



# **QS-9000**

## **ANSWER BOOK**

**101 Questions & Answers  
About the Automotive  
Quality System Standard**

**ROB KANTNER**

**WILEY QUALITY MANAGEMENT**

# QS-9000

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Automotive Quality System Standard

ROB KANTNER



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# Acknowledgments

Most of what I know about QS-9000 and ISO 9000 I learned not from books or classes, but on shop floors and in the offices of the many fine companies run by my clients, present and past. I am grateful to the following people, as well as all the others who have taught me so much.

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R. K.

# Introduction

Among suppliers to the Big 3 auto companies, there is a tradition of . . . how shall I put this . . . skepticism.

As the Big 3 and other major OEMs strive to cut costs and improve quality and efficiency, they have steadily increased pressure of all kinds on their suppliers. Each new initiative from the automotive giants generates responses that tend to be, to say the least, guarded. “What are they up to now?” some suppliers wonder.

QS-9000, the “new,” “unified” automotive quality system standard, is just such an initiative. Like most business initiatives, it has caused some confusion, anxiety, and no small amount of controversy.

But there is a method to the QS-9000 “madness.” That method is the underlying structure of the ISO 9000 quality system process. Suppliers may feel they are being unduly pressured by the Big 3, and it is not my place to comment on that. But what I do know is that, when it comes to QS-9000, the Big 3 are on the right track.

QS-9000 can help automotive suppliers improve their performance—if they implement it properly.

QS-9000 is partially made up of automotive-related quality methods and sub-systems that have been in use for years. And, it’s partially drawn from the international ISO 9001 standard, first published in 1987 (itself, the latest generation in a long evolution of quality system standards). QS-9000 is already the requirement for third-party audits and registration for a large portion of the supply chain.

Nothing new individually. But taken together, QS-9000 is very new to the industry. That is the cause of the hesitation, reluctance, and skepticism. “Who are they to tell us what to do?” many suppliers cry. “Do they have the right to tell us how to run our business?”

Well, yes, they do. But only if you acknowledge that the “they” here are your customers—and if you do not keep your customers satisfied, they will go elsewhere.

For many suppliers who want to keep their customers, QS-9000 is the new “rule of the road.” Deadlines have been drawn in the sand, and for many suppliers, time is growing short. They are a-bubble with questions.

- What is QS-9000?
- Does it apply to us?
- How do we implement it?
- What is “registration” all about?
- What can QS-9000 do for us?

The *QS-9000 Answer Book* is an effort to answer these questions. It is meant to be a quick, easy to digest, guide to the basics of the QS-9000 process. It is aimed at management and supervisory people who may, up until now, have had little if any exposure to the “quality” disciplines. For that reason, I have tried to avoid using technical jargon and “quality-speak.”

Using my years of experience implementing QS-9000 and ISO 9000 quality systems for client companies all over the country, I have compiled a guide that is handy and practical. Much of the book focuses on achieving “registration” to QS-9000, since that is the goal of many companies today. But I see “registration” as an interim goal. I believe that a company’s ultimate goal is to design and manage a system that continuously improves the performance of the company. A QS-9000 system can do that, if you let it. This book is intended to show you how.

Please keep in mind that QS-9000 is very new. It was first published in August, 1994, and was slightly revised in February, 1995. As this book goes to press, only a relative handful (fewer than 500) companies have been all the way through the implementation and registration process. For this reason, it is still unclear as to how many of the requirements need to be interpreted and implemented in response to specific business needs.

This is my way of cautioning you that you must not regard this book as the ultimate authority on QS-9000. Your company and situation are unique. Address your specific technical questions to your registration body or qualified consultant.

# How to Use This Book

The 101 questions and answers in this book address the essential issues related to QS-9000: the requirements, registration, implementation, and more.

Requirements are clearly identified as such. These must be adhered to without exception. "Guidance" is clearly identified as such. Much of the guidance information is drawn from my own experience in helping companies implement QS-9000 and ISO 9000 systems. Other guidance is drawn from published ISO 9000 guidance documents, which are just as relevant to QS-9000.

Each question has a "capsule answer." This provides just a kernel of information and is meant to be a browsing aid and a memory jogger. In addition to explanations, technical requirements, and technical guidelines, many answers also include audit-related information, as well as details on documents that are required.

Although the questions and answers follow a logical sequence, it is not necessary to read the book that way. Each answer stands more or less on its own. Abundant cross-references let you flip from answer to answer so you can access the information you need in the way that suits you best.

Finally, the knowledge and experience in this book is updated every day, thanks to the kind help of clients, colleagues, and readers. If you have any suggestions or questions, feel free to contact me via the publisher or via my home page on the World Wide Web: <http://www.cris.com/~rob4334/iso.htm>.

As is the case with my earlier book, *The ISO 9000 Answer Book*, the *QS-9000 Answer Book* gives you fast, easy access to most of the information you need to know.

ROB KANTNER  
Wayne, Michigan

**CROSS-REFERENCE CHART:**  
**QS-9000 REQUIREMENTS AND THE RELEVANT QUESTIONS**

<b>Element</b>	<b>Title</b>	<b>Question</b>
4.1	Management Responsibility	22, 23, 24, 28, 31, 68, 75
4.2	Quality System	17, 30, 34, 35, 36, 49, 55, 74
4.3	Contract Review	40
4.4	Design Control	45, 46, 47, 48, 50
4.5	Document and Data Control	34, 38, 49
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## PART ONE

# QS-9000 Overview

### I. What is QS-9000?

QS-9000 is a written set of rules (a "standard") published by major American car and truck companies as a joint venture. The rules state the practices that the sponsors—mainly, the Big 3 auto companies: Chrysler Corporation ("Chrysler"), Ford Motor Company ("Ford"), and General Motors Corporation ("GM")—expect their main suppliers to implement. The sponsors buy billions of dollars' worth of products and services from outside suppliers each year. Their customers' needs will be met more consistently if all their suppliers follow the same set of rules.

The Big 3 auto companies go beyond expecting their main suppliers to implement these practices; they *require* it. Any direct supplier of production materials, production or service parts, or certain specified services to a Big 3 company must implement systems that are consistent with QS-9000 rules (referred to as "requirements"). In most instances, prior registration is necessary (Question 5).

Because "meeting customer needs" is one of many definitions of quality performance, QS-9000 is often called a "quality system" or a "quality management system." But the complete set of rules goes beyond quality matters as they are generally understood. Very generally, the requirements can be categorized as:

#### CAPSULE ANSWER

QS-9000 is a set of "quality standard" requirements published by major car and truck manufacturers. By adhering to QS-9000, their direct suppliers of certain products and services become part of a commonly understood, independently verifiable quality management system.

- Requirements that help ensure that the supplier's output meets the auto company's specifications and announced product descriptions (popularly referred to as quality control).
- Requirements that ensure that the supplier's quality system is consistently implemented and verifiable. Has the supplier done exactly what was agreed to and would its delivered product or service stand up under an independent, objective audit?
- Requirements that support the continuous improvement of the supplier's ability to meet the auto company's needs. Competing companies cannot stand still; they must constantly strive to get better results from better methods.

Nothing in QS-9000 is new. Roughly 60 percent of the requirements are drawn, word for word, from the relevant International Organization for Standardization quality standard, issued in 1994: ISO 9001 (Question 2). The remaining 40 percent refer to quality-related methods and practices that have been in use in the automotive industry for years. QS-9000 is intended to *simplify* the rules for suppliers—to harmonize and consolidate the sometimes conflicting, sometimes redundant "quality programs" each of the sponsors has imposed on its suppliers. The Big 3 quality programs are:

- Chrysler: Pentastar.
- Ford: Qi.
- GM: Targets for Excellence.

QS-9000 is not a wholly successful harmonization. But it is a major improvement, and that alone makes it a radical and remarkable departure for the automotive industry and a source of consternation among the industry's suppliers.

The mandate on adhering to QS-9000 represents a fundamental change in the way the Big 3 relate to their suppliers. As customers, the Big 3 have always wanted verification (proof) that their suppliers were following their prescribed quality rules. In the past, they verified their prescriptions directly, usually with site visits, reports, and audits.

QS-9000 establishes a new system for verifying that suppliers are meeting the requirements. Independent, third-party registration firms (Question 21) conduct audits of suppliers, confirm compliance to the QS-9000 standard, and register the suppliers. And the process does not stop there. To stay registered, suppliers must undergo semiannual surveillance audits, also carried out by their registration body.