

ISO/TS 29001:2007-12 (E)

Petroleum, petrochemical and natural gas industries - Sector-specific quality management systems - Requirements for product and service supply organizations

Contents

Page

Foreword	vi
Introduction	viii
0.1 General	viii
0.2 Process approach	ix
0.3 Relationship with ISO 9004	x
0.4 Compatibility with other management systems	xi
0.5 Goal of this Technical Specification	xi
1 Scope	1
1.1 General	1
1.1.1 Field of Application -- Supplemental	1
1.2 Application	1
1.2.1 Application -- Supplemental	2
2 Normative references	2
3 Terms and definitions	2
3.1 Terms and definitions for the petroleum, petrochemical and natural gas industries	2
4 Quality management system	4
4.1 General requirements	4
4.1.1 Outsourced processes and/or services -- Supplemental	4
4.2 Documentation requirements	5
4.2.1 General	5
4.2.2 Quality manual	5
4.2.2.1 Quality manual -- Supplemental	5
4.2.3 Control of documents	6
4.2.3.1 Control of documents -- Supplemental	6
4.2.3.2 Control of document changes -- Supplemental	6
4.2.4 Control of records	6
4.2.4.1 Control of records -- Supplemental	6
5 Management responsibility	7
5.1 Management commitment	7
5.2 Customer focus	7
5.3 Quality policy	7
5.3.1 Quality policy -- Supplemental	7
5.4 Planning	8
5.4.1 Quality objectives	8
5.4.2 Quality management system planning	8
5.5 Responsibility, authority and communication	8
5.5.1 Responsibility and authority	8
5.5.2 Management representative	8
5.5.3 Internal communication	9
5.6 Management review	9
5.6.1 General	9
5.6.1.1 General -- Supplemental	9
5.6.2 Review input	9
5.6.3 Review output	10

6	Resource management	10
6.1	Provision of resources	10
6.2	Human resources	10
6.2.1	General	10
6.2.2	Competence, awareness and training	10
6.2.2.1	Training -- Supplemental	11
6.3	Infrastructure	11
6.4	Work environment	11
7	Product realization	12
7.1	Planning of product realization	12
7.1.1	Planning of product realization -- Supplemental	12
7.2	Customer-related processes	12
7.2.1	Determination of requirements related to the product	12
7.2.2	Review of requirements related to the product	13
7.2.2.1	Review of requirements related to the product -- Supplemental	13
7.2.3	Customer communication	13
7.3	Design and development	14
7.3.1	Design and development planning	14
7.3.1.1	Design and development planning -- Supplemental	14
7.3.1.2	Design documentation -- Supplemental	14
7.3.2	Design and development inputs	14
7.3.2.1	Design and development inputs -- Supplemental	14
7.3.3	Design and development outputs	15
7.3.3.1	Design and development outputs - Supplemental	15
7.3.4	Design and development review	15
7.3.4.1	Design and development review -- Supplemental	15
7.3.5	Design and development verification	15
7.3.6	Design and development validation	16
7.3.7	Control of design and development changes	16
7.3.7.1	Control of design and development changes -- Supplemental	16
7.4	Purchasing	16
7.4.1	Purchasing process	16
7.4.1.1	Purchasing process -- Supplemental	16
7.4.1.2	Criteria for supplier selection, evaluation, and re-evaluation -- Supplemental	17
7.4.1.3	Supplier provided processes that require validation -- Supplemental	17
7.4.2	Purchasing Information	17
7.4.2.1	Purchasing information -- Supplemental	17
7.4.3	Verification of purchased product	18
7.4.3.1	Verification of purchased product -- Supplemental	18
7.5	Production and service provision	18
7.5.1	Control of production and service provision	18
7.5.1.1	Control of production and service provision -- Supplemental	18
7.5.1.2	Process controls -- Supplemental	18
7.5.2	Validation of processes for production and service provision	19
7.5.2.1	Validation of processes for production and service provision -- Supplemental	19
7.5.3	Identification and traceability	19
7.5.3.1	Identification and traceability -- Supplemental	19
7.5.3.2	Identification and traceability maintenance and replacement -- Supplemental	19
7.5.3.3	Product status -- Supplemental	19
7.5.4	Customer property	20
7.5.4.1	Customer property -- Supplemental	20
7.5.5	Preservation of product	20
7.5.5.1	Preservation of product -- Supplemental	20
7.5.5.2	Periodic assessment of stock -- Supplemental	20
7.6	Control of monitoring and measuring devices	21
7.6.1	Control of monitoring and measuring devices -- Supplemental	21
7.6.2	Environmental conditions -- Supplemental	21
8	Measurement, analysis and improvement	22
8.1	General	22

8.2	Monitoring and measurement	22
8.2.1	Customer satisfaction	22
8.2.2	Internal audit	22
8.2.2.1	Internal audit -- Supplemental	23
8.2.2.2	Response times -- Supplemental	23
8.2.3	Monitoring and measurement of processes	23
8.2.4	Monitoring and measurement of product	23
8.2.4.1	Monitoring and measurement of product -- Supplemental	23
8.2.4.2	Acceptance inspection -- Supplemental	23
8.3	Control of nonconforming product	24
8.3.1	Release or acceptance of nonconforming product -- Supplemental	24
8.3.2	Field nonconformity analysis -- Supplemental	24
8.3.3	Customer notification -- Supplemental	25
8.4	Analysis of data	25
8.4.1	Analysis of data -- Supplemental	25
8.5	Improvement	25
8.5.1	Continual improvement	25
8.5.2	Corrective action	26
8.5.2.1	Corrective action -- Supplemental	26
8.5.2.2	Response times -- Supplemental	26
8.5.3	Preventive action	26
8.5.3.1	Preventive action -- Supplemental	26
	Bibliography	27