8.2.4 Monitoring and measurement of product

ISO 9001:2008 requires the organisation to measure and monitor product characteristics to ensure that all requirements have been met throughout all stages of the product realization process and that the planned arrangements have been achieved.

### How do I monitor and measure product characteristics?

Establish and define the process for inspection and testing activities to verify that products and materials conform to specified requirements throughout the product realisation process by identifying appropriate:

* References, e.g. specifications or legal and regulatory requirements
* Methodology, e.g. random sampling, non-destructive testing or in-process monitoring
* Documents, e.g. inspection and test plans
* Acceptance criteria, e.g. defined by ISO standards, legal or regulatory requirements
* Responsibilities, e.g. authority for acceptance

Materials, components, subassemblies and finished products should be prevented from use, assembly or dispatch until the required inspections are completed. Modified products should be fully re-inspected and re-tested against the acceptance criteria.

### Should I document our Monitoring and Measurement of Product process?

It is not a mandatory requirement to document your monitoring and measurement of product process. However, you should always look to adequately define and control any operational processes that directly impact upon product quality. Therefore, the implementation of an inspection and testing procedure will be appropriate to the majority of businesses where the characteristics of the product must be verified prior to release to the customer.

### How's best to document the process?

Develop and implement a procedure that defines the responsibilities for:

* Goods receipt inspection and test
* In-process inspection and test
* Final inspection and test
* Maintaining inspection and test records
* Dealing with non-conforming inspection and testing results

### Measuring the effectiveness of the process

The effectiveness of the monitoring and measurement of product process is often determined by looking for documentary evidence that product requirements have been achieved and the planned arrangements have been met. Trends in the rates of product failure must be monitored as should the effectiveness of corrective actions when dealing with non-conformances.