



BENEFITS OF PROCESSES AND CONTROLS REQUIRED BY ISO/TS 16949:2002 (BEYOND ISO 9001:2008)

Clause	Key Process	Benefit
5.1.1	Reviewing processes for efficiency	To add value faster
5.6.1.1	Trending and reviewing QMS performance	To prevent loss sooner and add value faster
6.2.2.2	Document the training process	None (see clause 4.2.1d of ISO 9001)
6.2.2.4	Empowering employees to achieve, improve and innovate	Enabling employees to motivate themselves
6.3.1	Planning and maintaining facilities, equipment and tooling	To prevent loss sooner and add value faster
6.3.2	Contingency planning	Maintain continuity of revenue stream after a disaster
7.1.4	Controlling process and product changes	Agility – able to react quickly and efficiently to changes
7.2.3.1	Exchanging data/information with customers	More automation (including automated payments)
7.3	Designing manufacturing processes	Enables organizational learning and faster ramp-up
7.3.3.1/2	Analyzing failure modes and effectiveness (assessing risks)	Improved risk management, enables improvement
7.3.6.2	Prototyping (validating) new and changed designs	Enables faster ramp-up and improved risk management
7.3.6.3	Obtaining production part approval	Enables customers to avoid production disruptions
7.4.1.2	Monitoring suppliers and developing subcontractors	Improved performance from suppliers & subcontractors
7.5.1.2	Developing and maintaining documented work instructions	None (see clause 4.2.1d of ISO 9001)
7.5.1.3	Verifying job setups	Preventing special causes of variation
7.5.1.4	Predicting maintenance requirements	Economical maintenance (as and when needed)
7.5.1.5	Managing production tools and equipment	Preventing special causes of variation
7.5.1.6	Scheduling production	Make only what is required when needed (see 6.3.1 too)
7.5.1.8	Managing Service Centers	None (see clause 4.1a of ISO 9001)
7.6.1	Analyzing measurement processes (MSA)	Greater confidence in process and product data
7.6.3.1	Managing laboratory services (from internal lab.)	Greater confidence in process and product data
8.2.2.3	Auditing product conformity	Verification of production processes (use sparingly)
8.2.3.1	Conducting capability studies of manufacturing processes	Provides basis for continual improvement
8.5.1.1/ 8.5.1.2	Managing continual improvement (manufacturing processes and organization)	None (see clauses 4.1a and 8.5.1 of ISO 9001)
4.2.3.1	Review customer specifications (within two weeks)	Faster product development
4.2.4.1	Control records per customer and regulatory requirements	None (see clause 4.2.4 of ISO 9001)
5.4.1.1	Include quality objectives in business plan	Connects quality to business decisions
5.1.1	Review design/production/supporting processes efficiency	To prevent loss sooner and add value faster
5.5.1.1	Inform corrective action managers of nonconformities	Faster action to stop recurrence of nonconformities
5.5.1.1	Authorize all shifts to stop production	Stop loss sooner
5.5.2.1	Appoint customer representative(s)	Internalize the “voice of the customer”
5.6.1.1	Top managers review quality objectives	Connect quality with running the business
5.6.1.1	Top managers review cost of poor quality	Realize the cost benefits of managing quality



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7.3.4.1	Top managers review results of design monitoring	Greater visibility for the design process
5.6.1.1	Top managers review customer satisfaction	Top managers connected to customer concerns
5.6.2.1	Top managers review impact of field failures on Q/E/S	Widen appreciation for the cost of field failures
6.2.2.1	Identify design tools and techniques	Greater visibility for the design process
6.2.2.3	Provide on the job training	Continuity of learning from theory to practice
6.2.2.4	Promoting awareness of statistics, technology, quality	Everyone able to think & speak the language of quality
6.3.1	Evaluate/monitor effectiveness of existing operations	Address today's reality (and tomorrow's improvements)
6.4.1	Address safety of products and process for employees	Prevent harm and loss
7.1.1	Make customer specifications part of the quality plan	None (see clause 7.1a of ISO 9001)
7.1.2	Accept zero defects when sampling attributes	Do not plan to make defective (nonconforming) product
7.1.3	Retain confidentiality of customer product/projects/info.	Protect liabilities for customers' intellectual property
7.5.1.7	Determine service concerns	Better communication to causes of problems
7.2.1c NOTE 3	Extend regulatory compliance to life of product	Avoid regulatory noncompliance in products' life cycle
7.2.1.1/3.3	Designate, document and control special characteristics	Better communication of what is critical to customer
7.2.2.2	Assess feasibility/risk before accepting new requirements	Improved risk management, enables improvement
7.3.1.1	Multidisciplinary approach to product and process design	Designs improved by better teamwork
7.3.2.1	Include customer requirements for special characteristics, packaging, labeling, identification and traceability	Whole manufacturing process is designed
7.3.4.1	Measure design and development (lead times etc...)	Shorter time from concept to market
7.4.1.3	Include "customer designated" in supplier selection criteria	None (see clause 7.4.1 of ISO 9001)
7.5.1.2	Use documented instructions for set-ups/per Control Plan	Preventing special causes of variation
7.5.4.1	Mark customer-owned tooling with customer's name	Protect liabilities for customers' physical property
7.5.5.1	Manage inventory of products/obsolete products	Reduce inventory costs
7.6.3.2	Specify ISO 17025 for purchasing of lab services	Required accuracy and precision assured from labs
8.2.1.1	Monitor customer satisfaction during realization	Faster feedback from customers
8.2.3.1	Record significant process events	For investigating special causes of variation
8.3.4	Approve vendor nonconformity actions before sent to C.	Supplier problems resolved before involving customers
8.5.2.1	Use defined/prescribed problem solving process	Faster removal of root causes of costly problems
8.5.2.2	Use error proofing methods (see also 7.3.3.1/7.3.3.2)	Work designed so it cannot go wrong
8.5.2.4	Analyze rejected/failed parts	Reduce the cost of nonconformities (see 5.6.1.1)