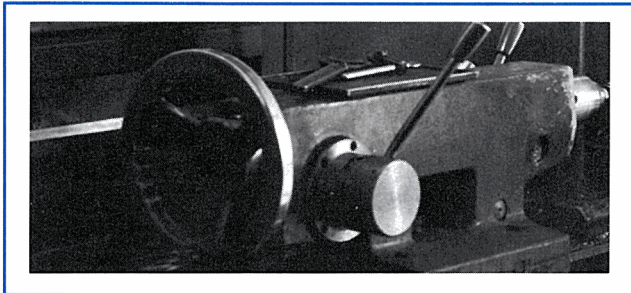
The MCBA Manufacturing System is the first full-functioned, field-proven, and user-oriented manufacturing system offered in DIBOL. It provides the tools necessary for a \$1-30 Million manufacturing firm to lower inventory investment, improve customer service, increase productivity, and respond to situations quickly.

In today's complex and competitive marketplace, good software is not enough. It is vital to truly understand the needs of the various types of manufacturers, as well as the functions of each package within the manufacturing system. With a clear focus on solving the particular manpower, material, and machine problems of each type of manufacturer, the packages of the MCBA Manufacturing System can be installed in a variety of different manufacturing environments.

*Education* in both the requirements of manufacturing firms and the capabilities of the MCBA Manufacturing System then, can help the user to realize immediate and long range benefits.

This important guidance is now being offered through MCBA's educational resource, **Business Technology Group** (BTG). BTG's training and consulting services range from user education to prospect seminars. In addition, overview seminars for the reseller and systems installer are offered at MCBA's headquarters and at BTG's site in the Chicago area.

The result? A manufacturing system that delivers real benefits and solutions, resulting in success and satisfaction for the user, and growth and profitability for the reseller.



## The BTG/MCBA Seminar Series

**Seminar 100 — (3 days)**  
**Securing Profits in the Manufacturing and Distribution Markets**

An Overview  
 For Installers

**Seminar 101 — (3 days)**  
**Securing Results from your MCBA Manufacturing System**

An Overview  
 For Users and User Management

**Seminar 200 — (3 days)**  
**Hands-on Distribution Management**

Covering I/M, P/O, COP  
 For Installers and Users

**Seminar 301 — (5 days)**  
**Ordering and Scheduling Systems**

Covering SFC, Material Requirements Planning, Capacity Requirements Planning  
 For Installers and Users

**Seminar 201 — (5 days)**  
**Establishing the Basics**

Covering I/M, P/O, BOMP, SPR, Master Scheduling  
 For Installers and Users

**Seminar 202 — (5 days)**  
**Control of the Job Shop**

Covering SFC, J/C, L/P, I/M, P/O  
 For Installers and Users

**Seminar 203 — (5 days)**  
**Cost Accounting and Performance Measurement Systems**

Covering SPC, J/C, L/P, G/L  
 For Installers and Users

For further information on the above educational opportunities, contact your MCBA Sales Representative for DIBOL Applications.



# Special Features and Functions of MC

## Accounts Payable (A/P)\*

MCBA's A/P: • provides for entry and editing of vendors' invoices; • allows flexible payment preparation; • supports partial payment selection; • prints checks on MCBA-compatible standard forms; • allows check reconciliation; • prints Federal 1099 forms on request; • prints more than a dozen useful reports to make your planning easier, e.g., *A/P Aging Report* and *Cash Requirements Report*.

## Accounts Receivable (A/R)\*

MCBA's A/R: • tracks both open item and balance forward customers; • allows entry and editing of sales, credit memos, debit memos, and cash receipts; • offers Sales Analysis by five methods; • records and tracks General Ledger distributions in detail; • calculates finance charges automatically or manually; • prints statements and numerous reports.

## Base Material Requirements Planning (Base MRP)

MCBA's Base MRP: • is an "introductory" MRP; • provides Master Production Scheduling; • generates time-phased requirements for all levels of product structures; • uses lead times and order quantity modifiers; • supports on-line initiation and report selection; • provides a daily shop calendar; • features an extremely fast regeneration algorithm; • requires MCBA's Inventory Management and Bill of Material Processor packages.

## Bill of Materials Processor (BOMP)

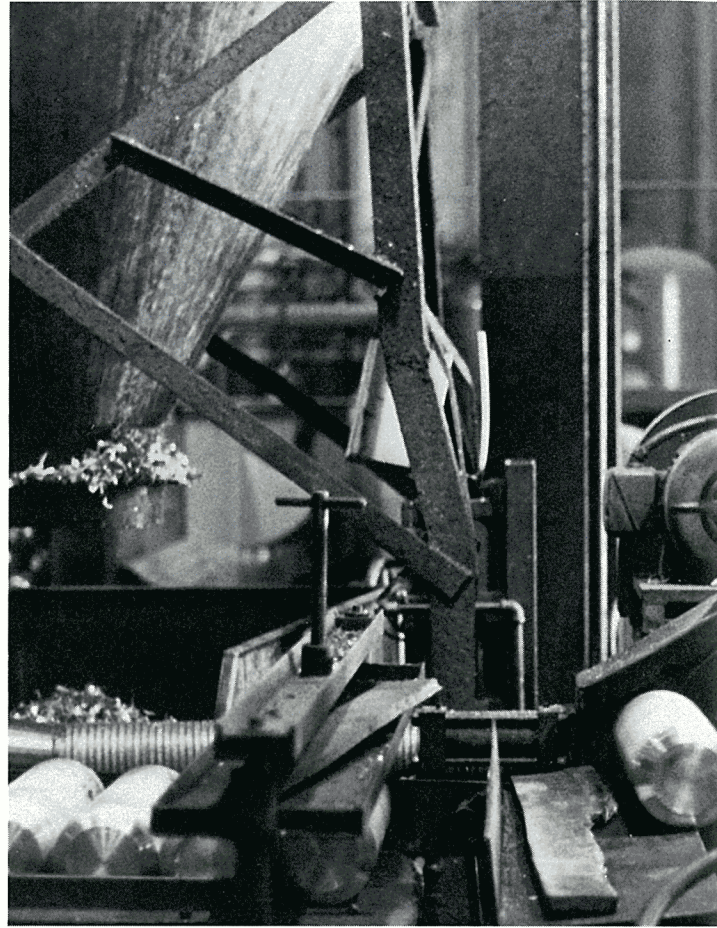
MCBA's BOMP: • maintains up to 12 levels of bills for use in engineering, product costing, purchasing, and manufacturing; • allows user-assigned sequence of components; • specifies scrap/shrinkage; • supports obsolete, forecasted/planned, and modular bills; • provides single level, indented, and summarized *Bill of Materials* reports; • provides single level and indented *Where-Used* reports; • requires MCBA's Inventory Management package.

## Customer Order Processing (COP)

MCBA's COP: • provides customer order entry with separate billing; • allows selective, partial, and full billing; • supports distribution from multiple warehouse locations; • allocates stocked line items at order entry time; • allocates components of non-stocked line items, via BOMP; • performs on-line credit checks and product availability checks at entry time; • offers full back order control; • allows flexible multi-level pricing and discounts; • performs mass price changes; • prints picking tickets; • compiles and prints detailed Sales History Reports; • requires MCBA's Inventory Management and Accounts Receivable packages.

## Fixed Assets and Depreciation (A/D)\*

MCBA's A/D: • supports depreciation by nine different methods, including the new Accelerated Cost Recovery System (ACRS); • keeps two separate sets of figures, one for tax purposes, and one for financial reporting; • provides tracking of investment tax credits; • handles up to 13 accounting periods per year; • prints *Amortization Schedules* for any loan, calculating payments, amounts of interest principal paid, and the remaining principal in each period.



## Full Material Requirements Planning (Full MRP)

MCBA's Full MRP: • provides all the features of Base MRP, plus it: • highlights exceptions; • recommends shop order releases; • supports multiple order policies; • provides pegging; • recommends purchase order releases; • accommodates "what if?" operations; • is the key to successfully implementing Manufacturing Resource Planning.

## General Ledger (G/L)\*

MCBA's G/L: • handles up to 13 user-defined accounting periods; • tracks transactions in great detail, and prepares year-end detail reports; • allows adjustments to prior and future periods; • offers transaction date sensitivity; • prints financial statements in flexible user-defined formats, and includes three Funds Flow statements; • features a comprehensive year-ending procedure; • interfaces to MCBA's A/P, A/R, A/D, and Payroll packages.

## Inventory Management (I/M)\*

MCBA's I/M: • supports multiple inventory locations; • handles stocked and non-stocked items; • performs ABC Analysis with updating; • provides physical inventory tag control; • supports cycle counting; • does forecasting.



# BA's Manufacturing System Packages:



## **Job Costing (J/C)\***

MCBA's J/C: • provides interactive entry and editing of labor and material tickets; • supports standards or estimates for variance analysis; • reports variance analysis for labor, material, and sub-contracting, including rate, yield, performance, and quantity breakdowns; • provides job cost analysis by job, department, work center, part, and operation; • allocates fixed and variable overhead.

## **Labor Performance (L/P)**

MCBA's L/P: • allows the user to improve labor utilization by identifying productivity problems; • tracks productivity performance and utilization (hours actually worked per shift as compared to hours available to work) of all direct labor; • tracks production efficiency and utilization by employee, department, etc.; • tracks usage of indirect labor; • handles labor distribution; • accommodates special situations, e.g. crew reporting.

## **Payroll (P/R)\***

MCBA's P/R: • maintains an employee master file, and prints various employee lists and labels; • calculates gross wages, taxes, and deductions for both hourly and salaried employees, within any standard pay frequency; • allows

interactive entry and editing of Federal, State, and City tax tables, including Earned Income Credit (EIC); • allows entry of payroll adjustment transactions; • provides detailed distribution of wages to G/L; • prints payroll checks in two formats, and provides for check reconciliation; • prints quarterly forms and year-end W2 and 1099 forms.

## **Purchase Order and Receiving (P/O)**

MCBA's P/O: • prints purchase orders and change notices; • follows the progress of the order from requisition through follow-up, receipt, inspection, to deposit into stores; • provides on-line maintenance of purchase order, receipt, and inspection data; • allows blanket purchase orders; • handles multiple order close-outs; • supports multiple vendors per item; • provides powerful vendor analysis; • notifies user when early shipments or over/under shipments occur; • requires MCBA's A/P and I/M packages.

## **Report Writer (R/W)\***

MCBA's R/W: • is a flexible and powerful executive tool; • offers fast turnaround time from concept to report; • allows non-programmers to define and design visually pleasing and useful reports with ease; • provides cross-referencing of up to six files per report, with up to three sort keys per file; • allows changes to be made to the file sequence of any report; • displays, prints immediately, or stores any report for reprint; • allows the OEM to quickly produce reports with no modification; • works with any MCBA package.

## **Shop Floor Control (SFC)\***

MCBA's SFC: • features Capacity Requirements Planning; • provides interactive entry and editing of shop orders; • supports "shop bills" and "shop routings"; • offers operational level controls; • records scrap and rejects; • accumulates actual material used and labor hours expended; • provides forward, backward, and manual scheduling of shop orders down to the operation level; • prints dispatch lists; • offers a daily shop calendar; • provides exception reporting to highlight problem areas in the shop.

## **Standard Product Costing (SPC)**

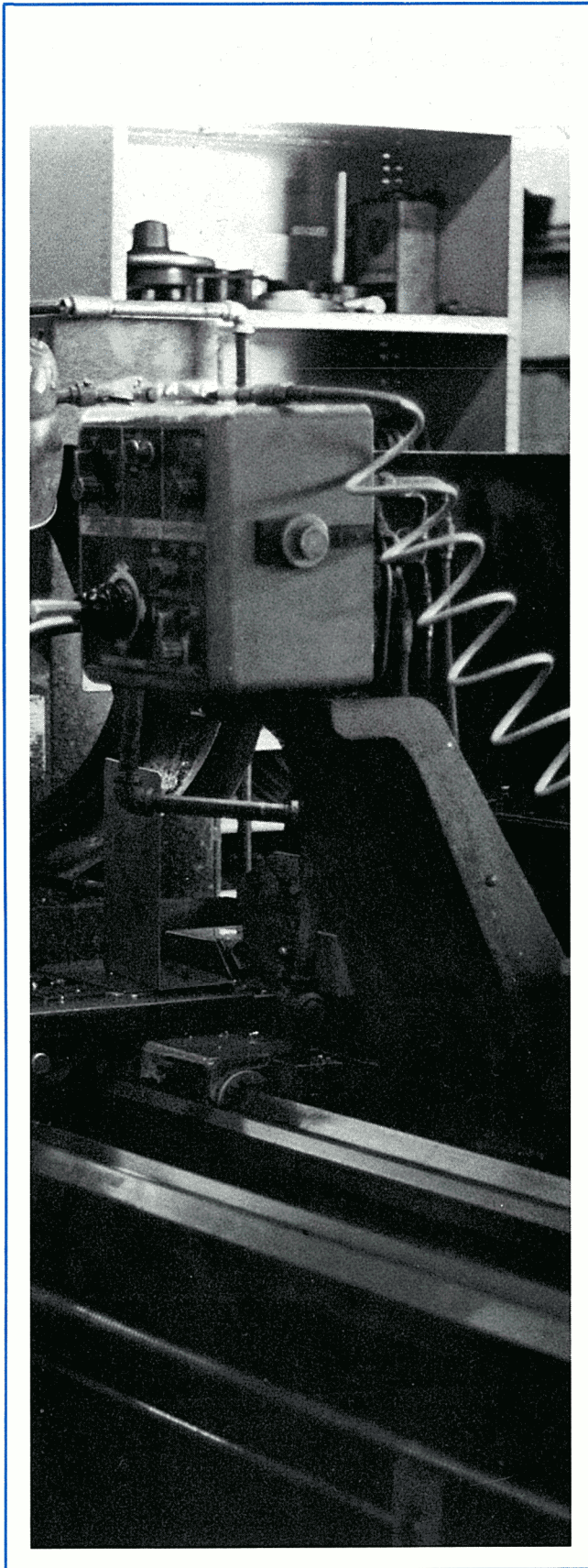
MCBA's SPC: • maintains value-added and accumulated material, labor, fixed and variable burden costs at each level of the bill of material; • maintains costs at current and standard categorizations; • facilitates "what if?" cost analysis; • reports purchase price variance from standard.

## **Standard Product Routing (SPR)**

MCBA's SPR: • handles the creation and maintenance of data describing operations, tools, and notes used in standard product manufacture; • supports interactive entry and editing of routing data; • maintains labor standards at the operation level; • supports "Same-as-Except" routings for creating new routings; • accommodates alternate routings; • provides tooling information control; • supports multiple operation types, including productive, setup, move, rework, etc.; • stores notes by operation, which can be used for operational instructions; • requires MCBA's I/M package.

\*Application packages that can be run stand-alone.





## Documentation

Documentation includes one *Software Reference Manual* and one *User's Manual* for each MCBA Manufacturing System package licensed. Within the *Software Reference Manual*, Installation Notes provide a step-by-step guide to installing each package. For those who maintain or modify these packages, important technical information is provided, including Operator Instructions, Program Specifications, Video and Report Formats, and File Definitions.

## Variety of Operating Systems

MCBA's Manufacturing System is available for the following language/operating system combinations:

Language	Operating System
DIBOL	CTS-300/XMTSD
DBL*	RT-11/TSX-Plus**
CTS-500 DIBOL	RSTS/E
VAX-11 DIBOL	VMS

\*DBL is a DIBOL-compatible compiler for RT-11. Licenses are available through MCBA.

\*\*TSX-Plus is a multi-user, multi-language time-sharing support system available through MCBA.

Inquire about additional language/operating system combinations.

## To Get More Information

Contact your local supplier or an MCBA Sales Representative for DIBOL Applications. Product Descriptions and Sample Screens and Reports for these packages are available on request.

Local Supplier:

# MCBA®

**Mini-Computer Business Applications, Inc.**

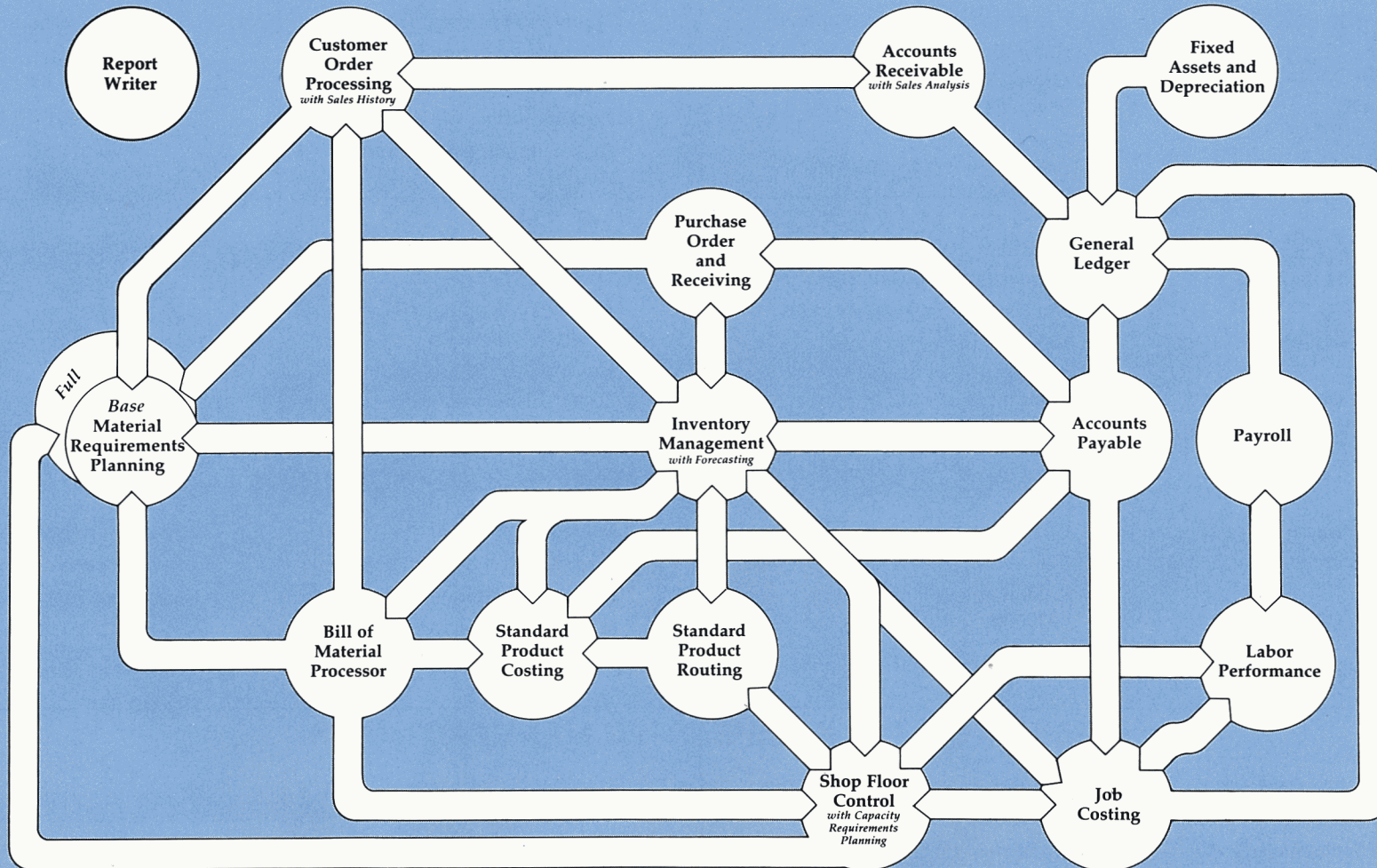
2441 Honolulu Avenue

Montrose, California 91020

Telephone: (213) 957-2900 Telex: 194188



# MCBA's Manufacturing System in DIBOL<sup>®</sup>



Note: Arrowheads indicate flow of data.

# CLASSIFY YOUR MANUFACTURING COMPANY

Determine your type by checking below (may be different for your various product lines):

## CHARACTERISTICS

## BASIC ISSUES

### ENGINEER-TO-ORDER JOB SHOP

- Sells engineering skills and manufacturing capacity
- Works from backlog
- Forecasts capacity
- Buys to the job
- Runs a functional shop

- Has no continuous operations
- Has a technical specialty
- May evolve "assemble-to-order" products
- Customer lead time = manufacturing + engineering

- Managing backlog
- Engineering **capacity**/utilization
- Plant **capacity**/utilization
- Not reinventing the wheel
- Cost estimating and control

- Job status and control

### MAKE-TO-ORDER JOB SHOP

- Sells manufacturing capacity
- Works from backlog
- Does very limited material forecasting
- Runs a functional shop

- Has no continuous operations
- Has a manufacturing specialty
- May evolve products
- Customer lead time = manufacturing

- Managing backlog
- Plant and equipment **capacity**/utilization
- Cost estimating and control
- Job status and control

### ASSEMBLE-TO-ORDER REPETITIVE MANUFACTURER

- Sells optioned products
- Maintains subassembly/component inventory
- Forecasts model families and options
- Runs a functional shop

- Has few continuous operations
- May evolve stocked finished goods
- Customer lead time = final assembly + shipping

- Managing backlog
- Maintaining customer lead times
- Forecasting models and options
- Material** planning and control
- Capacity** planning and control

- Manufacturing flexibility
- Job status and control
- Cost measurement and control

### MAKE-TO-STOCK REPETITIVE MANUFACTURER

- Sells specific finished products
- Maintains finished goods inventory
- Forecasts specific finished goods
- Has specialized/automated equipment

- Has some continuous operations
- May evolve options
- Customer lead time = shipping

- Inventory/service level
- Forecasting demand
- Material** planning and control
- Production efficiency

↑  
JOB SHOP  
↓

↑  
REPETITIVE  
↓