

ShopScan[®]

G.S.D. Associates, Inc.



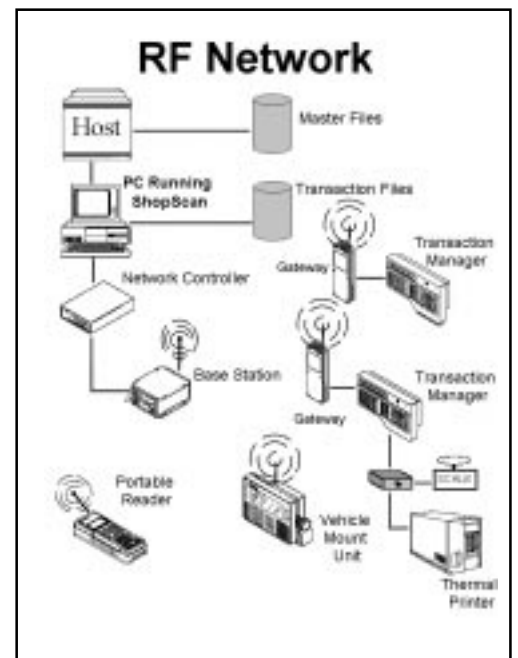
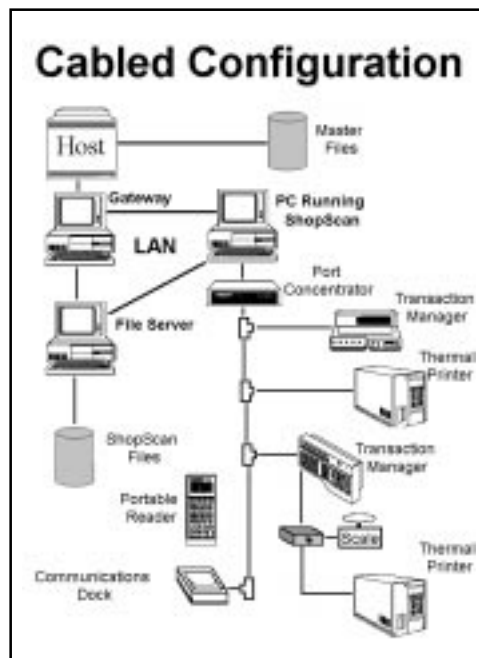
SHOP FLOOR DATA COLLECTION AND PRODUCTION INFORMATION SYSTEM



ShopScan is a PC-based modular software system that runs on 386, 486, or Pentium-based computers and local area networks (LAN's). In partnership with Intermec bar code equipment, this cost-effective shop-floor reporting system collects, validates, organizes, and reports - in real time - all activity occurring on a manufacturing shop floor.

ShopScan can operate as a stand alone shop-floor reporting system or as an intelligent front-end data collection system using either Cabled or Radio Frequency (RF) technology.

- Application modules
 - Work in Process
 - Labor Tracking
 - Inventory Tracking
 - Time and Attendance
- Provides a powerful, flexible database management system
- Interfaces readily to external data bases
- Fully customizable to your unique bar code data collection and management reporting requirements
- Supervisory module by itself can be used as a foundation for non-manufacturing or customized applications
- Supports Intermec wired or radio frequency (RF) systems



BAR CODE SUPERVISOR

ShopScan is built upon a sophisticated set of programs called the Bar Code Supervisor. The Supervisor provides the application support, data base management, and communications control to allow an extensive network of bar code readers, scanners, and printers to be managed by a single PC. It can be used in conjunction with the optional ShopScan application modules or may be used by itself as a basis for the development of custom applications. It uses Advanced Revelation®, a complete application development and relational data base management system that provides power and flexibility for the PC environment, whether stand alone or distributed in a network.

Full data collection supervisory functions

- Collects and validates bar code messages received from Intermec scanners
- Provides two-way communications between the PC and production workers using the bar code network
- Imports and exports files easily for transfer between the PC and host computers or networks
- Creates, stores, and prints bar code labels
- Schedules and then automatically executes one or more tasks on a regular basis, such as printing a daily report
- Manages the downloading of programs and data to the Intermec bar code terminal network

Application development tools

- Applications can be customized or new ones created from scratch, with Advanced Revelation's powerful programming language
- Provides the ability to interrogate and obtain reports from the PC data base through the use of an "English-like" inquiry and report writers
- Includes application optimization tools for creating screen windows, pop-up menus, and data validation checks

Data base management

- Manages the data base environment used by application modules
- Updates the local data base and maintains an audit trail of all transactions
- Through Revelation, an application can also link to SQL server files and other external data bases just as if they were Revelation files

Configuration flexibility

- Supports any Intermec (CrossBar®) cabled or RF configuration up to 140 reader or printer devices per COM port
- Equally suited to standalone or networked PC's
- Operates in all major PC-compatible LAN's

Work in Process Tracking

Tracks the quality and status of products or work orders as they move through the manufacturing process.

- Tracks work orders or individual parts and records defects
- Creates and maintains proper routing of work orders through production steps
- Provides status reports in various formats or from CRT screens
- Records yield per work order or part number
- Allows user-defined data defect codes

WORK ORDER	LOT	PART	OP. #	OPERATION	SETUP	RUN	RESOURCE	QTY
349100	1	996110	01-100	TRIM SETUP	1.00	0.00	1.00	
349100	1	996110	01-110	TRIM				
358150	1	886100	01-110	TRIM				
358150	1	886100	01-100	TRIM SETUP				
358150	1	886100	01-140	REWORK				
359101	1	100227	04-420	PACKAGE				
359101	1	100227	03-320	ASSEMBLY	1.00	16.00		
359101	1	100227	00-340	MELT	.50	2.00		.50
359101	1	100227	00-300	MACHINING SETUP	.50	4.00		
359101	1	100227	00-210	DRILL-TAP COMBINATION	.50	4.50		

Labor Tracking

This ShopScan module tracks current labor usage and helps management predict future costs more accurately.

- Records real-time clock hours for all operations
- Automatically logs breaks and lunches
- Can track multiple employees for one job
- Uploads elapsed time labor transactions to host computer
- Generates reports showing labor hours per work order, operation, part number or time period

PART	WORK ORDER	LOT	OP. #	SETUP	RUN	RESOURCE	LBR QTY	COST
776305	349100	1	01-110		1.00	1.00	5.00	
776305	349100	1	01-100	1.20	0.60	1.20		
776305	349100	1	01-110					
776305	469250	1	01-100					
776305	469250	1	01-110					
776305	469250	1	01-150					
886100	207950	1	01-100					
886100	207950	1	01-110					
886100	207950	1	01-100					
886100	207950	1	01-150					
886100	350150	1	01-100					
886100	350150	1	01-110					

Time and Attendance

Records employee hours for payroll purposes and provides up-to-the-minute reports.

- Logs employees in / out automatically via bar coded badges or manually in batches
- Maintains master file and shift information record for each employee
- Feeds in house or Service Bureau payroll system
- Prepares timekeeping data for uploads to host computer
- Provides employee listings and absentee reports on demand
- Allows customized variance and timekeeping reports
- Allows custom shift set-ups

Inventory Tracking

The Dock-to-Stock module tracks items by location, cost, and purchase order through receiving and inspection operations. ShopScan has also been customized for many other inventory applications including Unit Tracking, Lot Tracking, and Part Tracking.

- Gives quantity and location of items in each operation
- Prints bar coded labels for later inventory tracking
- Can assist cycle count operations and physical inventories
- Creates issue and change transactions
- Prepares inventory transactions for transfer to host computer
- Provides Dock-to-Stock status and transaction reports

EMP #	EMPLOYEE	SHIFT	DEPT	PN	PN	START	STOP	ACTU	OTHER
22803	Washington, Pat	08-18-95	077	0	0			07:10	
22803	Washington, Pat	08-19-95	077	0	0			06:15	
22803	Washington, Pat	08-20-95	077	0	0	WARNING	WARNING	07:25	
22803	Washington, Pat	08-21-95	077	0	0			06:14	
22803	Washington, Pat	08-22-95	077	0	0	WARNING		06:18	
22803	Washington, Pat	08-23-95	077	0	0			06:15	
31676	Robertoli, Sandy	08-18-95	077	0	0	WARNING	EARLY	06:12	
31676	Robertoli, Sandy	08-19-95	077	0	0			13:12	
31676	Robertoli, Sandy	08-20-95	077	0	0			06:15	
31676	Robertoli, Sandy	08-21-95	077	0	0			06:14	
31676	Robertoli, Sandy	08-22-95	077	0	0			06:14	
31676	Robertoli, Sandy	08-23-95	077	0	0			06:14	

G.S.D. ASSOCIATES, INC. - Company Profile

G.S.D. Associates, Inc. is a cost effective, independent resource for turnkey systems, hardware, software, systems design, consulting, vendor liaison, programming, training, installing; or interfacing bar code, RFDC, RFID, and other peripheral or microprocessor based equipment. The staff consists of highly qualified individuals who have worked in data processing for many years.

The company has worked with bar code applications and equipment since 1978. G.S.D. Associates, Inc. also represents various lines of bar code printers, applicators, readers, scanners, software, tags, and labels from manufacturers such as Intermec, Avery Dennison, Imtec, Spectra-Physics, SATO America, Microscan, Percon, and others.

The primary emphasis of the company is in providing data collection and labeling systems and equipment to the specifications of their clients. G.S.D. Associates' main goal is to supplement their clients' current data processing operations in a cost effective manner. This allows their clients to avoid the pitfalls of the bar code labeling and scanning learning curve and become independent as soon as possible.

G.S.D. Associates staff and consulting resources have had extensive experience interfacing bar code data collection systems, bar code readers, and bar code printers to various computer systems, some of which follow:

Hewlett Packard
IBM-AS400, SYS38, SYS36, 4000
Alpha Microsystems
Unisys
Honeywell

DEC VAX
Data General
Altos
Adds Mentor
PC's & PC Networks

**SHOP FLOOR DATA
COLLECTION AND
PRODUCTION INFORMATION
SYSTEM**

ShopScan®

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Specifications

MS-DOS System Requirements:

MS-DOS 3.X or above; 386, 486, or Pentium(586) based IBM PC, PS/2 or compatible with 2MB RAM, hard disk, and Advanced Revelation Runtime or Development versions.

Product Specifications

Product Number

5300A011 Bar Code Supervisor (includes one user manual)

Application Modules

5300A021 Work-in-Process
5300A031 Labor Tracking
5300A041 Time and Attendance
5300A051 Inventory Dock-to-Stock

Documentation

53051 ShopScan User Manual

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