



## INTERNATIONAL CERTIFICATION SERVICES

### *Quality Management Systems for Automotive Sector QS 9000 & ISO / TS 16949*

Although the ISO 9000 Quality Standards have been welcomed by all industries in general, they are quite generic in nature. The Automotive Industry has realized that its requirements are much more stringent than the ISO 9000 standards. In June 1988, the Vice Presidents of Chrysler Corporation, Ford Motor Company & General Motor Corporation and the automotive division of the American society for quality control chartered manuals, reporting formats & technical nomenclature. Previously each company stipulated their own requirements for supplier quality systems and corresponding assessment documentation. In December 1990 the Task Force was directed to harmonize the fundamental supplier quality system manuals and assessment tools. As a result in Aug 1994 the Task Force developed and released Quality System Requirements - QS 9000, which is a set of common requirements for all automotive suppliers, based on the ISO 9000 series of Quality Management System Standards.

QS 9000 applies to all internal and external suppliers of raw materials, components, sub-assemblies and service parts to Chrysler, Ford, General Motors, a number of Heavy Truck Manufacturers, and their subscribing companies. All requirements of QS 9000 are to be incorporated in to the supplier Quality Systems, described in supplier quality documentation, and verified through third party registration. QS 9000 registration is not just a onetime process. Companies, which achieve registration, are continuously monitored by the registrars through periodic audits, usually every six months.

QS 9000 aims to provide a common basis for prevention of defects, reduction of variation, elimination of waste and continuous improvement of Quality. QS 9000 Quality Systems requirements consist of three distinct sections.

#### Architecture of QS-9000.

##### Section 1 Core Requirements:

This section includes all twenty elements of ISO - 9001: 1994 Section 4. This section may be considered to be an elaboration of each element of ISO 9001: 1994 Section 4 specifically fits to the needs of the Automotive and Truck Industry.

##### Section 2 Sector Specific Requirements:

This section includes additional requirements beyond the scope of ISO 9001: 1994 Section 4 but common to the Automotive and Truck Industry.



These requirements include Production Part Approval Process, Continuous Improvement, and Manufacturing Capabilities. These programs are already in place within the Automotive and Truck Industry.

### Section 3 Customer Specific Requirements:

This section includes the unique specific requirements for each individual customer such as General Motor, Ford, and Chrysler, and Truck Manufacturers such as Mack Trucks, Navistar International, Freight Liner, Volvo GM Heavy Trucks and Peter Built Trucks. Each supplier must also discuss with its customer the unique specific requirements applicable to any existing or future contracts. The ISO 9001 or ISO 9002 based requirements and the sectors specific requirements are normally examined by a third party audit during the registration process, while the customers specific requirements are usually audited by the customer through a second party audit the guidelines for such audits as developed by the supplier and quality requirements Task Force are presented in a document entitled Quality System Assessment.

#### Opportunity With QS-9000 Registration.

By registering to the QS-9000 quality system requirements using a third-party registrar, a company can earn recognition as a quality producer of automotive components and service parts and gain tremendous competitive advantages. One advantage is that a company can increase its business significantly in the world marketplace.

Once implemented, QS-9000 may save substantial resources previously devoted to repetitive inspection and quality control. Once the system is under control, it is likely to produce good quality products at substantial cost savings. QS-9000 also reinforces the customer-supplier relationship as a team concept and can strengthen long-term relationships, profit potential, growth, and prosperity.

#### ISO / TS 16949

ISO / TS 16949 is an ISO Technical Specification which aligns existing Automotive Quality System Requirements within the Global Automotive Industry.

The ISO / TS 16949 was jointly developed by the IATF members and submitted to the International Organization for Standardization (ISO) for approval and publication. The document is a common Automotive Quality System Requirements Catalogue based on ISO 9001: 1994, AVSQ (Italian), EAQF (French), QS 9000 (USA) and VDA 6.1 (German) Automotive catalogues. This document coupled with customer specific requirements defines quality system requirements for use in the automotive supply chain.

The revision in this documents include adoption of the process approach requirements of ISO 9001: 2000, and the contribution of other participants including the Japanese Automobile Manufacturers Association, Inc. (JAMA) and members of ISO / TC 176.

TS 16949 along with customer specific requirements will satisfy the following automotive quality system standards.

- QS 9000 (American)
- VDA 6.1 (German)
- AVSQ (Italian) and
- EAQF (French)

Ford, GM (Including Opel Vauxhall), Deimler Chrysler, BMW, Fiat, PSA Peugeot Citroen, Renault SA, Volkswagen ALL SUPPORT ISO / TS 16949.

Organizations that provide automotive products to International Markets will have the option of maintaining one quality system registration to meet multiple customer quality requirements. In addition to avoiding multiple certification audits, ISO / TS 16949 has been designed to improve product and process quality while increasing efficiency and reducing variation.