

QAD Certification Program Study Guide



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Program Overview



rwant01 p b 14.13.2 Routing Maintenance (Date Based)

Routing Code	10-15000	NORMAL (TN) COILING
Operation	20	
Standard Operation		
Work Center	1030	INSPECTION, ALL SITE
Machine		
Description	INSPEC PER PROC-005	
Machines per Op	1	Direction: P
Overlap Units	1	
Queue Time	1.0	
Wait Time	0.0	
Setup Time	0.0	

Done by: Product Eng. & Mfg. Dept.

Welcome to the QAD Certification Program

The QAD Certification Program provides QAD employees, business alliances, and customer teams with a means of certifying the breadth and depth of their product knowledge. This program also assures QAD customers working with QAD certified professionals that they are getting maximum value from their QAD software.

The QAD Certification Program encompasses two types of exams: the Product Knowledge Specialization (PKS) Exam, which tests your knowledge of core areas of MFG/PRO functionality (Distribution, Manufacturing, and Finance); and the Mastery Test, which focuses on the functionality included in specific releases, such as ATP Enforcement and Flow Scheduling in eB2. The PKS Exams are prerequisites for the Mastery Tests.

MFG/PRO Certification and Recertification

To achieve MFG/PRO certification for a discipline, you must pass both the Product Knowledge Specialization Exam and the Mastery Test. QAD certification is currently valid if you achieved a passing score on the PKS Exam v8.5 or higher and Mastery Test on eB2 functionality. Anyone certified prior to these versions will need to become recertified. Successful testing on the latest major releases of the software will attain recertification.

Organization of Study Guide

This QAD Certification Program Study Guide is designed to assist you in preparing for the certification exams. The guide is divided into two sections—Preparation for the PKS Exam and Preparation for the Mastery Test. As you will see, most of the material in this booklet pertains to preparation for the PKS Exam, but both the PKS Exam section and Mastery Test section follow a similar format (Introduction, About the Test, Test Development, Test-Taking Hints, and Recommended Study).

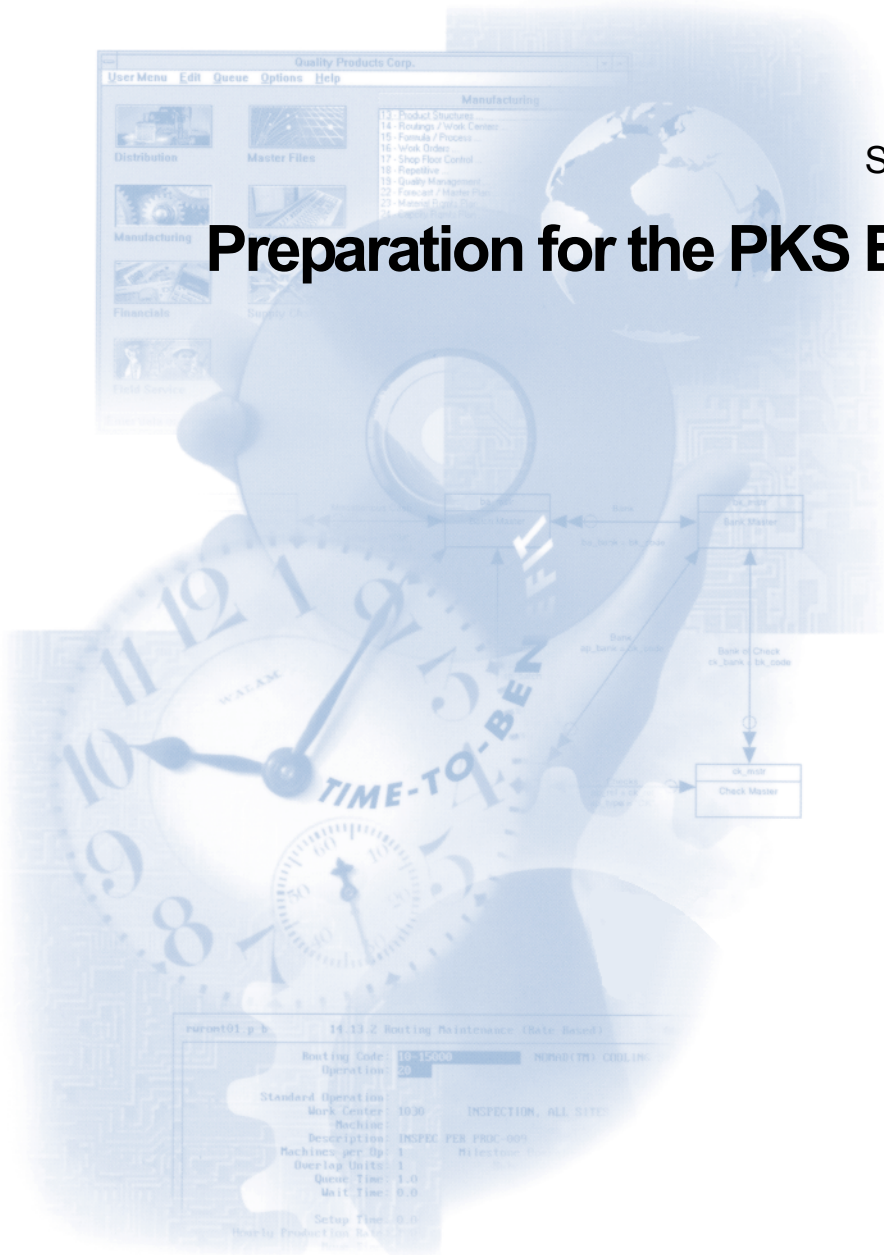
Additionally, the PKS Exam section includes a high-level overview of MFG/PRO Manufacturing, Distribution, and Finance. Under each of these three topics are lists of concepts, terms, and other information you should know and understand.

The PKS Exam and Mastery Test sections of this study guide also direct you to additional resources that can help you prepare for the exam. These resources include training classes, online training presentations, and product documentation.

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SECTION 1

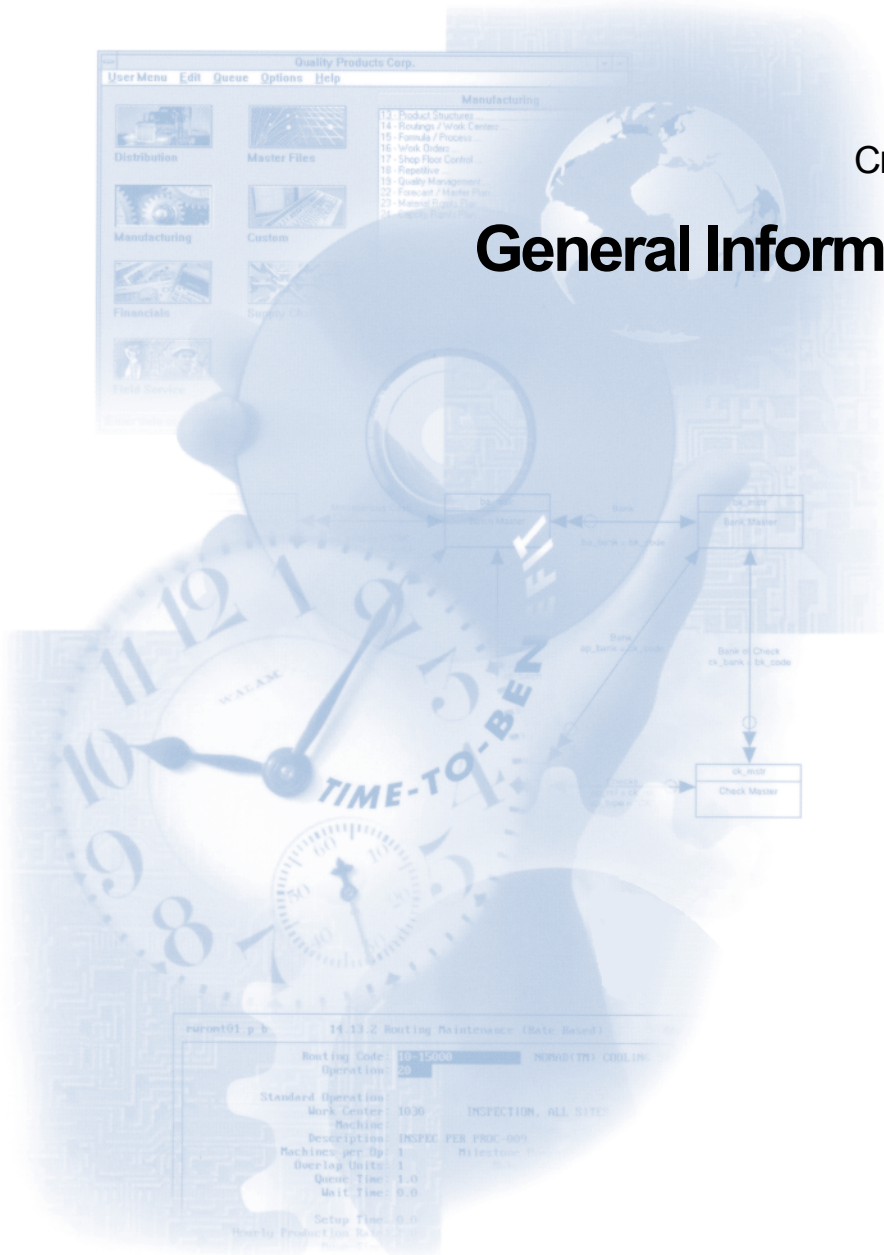
Preparation for the PKS Exam



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CHAPTER 1

General Information



OVERVIEW

The Product Knowledge Specialization (PKS) Exam requires a firm foundation of product knowledge in QAD applications. Areas tested include Manufacturing, Distribution, and Finance.

A brief description of each of these PKS Exams is given below.

Manufacturing Test

The Manufacturing test covers MRP II implementation and basic data setup, production scheduling and control (including inventory control), sales, production and resource planning, along with material/capacity/distribution requirements planning. Multiple site concepts and lot/serial traceability are also included.

Distribution Test

The Distribution test includes data setup and system features as well as addresses/taxes, products and pricing, defining configured products, inventory and purchasing, sales orders and invoicing, and distribution requirements planning. Multi-site, multi-currency concepts are also covered by this test.

Finance Test

The Finance test encompasses each of the financial modules of MFG/PRO and its integration with other system modules. This includes product definition and costing, general accounting, financial reporting and consolidated reporting. Multi-site, multi-entity, and multi-currency implementation issues are also included, along with product cost development and inventory valuation.

ABOUT THE TEST

Test Development

Test questions originate from subject matter covered in the standard MFG/PRO training and implementation classes, as well as MFG/PRO documentation and release bulletins. Test validity, time allocation, and grading methods have been checked against a representative sample group.

Basic Information on Registration and Test Format

Schedule and Registration

- If you qualify to participate in the certification program, please register online on the QAD Learning Portal at <http://learningportal.qad.com>. Applications must be received two weeks prior to the test date. Some centers offer morning and afternoon sessions; be sure to indicate your preference.
- You will be expected to show a photo ID (passport, driver's license) with a signature for admittance to the test site
- The PKS Exams are offered on a regular basis at each of the QAD regional offices. A current schedule may be accessed on the QAD Learning Portal (<http://learningportal.qad.com>). You may also contact your regional QAD proctor for specific schedule information.
- Test participants who are not fluent in English should indicate this on the registration form. Contact your regional proctor to find out about extra time to complete the exam.
- Be sure to allow plenty of time to arrive at the test site. Once the doors are closed and the test session begins, no one will be permitted to enter.
- Before registering for any certification test, you should review the outline in this guide and know the modules, test topics, and key terminology very well
- Regional proctors can assist you with any questions you may have. However, should you have questions regarding the certification process, contact the PKS Administrator by email at pkstest@qad.com.
- Participation in the QAD Certification Program is at the discretion of QAD

Fee

- The fee per test is \$300 USD
- The registration fee must be paid prior to testing and may be paid by check, credit card, or purchase order

Cancellation Policy

- The fee is fully refundable if a cancellation notice is received at least two weeks prior to the test
- There will be a 50% service charge for cancellation notices that are received less than two weeks prior to the test
- There will be no refund if a cancellation notice is not received prior to the test date (a “no show” situation)

Time

- Participants are given 3½ hours for each test
- Participants who have an approved *Request for Extra Time* form (not fluent in English) have 4½ hours to complete the test

Format

- All test questions are in English
- The test consists of Hands-On, Multiple Choice, and True/False sections
- Some questions require using MFG/PRO to enter information and make decisions based on the results
- Up-to-date information about the MFG/PRO interface and version used in the exam may be obtained from your regional QAD proctor, or contact the PKS Administrator by mail at pkstest@qad.com

Results

- Results can be expected within 3 to 5 weeks from the test date

Passing Score

- The passing score for each discipline is 70%
- Passing with Honors is awarded for a test score of 85% or higher, indicating a superior level of knowledge
- Failure to pass the same discipline three consecutive times requires a six-month waiting period to reschedule for the same discipline
- All test scores are strictly confidential

PREPARATION FOR THE PKS EXAM

Here are some suggestions to help you prepare for the PKS Exams.

Check Your Knowledge

This study guide includes lists of key concepts, terms, and other information that you should know and understand. These are useful in defining the scope of the tests and the breadth of knowledge that we believe is necessary for a successful implementation. You should use the lists to check your knowledge to determine what you know about each topic and how you might use what you know to solve problems.

Recommended Study

Specific to MFG/PRO

The best way to learn MFG/PRO functionality is to attend QAD's training classes, complete QAD online training courses, and review product documentation. Each of these resources is discussed below.

Training Classes

Listed below, by area of focus, are training classes that should help you prepare for the PKS Exams and Mastery Tests. A current schedule of courses may be accessed on the QAD Learning Portal at <http://learningportal.qad.com>.

Training Classes for Manufacturing

- Introduction to MFG/PRO
- MFG/PRO Quick Start
- Manufacturing Operations
- Manufacturing Planning and Scheduling
- Product Costing and Cost Management

Training Classes for Distribution

- Introduction to MFG/PRO

- MFG/PRO Quick Start
- MFG/PRO Purchasing
- MFG/PRO Sales Order Management

Training Classes for Finance

- Introduction to MFG/PRO
- MFG/PRO Quick Start
- Financial Management
- General Ledger Report Writer
- Product Costing and Cost Management

Online Training Courses

Use your QAD web account to access online courses featuring QAD product experts delivering focused training on specific areas of QAD product functionality. Online courses may be accessed on the QAD Learning Portal at: <http://learningportal.qad.com>. (Access to online training courses requires a QAD web account. For information go to QAD Web Accounts at <http://support.qad.com/resources/accounts.html>.)

QAD Product Documentation

Use your QAD web account to access MFG/PRO product documentation, which includes user guides, glossary, release bulletins, and technical references. Product documentation may be accessed at: <http://support.qad.com>. This material is also available on CD and can be ordered online using the Materials Order Form at <http://support.qad.com/downloads/mof>.

General

Generic MRP II concepts and their application can be learned from publications and seminars offered through professional organizations and local colleges. APICS certification is highly recommended.

Additional materials are available through the American Production and Inventory Control Society (APICS). APICS can be reached at:

500 West Annandale Road
Falls Church, VA 22046
(800) 444-2742 or (703) 237-8344

Study Hints

All topics covered in the test are documented; be sure to access the online training presentations and product documentation referenced on page 18 of this study guide.

- The MFG/PRO documentation on CD describes the basic functionality of the software and the interrelationships among its parts. This material can provide a reasonable introduction to the system.
- If you are already familiar with the basic functioning of the system, your best way of studying is to work with the software. Go through the activities in MFG/PRO training materials and be sure that you can do the activities accurately.
- Try to familiarize yourself with control settings and the contents of key reports and maintenance screens. If changes in settings of key fields would change calculations, determine what those fields and settings are.
- Many questions ask you to determine how MFG/PRO can be used to solve business problems. Therefore it is useful when studying to think of (or remember) real-world situations that would require the functionality you are studying.

Test-Taking Hints

Although 3½ hours sounds like ample time to complete the test, experience has shown that participants need to use this time wisely:

- In the hands-on section, you may be tempted to answer the questions without using the computer. Do not. You may not get the right answer to this question or to a later question! Use the system to determine all of your answers.
- Make sure you read all instructions carefully before responding. In the hands-on section, make sure that you have entered all of the data, since subsequent questions may use it.
- If you cannot answer a true/false or multiple choice question quickly, move on to the next question. Come back to it later as time permits.

- You can use the computer to find the answers to questions, but you will not have time to look up the answer to every question. Save this method for the end of the test, after you have completed all other questions.
- When using the system to try to find answers, group related questions together. This may help you answer more than one question using the fewest steps and the least amount of time.

CHAPTER 2

Manufacturing



INTRODUCTION

This section of the study guide is designed to assist you in preparing for the QAD Product Knowledge Specialization Exam on Manufacturing. The objective of this test is to ensure that you have a broad understanding of MFG/PRO manufacturing functions and how they should be implemented and used. Since manufacturing and planning functions form the core of MFG/PRO, all consultants should be fully versed in their functionality and use.

Modules and Topics Covered

This test covers the content of each of the manufacturing and planning modules, together with all of the modules needed to implement the system and define products.

You should study the following

- Capacity Requirements Plan
- Compliance
- Configured Products
- Distribution Requirements Planning
- Forecast/Master Plan
- Formula/Process
- Inventory Control
- Items/Sites
- Manager Functions
- Material Requirements Plan
- Physical Inventory
- Product Costing (Product Structures, Formulas, Routings, Work Centers, Process, Items, Sites)
- Product Line Plan
- Product Structures
- Purchasing (Subcontract)

- Repetitive/Advanced Repetitive
- Resource Plan
- Routings/Work Centers
- Sales Orders/Invoices
- Shop Floor Control
- Work Orders

The test covers implementation issues, how functions in each of these modules can and should be used, and how they are integrated. It requires an understanding of how manufacturing functions are used with and affect other modules such as Purchasing, Sales, and General Ledger.

Test Topics

The manufacturing modules have been subdivided into four major topics for you to study. These are:

- 1 System Foundations
- 2 Product Definition and Costing
- 3 Production Scheduling and Control
- 4 Distribution, Manufacturing, and Capacity Planning

On the following pages, each of these topics is briefly described, followed by a list of what you should know and understand.

SYSTEM FOUNDATIONS

Introduction

The PKS Exam covers tasks that must be performed in order to implement the basic functions of MFG/PRO. These include basic system management and implementation issues, including data setup.

MFG/PRO System Features

To begin with, you should have a good understanding of the MFG/PRO user interface (specified by the proctor for this exam) and a basic understanding of what PROGRESS is. Since each implementation begins with manager functions and control files, you should understand these in detail, particularly how they can be used to make the system easier to operate and to ensure adequate system security and control.

You should know and understand the following

- How MFG/PRO functions can be selected (menus, user menus, function keys)
- In general, how MFG/PRO modules are interrelated and what data they share
- How control settings are used and what each control file field does
- Which MFG/PRO functions can be disabled if they are not in use
- What security methods are available
- How to define and manage printers and batch queues
- Which MFG/PRO Help functions are available and how these can be supplemented
- What are the role and function of the System/Account Control
- When and how to use CIM Data Load functions
- How generalized codes can be used for field validation
- What master and transaction comments are and how they can be used

System Implementation

This section concentrates on the decisions you need to make at the beginning of any implementation and on the basic data elements that must be established.

You should know and understand the following

- Which fundamental issues need to be addressed when planning an MFG/PRO implementation
- Which factors determine whether to implement single or multiple databases
- How functions operate when connected to multiple databases
- What options there are for accessing and connecting to multiple databases
- In a multiple entity database, what entity should be the primary entity
- In what situations you would define an entity, site, or location
- How entities are defined and used
- What implementation and operating issues pertain to sites and locations
- What inventory status codes are and how they are used
- How the system stores inventory information in aggregate and in detail
- When inventory balances can be negative and how that is handled
- How the shop calendar and holidays are defined
- Which numbering and coding schemes make the most of MFG/PRO functionality
- How the general ledger calendar is defined
- How the general ledger calendar relates, or does not relate, to other calendars such as the shop calendar
- What the relationship is between format positions, accounts, sub-accounts, cost centers, and projects

PRODUCT DEFINITION AND COSTING

Here we focus on how products are defined for use in the manufacturing modules. This includes product lines and items, as well as the definition of manufacturing departments, work centers, formulas, product structures, process operations, and routings. Since all of these determine the standard cost and lead time of a product, you should understand how both are calculated and what each of the cost and lead-time components represents. You should understand how all of these can be applied in discrete, process, and mixed-mode environments.

You should know and understand the following

- What item status codes are and how they are used
- What values should be entered in each of the individual data fields in Item Master Maintenance, which fields are required and which are optional, and how each field is used
- How to determine the item unit of measure, where it is used, and where an alternate unit of measure can be used
- What BOM codes are and when they are used
- What functionality is provided by product structures and formulas, and the differences between product structures and formulas
- How BOM codes, formulas, and product structures are used in costing, planning, scheduling, and engineering control functions
- The difference between scrap and yield, and how each is used
- What batch quantity is and how it is used; the difference between batch and item order quantity
- How standard operations can be used and what happens when a standard operation changes
- What functionality is provided by routings and processes, and the differences between routings and processes
- How lead time and manufacturing costs are calculated from routings and processes
- What routing or process is used by planning, scheduling, and labor reporting

- How the relationship between items, structures, and routings is defined
- How substitute items are set up and used
- How common routings and structures are set up and used
- What “this level” and “lower level” costs are
- What item GL cost is and how it is used
- When and how to do cost roll-ups
- How costs are maintained for different kinds of items (for example, purchased, manufactured, routable, phantom, configured)
- What cost sets can be maintained without using the Cost Management module

PRODUCTION SCHEDULING AND CONTROL

This topic covers manufacturing and inventory control functions used to execute manufacturing plans and the effect that these functions have on planning, the general ledger, and other parts of the system.

Inventory Control

Here we look at the day-to-day activities of inventory control that support manufacturing operations. Particularly important are issues related to implementation, operating procedures, and integration with other modules. When reviewing each of these topics, be sure to relate them to both work orders and repetitive manufacturing functions.

You should know and understand the following

- How item shelf life and expiration date are related
- How inventory details (lot/serial, reference, grade, assay %, and expire date) are maintained and used
- Where and how alternate units of measure are used
- What general and detail allocations are; how they are related, and how they are different
- How inventory allocations are controlled and monitored for both manufacturing orders and sales orders
- What process is used to move inventory from and to work center locations or manufacturing orders
- What methods are used for floor stock and bulk issue materials
- What options exist for handling component scrap
- What inventory backflush is and when it is appropriate to use it
- How the backward exploded receipt differs from the work order receipt backflush
- What general ledger transactions are created by inventory activities and when

Manufacturing

Manufacturing modules are used to schedule and monitor production in discrete, repetitive, process, and mixed-mode environments. Work Order, Shop Floor Control, and Repetitive functions are covered, as is the entire production cycle: scheduling production; printing picklists; issuing components; recording labor; processing completions, receipts, scrap, rework, and rejects; and monitoring utilization, efficiency, and work in process.

You should know and understand the following

- How production is scheduled and controlled using work orders versus repetitive schedules, and in what types of manufacturing environments each is appropriate
- What planned orders, master scheduled orders, work orders, repetitive scheduled orders, and final assembly orders are and how they are related
- What needs to be set up prior to using repetitive functions and the ways components may be issued from inventory
- What the steps of the repetitive life cycle are, why each is used, and how they affect MRP
- Why cumulative work orders are needed
- What the differences are between forward and backward scheduling and loading, and when each is used
- What each of the fields on a work order is used for
- How work order release and due dates are scheduled, and when they should be manually adjusted
- How type and status codes relate to the work order life cycle, and their effect on work order bills and routings
- In what ways routable items are managed differently from other items
- How work orders can be used to track custom production, rework, or repairs
- How final assembly work orders are created and processed; what components are referenced; what options are available for receiving and shipping final assemblies
- How components are allocated and picklists printed, and how Allocate Single Lot and Critical Items are handled

- How substitute items and alternate bills and routings are processed, and how phantom items work (in both the Work Order and Repetitive modules)
- How manufacturing operations are monitored; what operation status indicates and how it is set
- How subcontracting is managed, and the interface to Purchasing
- What options there are for reporting labor and how operations can be completed at standard; what nonproductive labor is
- When and how a work order is split and what happens
- How and when variances are calculated when using standard or average costing
- What rate and usage variances are and how they are calculated for material, labor, and burden
- How the system accounts for scrap at an operation and at work order receipt
- When orders should be closed for accounting purposes and what this does
- How utilization, efficiency, and productivity are calculated and used
- What general ledger transactions are created by manufacturing activities

Compliance

MFG/PRO's Compliance functionality enables businesses to comply more easily with government regulations and international agreements. The Compliance module consists of site security, batch control, lot control, work order control, and controlled substance fields. Each feature can be used in conjunction with or independent of the other features.

You should know and understand the following

- What is meant by site security and how it is maintained
- How the control file is used and what each control file field does
- How inventory attributes are used and assigned
- How and why batch control is maintained in MFG/PRO and what is the significance of batch control
- How and why lot control is used in MFG/PRO and what the significance of lot control is
- How automatic lot numbering is maintained
- What is meant by single lot per receipt and how it is enforced
- How supplier lot numbers are used in MFG/PRO
- How expired inventory transactions are handled
- How component issues can be controlled
- How controlled substances are tracked
- What type of controls can be placed on work orders

DISTRIBUTION, MANUFACTURING, AND CAPACITY PLANNING

This topic covers the modules and activities necessary for manufacturing resource planning (MRP II). The disciplines involved range from high-level sales and production planning to detailed material and capacity planning. You should know how each of the planning modules works and how it is implemented. You should understand MRP II concepts such as time-phased planning, resource management, and master production scheduling, and how they are supported in MFG/PRO. For each of the following sections, you should be thoroughly familiar with all of the reports and inquiries, be able to look at each of them and determine what action needs to be taken and why.

Sales, Production, and Resource Planning

Sales and production planning is the starting point of the planning process; these are supported in MFG/PRO by the Product Line Planning and Resource Planning modules. These are high-level plans that state projected monthly sales and production by product group. They support the annual business plan and provide input to the detailed master production schedule. Resource Planning functions are used to verify the plan against the availability of critical resources.

You should know and understand the following

- What the elements of a product line plan are and how they are used
- How product line plans can be used to project inventory levels, inventory turns, and backlog
- What information is used for product line resource planning
- How resources are defined and how changes are recorded
- How resource capacity and load are calculated

Master Production Scheduling and Rough-Cut Capacity Planning

Unlike sales and production planning, this topic deals with demand and supply planned at the item level. You should understand each of the sources of demand for an item (forecast, sales orders, spares, and interplant requirements) and how these demands are used to generate a master production schedule (MPS). Once developed, the plan can be checked against the availability of critical resources using rough-cut capacity planning.

You should know and understand the following

- What types of items should be forecast; how forecasts are maintained and how net forecast is calculated
- What the process of forecast consumption is and how this can compensate for forecast errors
- What the primary functions of a master schedule are
- What types of items should be master scheduled, and what the difference is between a master schedule item and an MRP item
- What the advantages and disadvantages of the manual, automatic, and computer-assisted master scheduling techniques are; how items are set up when using each technique
- What different methods can be used for entering and managing master schedule orders, and how repetitive schedules may be used for this
- When and how multi-level master scheduling is used and how this differs from single-level master scheduling
- Why multi-level master scheduling is not recommended for more than two levels
- How components with structure code “O” and “P” consume forecast
- How production forecast is calculated and how it is handled by MRP
- What information is used by item resource planning

Material Requirements Planning (MRP)

MRP is a technique used to develop time-phased material plans based on the inventory, supply, demand, and product structures at a site. You should understand how the MRP process works, how to implement it, how to use it, and how it depends on and relates to activities in other modules.

You should know and understand the following

- Which four basic questions are answered by MRP
- What the meaning of time-phased MRP is
- How independent and dependent demand are defined and how they are different
- What the inputs, outputs, and sources of demand and supply for MRP are
- What calculation steps MRP uses; what gross requirements are and how MRP calculates them
- How MRP projects inventory balances, re-schedules receipts, creates planned orders, and generates action messages
- What the similarities, differences, and applications are for net change, regenerative, and selective MRP
- How material plans are processed for inventory, supply, and demand at multiple sites
- What the relationships are between MRP, DRP, CRP, and MPS
- How MRP uses order policies, order modifiers, and product structures
- How scrap and yield are used by MRP
- How and when time fences are used and how long they should be
- How long the planning horizon should be
- What action messages are generated by MRP and how they are used
- What pegging is and what information is available to support it
- What effect approving a planned order has

Capacity Requirements Planning (CRP)

CRP is a medium-range planning technique that schedules operations for planned orders, work orders, and repetitive schedules and determines capacity load (planned hours per person or machine). Load can be compared to available capacity to detect potential problems or delays.

You should know and understand the following

- How and when Recalculate Capacity Plan is used; what work order status to include
- How operations are scheduled for planned orders, work orders, and repetitive schedules; what routing is used
- What the effect of overlap and machines per operation is; how calendars are used
- How capacity and load are calculated and how they can be adjusted
- What cumulative load represents

Distribution Requirements Planning (DRP)

The primary use of DRP is to manage demand, supply, and transportation of materials from one site to another. Since the calculations and procedures are similar to MRP you should already be familiar with them; just know how they are different. You should understand the situations in which DRP can be used, and how it can provide solutions to material and distribution problems.

You should know and understand the following

- What the inputs, outputs, sources of demand, and sources of supply for DRP are
- How source networks are defined and used by DRP
- What steps DRP calculations go through, how they are similar to MRP and how they are different
- What methods can be used for managing intersite demand and supply
- How intersite requests, intersite demands, requisitions, and distribution orders interrelate
- What the implementation and operating considerations are when using DRP on multiple databases, and what options are available for communicating requests

Distribution



INTRODUCTION

This section of the study guide is designed to assist you in preparing for the Product Knowledge Specialization Exam on Distribution. The objective of this test is to ensure that you have a broad understanding of MFG/ PRO distribution functions and how they should be implemented and used.

This test includes all of the activities necessary to support distribution operations (inventory control, purchasing, and sales). Since all companies purchase materials and sell products, most of these functions are as applicable for manufacturing companies as they are for distributors.

Modules and Topics Covered

The test covers the content of each of the distribution modules plus related modules.

You should study the following

- Accounts Receivable
- Addresses/Taxes
- Available to Promise (ATP)
- Configured Products
- Distribution Requirements Planning
- Forecasting and Master Scheduling
- Inventory Control
- Invoices and Credit Management
- Items/Sites
- Manager Functions
- Multiple Database
- Physical Inventory
- Pricing
- Purchasing
- Sales Analysis
- Sales Orders/Invoices
- Sales Quotation
- Shipping

To pass the test, you need to understand implementation issues, how functions can and should be used, and how functions are integrated. You also need an understanding of how distribution functions are used with and affect other areas such as master scheduling and available-to-promise.

Test Topics

Modules have been subdivided into seven topics for you to study. These are:

- 1 System Foundations
- 2 Addresses/Taxes
- 3 Products and Pricing
- 4 Defining Configured Products
- 5 Inventory and Purchasing
- 6 Sales Orders and Invoicing
- 7 Distribution Requirements Planning

On the following pages, each of these topics is briefly described, followed by a list of what you should know and understand.

SYSTEM FOUNDATIONS

Important See Chapter 2, “System Foundations,” pages 24 through 25 for study-guide information on this test topic, which applies to all three test areas: Manufacturing, Distribution, and Finance.

ADDRESSES/TAXES

In order to use the system for order entry and invoicing, you must first load company, customer, and salesperson information. To do this, you will need to know what each data item is used for and what the implementation considerations are.

You should know and understand the following

- What the various types of addresses are and how they are stored and used
- What the alternative address coding schemes are and which methods work best
- How address codes and sort names are used for both searching and reporting
- How company addresses are used, including the special address codes that are supported
- How salesperson commissions are entered and what the reporting options are
- How the customer information is maintained (understand each field and how it is used)
- What tax methods are supported and how each is defined and used (this test covers all test types)
- How Global Tax Management allows you to record additional tax information on orders, quotes, and invoices and how this information can be viewed and edited
- How customer credit information is maintained and used on sales orders
- How trailer codes are set up and used
- How multiple ship-to addresses may be set up for one customer and what information can be maintained for each ship-to
- How Freight Rates can be set up and how they are used and updated on quotes and orders

PRODUCTS AND PRICING

Here, we focus on how products are defined for use in the Distribution modules. This includes product lines and items, as well as the definition of price lists (price tables and discount tables), volume discounts, customer items, and supplier items.

You should know and understand the following

- Why product lines are defined and how they are used for planning and reporting
- How items are set up; what information can and cannot be set up by site
- How to determine the item unit of measure
- What item status codes are and how they are used
- How prices and costs are maintained for items
- How analysis codes are used and maintained
- What options are available for setting up price lists; understand the difference between price tables and discount tables and how each is used; understand each field and how it is used
- How price lists are accessed by quotes and orders, and how they affect default prices, discounts, and net prices
- What is meant by the term “Best Pricing” and how it is determined
- What price break categories are and how they are used
- What volume discount capabilities there are and their limitations
- How to set up a cross-reference for customer item numbers or catalog numbers
- How to set up a cross-reference for supplier item numbers; how they affect default costs on purchase orders
- How prices can be updated on orders and quotes; how prices can be fixed so no update can occur

DEFINING CONFIGURED PRODUCTS

These are products that are assembled to customer order. When a sales quote or order is entered, the operator may select a standard configuration or choose from related groups of options and accessories, called features. The configuration structure predefines what features are available and which are standard.

You should know and understand the following

- What products are best suited for configured product functions
- How configured products are defined (understand each field and how it is used)
- How feature groups can be defined and prompted for during order entry
- How mandatory and default options are defined; what the standard bill consists of
- How components with structure code <blank> are handled in a configuration and what configured items cost
- What the relationship is between routings and configured products; how this affects the cost
- What family items are and how they are useful with configuration structures
- How configured products may be planned using multilevel master scheduling
- What options are available for planning and forecasting configured items and the limitations
- What options are available for manufacturing and shipping configured products (understand the options in the Configured Products Control File and how they interrelate)

INVENTORY AND PURCHASING

This topic covers functions used to manage and acquire additional inventory and the effect that these functions have on planning, the general ledger, and other parts of the system.

Inventory Control

This section covers the day-to-day activities of inventory control that support distribution operations, including physical inventory. Particularly important are issues related to implementation, operating procedures, and integration with other modules. When reviewing these topics, try to relate them to sales and purchasing activities whenever possible.

You should know and understand the following

- What the best way to initialize inventory balances is
- How each inventory transaction works and when it is used
- Why cycle counting is used and what the advantages and disadvantages are relative to a physical inventory
- What steps are involved in performing a cycle count or physical inventory; how errors are handled and inventory tolerances used
- How inventory details (lot/serial, reference, grade, assay %, and expire date) are maintained and used
- What general and detail allocations are, how they are related, and how they are different
- How inventory allocations are controlled and monitored for both manufacturing orders and sales orders
- How control files affect inventory operations
- How inventory transaction history is maintained and used
- What general ledger transactions are created by inventory activities and when
- How inter-site and intra-site transactions are created and their general ledger effect

Purchasing

This topic covers the entire purchasing life cycle, including the integration between purchasing and other modules: Work Orders, MRP, Accounts Payable, and General Ledger.

You should know and understand the following

- How requisitions are related to MRP planned orders
- What options there are for multi-site purchasing; how centralized and decentralized purchasing is implemented; how multi-site purchase orders are printed by ship-to site
- What options are available for purchase approvals and how they are implemented
- How supplier information is used on purchase orders; what the default PO cost is
- How supplier items are used on purchase orders
- What the operating differences are between single and multiple line entry
- How costs and taxes are calculated
- How subcontract, non-inventory purchases, and drop shipments are processed
- In what situations blanket orders, purchase orders, or supplier schedules should be used
- What the philosophy and application for supplier schedules is
- How purchase orders and supplier schedules differ
- How supplier schedules are managed and what the net, discrete, and cumulative quantity represents
- How required receipt schedules, shipping schedules, and planning schedules relate to each other and to MRP
- How receipts, returns, and corrections are processed
- How control file settings affect purchasing operations
- How current and average costs are updated by purchasing
- How receivers are created and for what purpose
- How MFG/PRO supports PO Fiscal Receipts; how and when they should be used
- What general ledger transactions result from purchasing activities, and how they differ for multisite purchases
- How PO Container and PO Shipper Maintenance are used in relation to purchase orders and the advantages and disadvantages of using them instead of PO Receipts

SALES ORDERS AND INVOICING

Here we are concerned with the management of the entire sales process, including sales quotations, orders, inventory allocation and order promising, invoicing, and sales reporting (analysis). It is vital to understand not only the functions within each individual module, but also how these modules relate to each other and to other modules. You are expected to understand how sales orders and invoicing activities are related to credit management, accounts receivable, general ledger, commissions, and sales history.

Sales Quotations

Sales quotations (quotes) are used to record delivery, pricing, or special product configuration offers that have been made to a customer. You should understand where and when sales quotations should be used and what types of information they can provide.

You should know and understand the following

- What procedures are followed for managing sales quotes
- How sales quotes relate to sales orders, how they are similar, and how they are different
- In general, what types of data are accessed from the customer sold-to, bill-to, and ship-to addresses
- When and how recurring quotes are used; how they differ from non-recurring quotes
- What you must do in order to create a sales order from a quote; what value each of the sales order fields will be set to (in particular, order quantity, due date, confirmed flag, and action status)
- How expired quotes are handled

Sales Orders and Customer Schedules

This section covers the entire order entry process for both sales orders and customer schedules. You should understand how each of the sales functions works, as well as what effect each has on other modules: Work Orders, Forecasting, and MRP.

You should know and understand the following

- What each of the steps in the sales order life cycle is, how and when each is used, and which are optional
- In general, what types of data are accessed from the customer sold-to, bill-to, and ship-to addresses
- How sales orders are maintained for inventory, non-inventory, configured, and family items; how prices, discounts, costs, margins, and taxes are determined on each
- How Pricing What-if inquiry works
- What a sales order bill is and how this relates to the work order bill for a configured product
- How sales orders handle customer items and alternate units of measure
- What options there are for multi-site sales order processing
- What the operating differences are between single and multiple line entry
- What customer credit information is maintained; which customer's credit is checked—the sold-to, bill-to, or ship-to—and when
- In what ways credit status affects sales order processing
- How available-to-promise can be taken from the Master Schedule Summary and used for order promising and determining due dates
- How available-to-promise quantities are calculated
- How sales orders and customer schedules differ
- What the philosophy and application is for customer schedules
- How customer schedules are managed, and what the net, discrete, and cumulative quantity represents
- How shipping schedules, planning schedules, and required ship schedules relate to each other and to MRP
- How confirmed and unconfirmed sales orders affect MRP and forecasting
- How forecast consumption works and why it is important
- How control file settings affect sales order processing and forecast consumption

Shipping and Invoicing

Here, we cover all of the activities used to allocate available inventory to sales orders, generate packing lists, and ship and invoice product. Once again, you should focus not only on the sales functions, but also on how they interrelate with other modules: Inventory, Sales Analysis, Accounts Receivable, and General Ledger.

You should know and understand the following

- What the recommended procedural controls are for allocations, shipping, and invoicing
- How general and detail allocations apply to sales order activities
- What methods and controls are available for allocating inventory to sales orders
- How on-hand inventory and available inventory differ
- How packing slips are used; why the Print Only Lines To Pick option can be used to control the shipping process
- How shipments, returns, credits, and corrections are processed; how this is different for customer schedules
- How Pre-shippers and Shippers are used
- How partial shipments and drop shipments are processed
- How containers are used for shipping
- How Bills of Lading and Master Bills of Lading are produced and used
- At what point general ledger transactions are created for cost of goods sold
- How information flows from sales order to pending invoice, from pending invoice to invoice, and from invoice to invoice history
- How and when Pending Invoice Maintenance is used
- How shipments of configured items update work orders and what transactions occur when work orders are used and when they are not used
- How Nota Fiscal shipping documents are used and created
- How the fields Ready to Invoice and Invoiced are used to control the printing and posting of invoices
- What general ledger transactions result from shipping and invoicing activities, and how they differ for multisite sales
- What sales backlog is and how it is managed
- What procedures should be followed at period-end and what effective dates should be used

Sales Analysis and Commissions

Another important aspect of distribution is the recording and analysis of actual sales activity. Inventory transaction history maintains complete, detailed sales history, and Sales Analysis maintains historical sales information in summary form. This can be used to project future sales, monitor key customers and products, and review salesperson results. Commission reports are found in the Addresses module.

You should know and understand the following

- At what point in the sales order life cycle sales information is available for reporting
- What date it is based on (the shipment, invoice, or invoice post date)
- What the options and constraints for summarizing sales information are
- What salesperson performance reports are available
- How commissions are calculated, recognized, and reported; how commission splits are processed
- How Historical Sales Analysis data can be used with Forecast Simulation and the effect of using the delete/archive functionality

DISTRIBUTION REQUIREMENTS PLANNING (DRP)

The primary use of DRP is to manage demand, supply, and transportation of materials from one site to another. When customer service depends on timely deliveries from other sites, DRP functions can be quite important. You should understand the situations when DRP can be used and how it can provide solutions to material and distribution problems.

You should know and understand the following

- What capabilities DRP provides and what issues it addresses
- What three basic questions need to be answered when planning material demand and supply between sites
- What the inputs, outputs, sources of demand, and sources of supply for DRP are
- How source networks are defined and used by DRP
- What source networks, transport modes, transportation networks, and shipping schedules are and how they interrelate
- What steps DRP calculations go through
- What inquiries are available for reviewing inventory balances at other sites and inventory in transit between sites

CHAPTER 4

Finance



INTRODUCTION

This section of the study guide is designed to assist you in preparing for the QAD Product Knowledge Specialization Exam on Finance. The objective of this test is to ensure that you have a broad understanding of MFG/PRO financial management functions and how they should be implemented and used.

Modules and Topics Covered

This test includes all of the Financial modules, functions, and activities that pertain to general accounting as well as financial planning, reporting, and control. The test also covers other modules needed to implement the system.

You should study the following

- Accounts Payable
- Accounts Receivable
- Addresses/Taxes
- Commission
- Currency dependent rounding
- General Ledger
- GL Transactions (Physical Inventory, Purchasing, Sales Orders, Invoices, Inventory Control)
- Manager Functions
- Multiple Currency
- Product Costing (Product Structures, Formulas, Routings, Work Centers, Process, Items, Sites)
- Product Line/Account (product lines)
- Salespersons (commission)

You should understand how to implement and use each of these modules in companies that are made up of single or multiple entities, operate with one or more currencies, in one or more countries, on one or more databases. This test will cover all aspects of MFG/PRO financial management including budgeting, product costing, and financial control functions.

Test Topics

Modules have been subdivided into four major topics for you to study. These are:

- 1 System Foundations
- 2 Financial System Implementation
- 3 General Accounting
- 4 General Ledger

SYSTEM FOUNDATIONS

Important See Chapter 2, “System Foundations,” pages 24 through 25 for study-guide information on this test topic, which applies to all three test areas: Manufacturing, Distribution, and Finance.

FINANCIAL SYSTEM IMPLEMENTATION

This area of the test focuses on setting up financial management functionality in the system.

You should know and understand the following

- How currency exchange rates are maintained and where they are used
- What the different types of accounts are and how each is used (asset, liability, income, expense, statistical, and memo accounts)
- What accounts may be maintained in terms of a non-base currency and how they are valued
- How rounding methods are maintained and where they are used
- How and when to run the Currency Dependent Rounding Conversion
- In general, where information can be reported in base and non-base currencies
- What realized and unrealized gain/loss represent, and when and how they are calculated
- When spot rates can be entered; what effect flagging a rate as “fixed” has
- What bank codes must be defined and how they are used
- How and where each of the values in System/Account Control are used
- How credit terms are set up and used
- What the various types of addresses are and how they are stored and used
- What the alternative address coding schemes are and which methods work best
- How customer information is maintained (in particular, credit information, salesperson, and currency)
- Which customer’s credit is checked—the sold-to, bill-to, or ship-to—and which addresses are used in Accounts Receivable
- How supplier information is maintained (in particular, credit information, prepayment balance, and remit-to)
- How salesperson commissions are entered and what the reporting options are
- How tax rates and tax exemptions are set up, calculated, and reported in all modules
- Which numbering and coding schemes make the most of MFG/PRO functionality

Product Definition and Costing

Here we focus on how products are defined for use in the manufacturing modules. This includes product structures, formulas, routings, and processes. The operational details are covered in the Manufacturing test, but since they also determine the standard cost of a product, you should understand what each of the cost components is and how costs are calculated. This test focuses on your understanding of cost calculations and the use of the Cost Management module.

You should know and understand the following

- Why product lines are defined and where product line GL accounts are used
- How item prices and costs are set up
- What costs can be maintained without using the Cost Management module
- How costs are maintained for different kinds of items (purchased, manufactured, routable, phantom, or configured)
- What “this level” and “lower level” costs are
- What item information can and cannot be set up by site
- What item GL cost is and how it is used
- When and how to do cost roll-ups
- How product structures and formulas are set up and which fields affect product cost
- How BOM codes can be used to set up product structures or formulas used only for costing purposes
- How departments, work centers, routings, and processes are set up, and which fields affect product cost and cost accounting
- How the relationship between items, structures, and routings is defined, and which is used for costing
- How the system stores inventory information: in aggregate and in detail
- When inventory balances can be negative and how that is handled
- How inventory is valued; what happens to inventory value when GL cost changes; what types of inventory are revalued; and what the GL transaction is
- In Cost Management, what types of cost sets can be maintained
- How standard, average, current, and simulation costs differ and how they are used
- In what way item costs, sites, and cost sets are related; what defaults apply
- What steps are involved in cost simulation
- What cost elements and cost categories represent; how they are created and used

- Why cost planning is useful; how cost plans appear on MRP and MPS summaries; and what must be done to activate planned changes

GENERAL ACCOUNTING

Here we concentrate on the functions that support day-to-day accounting activities. When studying these, think about how they can be used in both single and multi-company, multi-currency situations.

Accounts Receivable (AR)

This area of the test covers managing customer credit, invoicing sales and posting invoices, processing credits and returns, calculating finance charges, and recording customer payments. You should understand the relationship between AR and Sales Order/Invoicing functions.

You should know and understand the following

- What the Invoice Post does
- How the shipping/invoicing process affects the number of invoices that are posted to AR
- What the recommended method is for handling returns
- What the recommended method is for handling corrections to quantity, price, and commissions
- How and when debit/credit memos are recorded
- What “contested” amounts are and what options you have to exclude them from reports
- How due and discount dates are calculated
- Where expected pay date is used and where it can be updated
- When taxes are calculated automatically and when they need to be entered manually
- How exchange tolerance is used
- How to check credit; what dunning letters are
- How finance charges are calculated
- What procedures should be followed for processing and applying payments; how prepayments or overpayments are handled
- How bad checks and bad debt write-off should be recorded
- In what situations drafts can be used
- What steps are involved in recording and approving a draft; how each step affects the customer balance and what GL entries are created
- What reports (audit trails) are available and in what situations each should be used

- What general ledger transactions are created by invoicing and accounts receivable; how they differ for multi-entity transactions
- What procedures should be followed at period-end

Accounts Payable (AP)

This area covers all accounts payable functions, including the relationship between Accounts Payable and Purchasing.

You should know and understand the following

- What the role of unconfirmed vouchers is
- What the recommended voucher registration procedure is; what GL entries are generated and when
- What the process of three-way matching is
- What AP rate and usage variances represent and when they are calculated
- When multiple vouchers are processed for one receiver and at what point variances are calculated
- How vouchers are entered for purchase receipts and miscellaneous payables
- When a voucher is automatically placed on hold and for what amount; what the effect of entering a hold is
- Why the voucher date should be consistent
- How due and discount dates are calculated
- Where expected pay date is used
- What taxes are calculated and when
- How prepayments are recorded and applied; how they appear on the supplier and on the purchase order
- How exchange tolerance is used
- What the recommended procedural controls are for selecting vouchers for payment and printing checks
- What hash totals are and where they appear
- What payment options there are (look up Check Forms and Payment Specification)
- In what situations the Payment in Process account applies and how it is used
- What the effect of a void check is

- Why bank reconciliation is required
- What general ledger transactions are created by each of the accounts payable functions; how they differ for multi-entity payables
- How fluctuations in exchange rates are accounted for (gain/loss, price variance)
- What reports (audit trails) are available and in what situations each should be used
- What procedures should be followed at period-end

GENERAL LEDGER

This topic covers general ledger functions and their integration with other modules. It also includes the procedural aspects of period-end and year-end processing, along with budgeting, financial reporting, and consolidations.

General Ledger Transactions

Here, we look at how to use MFG/PRO functions to record accounting activity and make adjustments and corrections in a single and multiple entity, multiple currency environment.

You should know and understand the following

- What the general flow of transaction activity is and how it is controlled
- How to enter a general ledger transaction; when amounts should be entered as negative
- When balanced entities are needed and what the implications are
- In what situations reversing transactions should be used and what they do (know some examples)
- How effective dates are used to record future activity
- How recurring transactions are set up using Transaction Copy
- At what point GL transactions are posted
- What capabilities exist to review posted and unposted activity
- How changes to transactions generated in other modules can be prevented
- What the recommended period-end and year-end procedures are
- At what point revaluation of non-base currency accounts takes place and what the result is; why there is an extra revaluation function just for imported transactions
- How and when retained earnings are calculated and posted
- When retroactive transactions are used
- What Transaction Consolidation does and when it should be used

Activity from Other MFG/PRO Modules

You can get General Ledger journal transactions from other MFG/PRO modules. You should understand where these transactions are created and when, and what accounts they use. When calculations are involved (as with variances), you should understand the calculation. You should also know how to investigate the sources of these transactions in order to follow up on errors or make corrections and adjustments.

You should know and understand what GL transactions are created by the following

- Sales order shipments and returns
- Posting invoices
- Purchase receipts and returns
- Purchase price and exchange variance
- Unplanned inventory transactions
- Cycle count and physical inventory updates
- Changes to standard and average costs

You should also know and understand the following

- What account numbers and amounts are used in each of the above transactions
- What can cause unbalanced transactions and how they should be handled
- How transaction reference number and type are assigned and what they signify
- How to research GL transactions based on the transaction reference, type, and description information
- How posted transactions can be researched using the GL drill-down inquiry; what “Document” identifies on type IC, AR, SO, and AP transactions
- What financial control points exist in other modules (for example, exchange tolerances)
- What period-end and year-end procedures should be used in each of the modules
- What perpetual and periodic inventory methods are and how to implement each
- How to prevent or delete GL transactions

Financial Reporting

For this section, you should be familiar with the reports that are available in MFG/PRO and how they are used. In addition, you should understand how custom reports may be developed in the General Ledger module and how budgets are entered and calculated for use during reporting.

You should know and understand the following

- What the various methods for entering budgets are
- At what level of detail budgets can be maintained
- When and why the Budget Calculation function is required
- Why memo accounts might be useful for storing base amounts for budgets
- How projects and cost centers may be used for detailed activity reporting
- Where project codes are used and how they can be validated
- What standard financial reports and report options are available; how these may dictate what coding schemes to use for entities and accounts
- When each of the report selections, such as “Level” and “Summarize Cost Centers,” would be used
- How and when year-to-date profit and loss is calculated
- What steps are involved in developing a custom report in General Ledger; what the capabilities and limitations are

Consolidated Reporting

You should be aware that MFG/PRO supports the consolidation of financial activity for multiple entities using the MFG/PRO General Ledger module. Within a database, each entity must use the same chart of accounts and base currency.

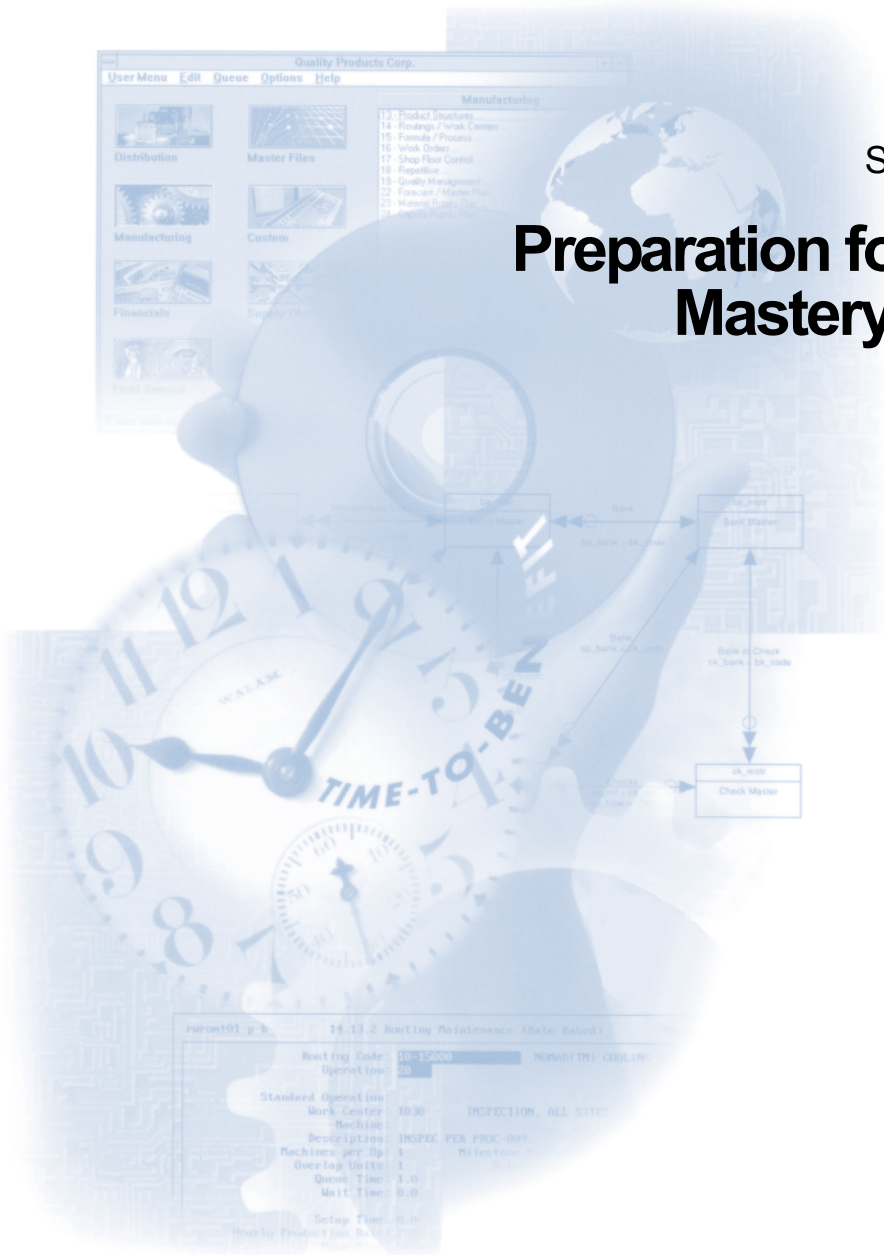
You should know and understand the following

- What the consolidation process entails and how it is controlled
- How to set up account cross-references for transaction import/export
- How to handle accounts held in non-base currency at another entity and what options there are
- What capabilities exist to import transactions from an entity operating in another currency
- At what point account number and currency translation takes place
- What rates may be used for currency translation and how these are entered

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- What the Transaction Export and Import functions create
- What balancing entry is created when importing journal entries from entities held in another currency and what options there are regarding where it is posted
- When and why the Imported Transaction Revaluation is required

Preparation for the Mastery Test



OVERVIEW

While the Product Knowledge Specialization Exams focus on the core functionality in MFG/PRO, the Mastery Tests cover specific topics that are supplementary to the PKS Exams. Since the Mastery Tests are supplementary, you must pass the appropriate PKS Exam(s) before you can take the Mastery Test.

The current Mastery Tests focus on new functionality introduced in MFG/PRO eB2. There are three different Mastery Tests that cover the new functionality in Manufacturing, Distribution, and Finance.

Mastery Tests generally do not require the same depth of knowledge that the PKS Exams do. The Mastery Tests are designed to test your understanding of the new functionality—what it is used for, how to set it up, and how to use it to solve business problems—but they do not require extensive hands-on experience implementing or using the functionality, as do the PKS Exams.

ABOUT THE TEST

Test Development

The test questions used in the Mastery Tests are primarily based on subject matter covered in the online courses on the QAD Learning Portal (<http://learningportal.qad.com>). Much of the content is also covered in the QAD Release Bulletin and User Guides. Test validity, time allocation, and grading methods have been carefully checked against representative sample groups.

Basic Information on Registration and Test Format

Schedule and Registration

- The Mastery Tests are offered on a regular basis at each of the QAD regional offices. A current schedule may be accessed on the QAD Learning Portal (<http://learningportal.qad.com>). You may also contact your regional QAD proctor for specific schedule information.
- You may pre-register for multiple tests for the test session at the proctor's discretion.
- If you qualify to participate in the certification program, please register online on the QAD Learning Portal (<http://learningportal.qad.com>). Applications must be received two weeks prior to the test date. Some centers offer morning and afternoon sessions; be sure to indicate your preference.
- You will be expected to show a photo ID (passport, driver's license) with a signature for admittance to the test site
- Test participants who are not fluent in English should indicate this on the registration form. Contact your regional proctor to find out about extra time to complete the exam.
- Be sure to allow plenty of time to arrive at the test site. Once the doors are closed and the test session begins, no one will be permitted to enter.
- Before registering for any certification test, you should review the outline in this guide, and should know the modules, test topics, and key terminology very well

- Regional proctors can assist with any questions you may have. However, should you have questions regarding the certification process, contact the PKS Administrator by email at pkstest@qad.com.
- Participation in the QAD Certification Program is at the discretion of QAD

Fee

- The fee per test is \$100 USD
- The registration fee must be paid prior to testing and may be paid by check, credit card, or purchase order

Cancellation Policy

- The fee is fully refundable if a cancellation notice is received at least two weeks prior to the test
- There will be a 50% service charge for cancellation notices that are received less than two weeks prior to the test
- There will be no refund if a cancellation notice is not received prior to the test date (a “no show” situation)

Time

- Participants are given 1 hour for each Mastery Test
- If you have time remaining, you may retake the test if you have not passed it on the first attempt
- Participants who have an approved *Request for Extra Time* form (not fluent in English) have 1.5 hours to complete the test

Format

- All test questions are in English
- The Mastery Tests are delivered online at a QAD facility
- Each test consists of 25 multiple choice and True/False questions
- Each test is based on a specified number of questions randomly selected from multiple “pools” of questions on the test topics. This is done automatically and is not controlled by the proctor. Each time a test is delivered, a new test is generated. The order of the questions and the order of the options are also randomized so that each participant receives a unique test each time they take a test.
- You will not have access to an MFG/PRO system or database during the test and cannot use any supplementary material

- Upon successfully completing a Mastery Test, you must notify the session proctor BEFORE submitting your results so that the proctor can confirm your results. If you do not notify the proctor, QAD will accept no responsibility if later there is question about the results.

Results

- Test results indicating Pass/No Pass and percent correct are received online upon completion of the test. No feedback is given on which questions were answered correctly.

Passing Score

- A minimum of 80% of the questions on the Mastery Test must be answered correctly in order to pass.
- All test scores are strictly confidential

PREPARATION FOR THE MASTERY TESTS

Here are some suggestions to help you prepare for the Mastery Tests.

Test-Taking Hints

Most participants generally have enough time to take a mastery test multiple times, if necessary, during the testing period, so you are encouraged to take your time in answering the questions. You will be able to move forward and back through the list of questions as much as you wish before you submit your results. Answer questions as you go along. There is no special penalty for incorrect answers, so it is in your interest to guess if you do not know the answer; in fact, you are required to answer all of the questions before you can submit your answers to ensure that you have the best chance possible to pass. Prior to submitting your answers for grading, double-check your answers and *notify the test proctor before submitting your answers.*

Recommended Study

It is highly recommended that you complete QAD's online courses prior to taking the QAD Mastery Test. You are encouraged to go through these courses as many times as necessary to help you understand the content. The online courses are on the Learning Portal at <http://learningportal.qad.com>. You must have a valid web account to access these online courses. Other reference materials that will be helpful include QAD User Guides and Release Bulletins (also see Recommended Study on page 17 of this study guide). Following are topics in each discipline covered on the Mastery Tests.

Manufacturing

- Flow Scheduling
- Kanban Management
- Work Order Close and Receipt Dates
- Work Order Control by Site

Distribution

- Available-to-Promise Enforcement

- Container and Line Charges
- Customer Consigned Inventory
- Distribution Orders
- PO Site and Quantity Change (Blanket Order Enhancements)
- Reserved Locations
- Shipment Performance
- Supplier Consigned Inventory

Finance

- Intercompany Accounting
- Linked-Site Costing
- Logistics Accounting
- Purchase and Work Order Accounting by Site