



Red Text represents additions to ISO 9001:2008

ISO 9001:2008	ISO/TS 16949:2009
	Introduction
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	0.2 Process approach
	0.3 Relationship with ISO 9004
	0.4 Compatibility with other management systems
	0.5 Goal of this Technical Specification
1. SCOPE	1 Scope
1.1 General	1.1 General
1.2 Application	1.2 Application
2 Normative references	2 Normative references
ISO 9000:2005	ISO 9000:2005
3 Terms and definitions	3 Terms and definitions
	3.1 Terms and definitions for the automotive industry
	3.1.1 Control Plan
	3.1.2 Design Responsible Organization
	3.1.3 Error Proofing
	3.1.4 Laboratory
	3.1.5 Laboratory Scope
	3.1.6 Manufacturing
	3.1.7 Predictive Maintenance
	3.1.8 Preventive Maintenance
	3.1.9 Premium Freight
	3.1.10 Remote Location
	3.1.11 Site
	3.1.12 Special Characteristic
4 Quality management system	4 Quality management system
4.1 General requirements	4.1 General requirements
	4.1.1 General requirements — Supplemental
4.2 Documentation requirements	4.2 Documentation requirements
4.2.1 General	4.2.1 General
4.2.2 Quality Manual	4.2.2 Quality manual
4.2.3 Control of Documents	4.2.3 Control of documents
	4.2.3.1 Engineering specifications
4.2.4 Control of Records	4.2.4 Control of records
	4.2.4.1 Records retention
5 MANAGEMENT RESPONSIBILITY	5 Management responsibility
5.1 Management commitment	5.1 Management commitment
	5.1.1 Process efficiency
5.2 Customer focus	5.2 Customer focus
5.3 Quality policy	5.3 Quality policy
5.4 Planning	5.4 Planning
5.4.1 Quality Objectives	5.4.1 Quality objectives
	5.4.1.1 Quality objectives — Supplemental
5.4.2 Quality Management System Planning	5.4.2 Quality management system planning
5.5 Responsibility, authority and communication	5.5 Responsibility, authority and communication
5.5.1 Responsibility and Authority	5.5.1 Responsibility and authority
	5.5.1.1 Responsibility for quality
5.5.2 Management Representative	5.5.2 Management representative
	5.5.2.1 Customer representative
5.5.3 Internal Communication	5.5.3 Internal communication
5.6 Management Review	5.6 Management review
5.6.1 General	5.6.1 General
	5.6.1.1 Quality management system performance
5.6.2 Review Input	5.6.2 Review input
	5.6.2.1 Review input — Supplemental
5.6.3 Review Output	5.6.3 Review output
6 Resource management	6 Resource management
6.1 Provision of resources	6.1 Provision of resources
6.2 Human resources	6.2 Human resources
6.2.1 General	6.2.1 General
6.2.2 Competence, Training and Awareness	6.2.2 Competence, training and awareness
	6.2.2.1 Product design skills
	6.2.2.2 Training
	6.2.2.3 Training on the job
	6.2.2.4 Employee motivation and empowerment
6.3 Infrastructure	6.3 Infrastructure
	6.3.1 Plant, facility and equipment planning
	6.3.2 Contingency plans
6.4 Work environment	6.4 Work environment
	6.4.1 Personnel safety to achieve conformity to product requirements
	6.4.2 Cleanliness of premises



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7 Product realization	7 Product realization
7.1 Planning of product realization	7.1 Planning of product realization
	7.1.1 Planning of product realization — Supplemental
	7.1.2 Acceptance criteria
	7.1.3 Confidentiality
	7.1.4 Change control
7.2 Customer-related processes	7.2 Customer-related processes
7.2.1 Determination of requirements related to the product	7.2.1 Determination of requirements related to the product
7.2.2 Review of requirements related to the product	7.2.1.1 Customer-designated special characteristics
	7.2.2 Review of requirements related to the product
	7.2.2.1 Review of requirements related to the product — Supplemental
	7.2.2.2 Organization manufacturing feasibility
7.2.3 Customer Communication	7.2.3 Customer communication
	7.2.3.1 Customer communication — Supplemental
7.3 Design and development	7.3 Design and development
7.3.1 Design and Development Planning	7.3.1 Design and development planning
	7.3.1.1 Multidisciplinary approach
7.3.2 Design and Development Inputs	7.3.2 Design and development inputs
	7.3.2.1 Product design input
	7.3.2.2 Manufacturing process design input
	7.3.2.3 Special characteristics
7.3.3 Design and Development Outputs	7.3.3 Design and development outputs
	7.3.3.1 Product design outputs — Supplemental
	7.3.3.2 Manufacturing process design output
7.3.4 Design and Development Review	7.3.4 Design and development review
	7.3.4.1 Monitoring
7.3.5 Design and Development Verification	7.3.5 Design and development verification
7.3.6 Design and Development Validation	7.3.6 Design and development validation
	7.3.6.1 Design and development validation — Supplemental
	7.3.6.2 Prototype program
	7.3.6.3 Product approval process
7.3.7 Control of Design and Development Changes	7.3.7 Control of design and development changes
7.4 Purchasing	7.4 Purchasing
7.4.1 Purchasing Process	7.4.1 Purchasing process
	7.4.1.1 Statutory and regulatory conformity
	7.4.1.2 Supplier quality management system development
	7.4.1.3 Customer-approved sources
7.4.2 Purchasing Information	7.4.2 Purchasing information
7.4.3 Verification of Purchased Product	7.4.3 Verification of purchased product
	7.4.3.1 Incoming product conformity to requirements
	7.4.3.2 Supplier monitoring
7.5 Production and service provision	7.5 Production and service provision
7.5.1 Control of Production and Service Provision	7.5.1 Control of production and service provision
	7.5.1.1 Control plan
	7.5.1.2 Work instructions
	7.5.1.3 Verification of job set-ups
	7.5.1.4 Preventive and predictive maintenance
	7.5.1.5 Management of production tooling
	7.5.1.6 Production scheduling
	7.5.1.7 Feedback of information from service
	7.5.1.8 Service agreement with customer
7.5.2 Validation of Processes for Production and Service Provision	7.5.2 Validation of processes for production and service provision
	7.5.2.1 Validation of processes for production and service provision — Supplemental
7.5.3 Identification and Traceability	7.5.3 Identification and traceability
	7.5.3.1 Identification and traceability — Supplemental
7.5.4 Customer Property	7.5.4 Customer property
	7.5.4.1 Customer-owned production tooling
7.5.5 Preservation of Product	7.5.5 Preservation of product
	7.5.5.1 Storage and inventory
7.6 Control of monitoring and measuring Equipment	7.6 Control of monitoring and measuring equipment
	7.6.1 Measurement system analysis
	7.6.2 Calibration/verification records
	7.6.3 Laboratory requirements
	7.6.3.1 Internal laboratory
	7.6.3.2 External laboratory



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8 Measurement, analysis and improvement	8 Measurement, analysis and improvement
8.1 General	8.1 General
	8.1.1 Identification of statistical tools
	8.1.2 Knowledge of basic statistical concepts
8.2 Monitoring and measurement	8.2 Monitoring and measurement
8.2.1 Customer Satisfaction	8.2.1 Customer satisfaction
	8.2.1.1 Customer satisfaction — Supplemental
8.2.2 Internal Audit	8.2.2 Internal audit
	8.2.2.1 Quality management system audit
	8.2.2.2 Manufacturing process audit
	8.2.2.3 Product audit
	8.2.2.4 Internal audit plans
	8.2.2.5 Internal auditor qualification
8.2.3 Monitoring and Measurement of Processes	8.2.3 Monitoring and measurement of processes
	8.2.3.1 Monitoring and measurement of manufacturing processes
8.2.4 Monitoring and Measurement of Product	8.2.4 Monitoring and measurement of product
	8.2.4.1 Layout inspection and functional testing
	8.2.4.2 Appearance items
8.3 Control of nonconforming product	8.3 Control of nonconforming product
	8.3.1 Control of nonconforming product — Supplemental
	8.3.2 Control of reworked product
	8.3.3 Customer information
	8.3.4 Customer waiver
8.4 Analysis of data	8.4 Analysis of data
	8.4.1 Analysis and use of data
8.5 Improvement	8.5 Improvement
8.5.1 Continual Improvement	8.5.1 Continual improvement
	8.5.1.1 Continual improvement of the organization
	8.5.1.2 Manufacturing process improvement
8.5.2 Corrective Action	8.5.2 Corrective action
	8.5.2.1 Problem solving
	8.5.2.2 Error-proofing
	8.5.2.3 Corrective action impact
	8.5.2.4 Rejected product test/analysis
8.5.3 Preventive Action	8.5.3 Preventive action
	Annex A (normative) Control plan
	A.1 Phases of the control plan
	A.2 Elements of the control plan