TURK PRYSMIAN CABLE AND SYSTEMS CO.
ISO 9001-2000 QUALITY MANAGEMENT SYSTEM

Summary of Procedures which ensure that the cables offered are within specified and contractual limits.

- **QMS Manual 4.2.3. Control of Documents :**

The documentation control system in Turk Prysmian Cable and Sys. Co. is as summarized below :

The documents, which are decided by the Management Representative for their control within the defining process of the foreign sourced documents and ensuring the structure of Türk Prysmian, are controlled in accordance with the "Control of Documents" procedure numbered P01-001. The following processes of the documents, which are used for the quality and environment system, have been placed under guarantee by means of this procedure:
- The approval process of the documents, within the viewpoint of competence, prior to their publication
- The reviewing, if applicable, updating and re approval process the documents,
- The process of ensuring to define the document modifications and updated revision conditions,
- The process of ensuring the related editions of valid documents to be available at the usage points, as readable and to be easily defined,
- The process of ensuring the documents to be defined and taking these documents under control,
- The process of preventing undesirable usages of invalid documents and applying a convenient description in the events that they are kept for any purpose.
- Besides, Records are assumed special documents and controlled according to Control of Records procedures numbered P01-002 mentioned in article number 4.2.4 of QMS Manual.

- **P01-002 : Control of Records Procedure**

  Summary of P01-002:
  Each department defines their own quality records on the form TPK01-101-1 – 'Control of Quality Records Form'. Each department defines their records, the period and place to keep these records, the period and place to keep these records in the archive office, the responsible person to keep these records, the method of destruction of records after the archive period.

  Special care should be given to take a copy of the documents on the fax paper, etc.. because the writings on fax paper or similar papers disappear after some time. Also, the pens should be permanent. The records kept by hand-writing should be easily readable.

  The records can be kept on paper or in electronic media. The records should be kept clean and away from any adverse environmental effects. The records should be easily reachable.

  The back-up of the electronic files on the file server and SAP is taken every day by IT department. The back-up tapes are kept in special, inflammable cupboards.

The minimum period for keeping the records is given below. Every department defines the period by himself by taking into consideration the below 'minimum periods'.

Record	Minimum Keeping Period (years)
- Meeting Reports	3
- Supplier Evaluation Forms	3
- Internal and external audit reports	3
- Management Review Meeting Reports	3
- Review of the agreement records	3
- Calibration records	3
- Maintenance and adjustment records of instruments	3
- Corrective Preventive Actions	3
- Training Records	Always
- Statistical Records	3
- Maintenance Records	3
- Records of nonconforming products	3
- Environmental Records	3
- Quality Control Records	5
- Test and control records	5

- **P01-003 : Management of Internal Audits Procedure**

Summary of P01-003:
The objective of the quality and environmental internal audits is, to check the conformance or non-conformance of Turk Prysmian Management Systems to ISO 9001 and 14001, to close any non-conformities, to increase the efficiency of the management systems and to maintain continuous improvement.

Every year, Annual Internal Audit Schedule is prepared by Management Representative and the schedule is sent to all of the departments. Each department is audited at least once in 1 year. According to the situation of the department in Quality Management System, according to previous audit reports, the number of internal audits is increased. In the internal audit schedule, the internal auditors are defined, too.

According to the Internal Audit Schedule, the auditors and the department responsibles, who will be audited, begins the audit with an opening meeting. The audit is realized according to the check-lists, which are prepared separately for ISO 9001 and ISO 14001. The auditor fills-in the check-list according to the objective evidences. The auditor checks the documents, records and the applications on the shop-floor.

After the audit, a closing meeting is realized. In the closing meeting, the auditor explains the strong points and weak points of the department, to the department responsibles and manager. The auditor explains the non-conformances that were identified during the audit. The Internal audit report is prepared and if any non-conformances are present, Corrective and Preventive Actions form is filled in. The actions and deadlines are defined by the department responsibles. The audit report is distributed to Management Representative, to the auditors and department responsibles.

To close the nonconformities, a follow-up audit is realized. If the Corrective and Preventive Actions are not completed, new deadlines are defined. Another follow-up audit is done. If the nonconformances are not closed again, the department's director is informed.

Internal auditors are chosen according to the below criteria:

- He/ She must have Internal auditor Certificate,

- He / She must be at least high-school graduate,
- He / She must have good communication,
- He / She must be neutral.

The internal auditors are evaluated by the department responsibles and management representative. If they fail the evaluation, they are nominated as internal auditors any more.

- **P01-004 : Control of Non-Conforming Products Procedure**

Summary of P01-004:
Raw material: The incoming material controls are made according to the procedure P01-011. The incoming material quality controls are made according to the Test Plans. If the incoming material does not comply with the requirements, a red label, with writing 'CANNOT BE USED', is put on the packaging. If the material does not comply with the requirements, but can be used under control because that it won't affect the quality of the product, a blue label is put on the packaging, with writing 'CONDITIONAL ACCEPTANCE'. These materials are kept under control in the production departments. If the incoming material fails the test, they are returned to the supplier.
The materials that are not accepted or conditionally accepted are recorded on the related forms.

Semi-product: The Control of Production Procedure P 01-012 is applied. During the production, tests are realized according to the Quality Plans. If there are any non-conforming results, 'CANNOT BE USED' label is put on the product and 'Failure form' is filled in. The failed product is sent to the red area, which is separated for the failed semi-products. The Quality Department is informed about the semi-product. The Quality Department investigates the problem and fills in the failure form. They define how to solve the problem on the form. The production department completes the corrective actions. If the Quality Department decides that the semi-product can be used after the repairment, than the semiproduct is delivered to the next stage.

Finished products: The Final Control Procedure P01-013 is applied. The conformance / nonconformance of the product is controlled according to the Quality Plans. If there are any nonconforming products, 'CANNOT BE USED' label is put on the product and the Failure Form is filled in. The product is delivered to the failed products area. The Logistics and Production Departments are informed about the failure. The production and / or quality departments investigate the problem, and decide the corrective and preventive actions. If the product can be repaired, then it is repaired and final tests are repeated.

The products at the delivery stage: During the delivery stage, while the products are put onto the transport vehicles, visual control is realized. If any problems are observed on the products, Failure Form is filled in and Quality and Logistics Departments are informed. Quality Department investigates the problem and decides the corrective and preventive action. After the completion of the corrective actions, the product is tested again. If it conforms to the requirements, the product is delivered to the customer. If not, the product is scrap.

The products at the customer: The product, which is delivered to the customer and which is subject to a claim, is delivered to the Logistics department. The Logistics department informs the Quality Department, and they put the 'CUSTOMER CLAIM' card on the product and follow the Customer Claims procedure P01-018. The investigation report is sent to Sales, Logistics, Production and Quality Departments. According to the report, the Sales department contacts with the customer and necessary actions are realized.

- **P01-005 : Corrective Actions Procedure**

  Summary of P01-005:

  The probable nonconformances are due to the incoming material, design, production, control, delivery or customer claims.

  The nonconformances and their reasons are investigated during the production meetings, quality meetings, health, safety, environment meetings, management review meetings, etc.

  The Corrective and Preventive Actions (CPA) Form is filled in. In this form, the nonconformance is defined. The reason of the nonconformance is defined. The corrective action, the responsibles and the deadlines are defined. The number of the CPA form is taken from the Management Representative.

  The defined actions are realized. After the deadline, the realized actions are controlled. The efficiency of the actions are also controlled by monitoring the results of the actions. If the actions are efficient, the CPA is closed.

  All of the CPA forms can be found on the file server Svr129tr.

- **P01-006 : Preventive Actions Procedure**

  Summary of P01-006:

  The probable preventive actions are due to the incoming material, design, production, control, delivery or customer claims.

  The preventive actions and their reasons are investigated during the production meetings, quality meetings, health, safety, environment meetings, management review meetings, etc.

  The Corrective and Preventive Actions (CPA) Form is filled in. In this form, the reason that arose the preventive action is defined. The preventive action, the responsibles and the deadlines are defined. The number of the CPA form is taken from the Management Representative.

  The defined actions are realized. After the deadline, the realized actions are controlled. The efficiency of the actions are also controlled by monitoring the results of the actions. If the actions are efficient, the CPA is closed.

  All of the CPA forms can be found on the file server Svr129tr.

- **P01-007 : Design and Development Procedure :**

  Summary of P01-007 :
  Design and Development Procedure begins after the internal memos between the Sales and R&D departments. At this stage, the requirements and needs to produce the cable is

identified. A draft is prepared by the R&D department and the draft is approved by the R&D Manager.

After the approval of the draft, the R&D Department prepares a detailed deadline plan for the design process of the job, with the responsible of the project.

During the identification of the details of the product, all of the related standards, customer requirements and legal requirements are taken into consideration.

After the identification of the technical details of the product, all of the technical documentations, including the design sheets, quality plans, work instructions, the production of the prototypes, are prepared. All of the records of these technical documents, action plans, internal memos about the design, etc.. are kept according to P01-002 Control of Records Procedure.

- **P01-009 : Control of Monitoring and Measuring Devices Procedure**

Summary of P01-009:
The below instruments are in the scope of calibration:
- All of the test, monitoring and measurement instruments that directly effect the product quality,
- The instruments that are used to warranty and prove that the product parameters conform to the specifications and standards,
- The instruments that document the measured values,
- The instruments that are used to warranty the product quality from the beginning,
- All of the monitoring and measurement devices that are related to the dependability of the product.

The below instruments are out of the scope of calibration:
- The instruments that are used for training purposes,
- The instruments that cannot be calibrated by the calibration institutes,
- The instruments that are used only for rough measurements,
- The instruments that are used to monitor / measure parameters which are not related to standards / specifications / quality.

The instruments that are in the scope of calibration are listed in the form TPK 0202-Rev1 and the instruments that are not in the scope are kept in the form TPK 0203. On these lists, the last and next calibration dates are listed, too.

The departments are responsible to calibrate their own instruments. The packaging of the instrument should be made carefully during the delivery of the instrument to the calibration company. The instrument shouldn't be damaged during the delivery. When the instrument is sent back to the department, the department responsible should first make a visual control on the equipment. If he notices anything wrong, then he should immediately call back the calibration company and organizes the essential actions.

The calibration protocol of each instrument is checked and approved for compliance to the acceptance criteria by the Management Representative.

The calibration companies put on the instrument stickers showing the last calibration date and the next calibration date. The next calibration date is a proposal. In the below situations, the validity of the calibration ends:
- If the instrument is damaged,
- If the instrument is out of order,

- If the calibration needs change,
- If any suspicious test results are taken.

The monitoring and measurement instruments should be labeled as 'CANNOT BE USED' if there are any problems. The instruments should be kept in a media, which complies with the conditions that are identified by the instrument' producer.

- **P01-011 : Incoming Material Control Procedure**

Summary of P01-011:
The quality control of incoming material is the responsibility of the Material Technology Laboratory, which is in charge of R&D and Quality Department.
Incoming materials' quality control is realized according to test plans. If the results are OK, green 'APPROVED' cards are put on the materials and they are sent to the production departments. If there are any failures in the tests, red 'CANNOT BE USED' cards are put on the materials. The production, purchasing, Logistics and Quality departments are informed about the test results.

When a new material is to be used or when there is an alternative material to the current material, the decision is made according to the test results of that material.

The statistical reports, including the including the incoming material test results, are sent to the purchasing, production and quality departments.

The technical specifications of the materials are prepared, modified (when necessary) and distributed by Material Technology Laboratory. The technical specification is approved by production and R&D and Quality Departments.

The incoming materials' test plans are prepared by Material Technology Laboratory. At the end of each year, by reviewing the quality scores of each supplier, the necessary modifications are done on the test plans.

The Material Technology Laboratory completes the incoming materials' tests in 3 days. Each and every material that will be used for production has to be tested. The samples are taken according to the test plan. If the packaging is opened to take the sample, the packaging should be closed as soon as possible. The name of the material, the batch number, and the sampling date should be written on the sample.

For each test, there are instructions. The tests are realized according to the instructions. If the tests cannot be realized by our laboratory, the tests are outsourced to an accredited laboratory.

If the sample fails the test, the laboratory informs the Purchasing and R&D and Quality Departments with the Warning Form. The material is marked with red card and is taken to the red blockage area. The purchasing department contacts with the supplier about the problem. If the sample passes the tests, the material is released and marked with green 'APPROVED' card.

All of the suppliers are evaluated according to the incoming materials' test results. If there are too many nonconforming materials from a company, then the company may be blocked.

- **P01-012 : Control of Production Procedure**

  Summary of P01-012:
  During the production process, the product should be controlled and tested according to the quality plans and documented instructions. The controls and tests are defined for different stages of production, in the Quality Plans. By these controls and tests, the below points are warrantied :
  - Only the materials, that comply with the essential conditions, are used,
  - The nonconformities are identified as early as possible, and so they are corrected as soon as possible,
  - Preventive actions are taken at different stages of productions.

  The below data about the controls and tests are given below :
  - At what stage the control / test is to be done,
  - At what frequency is the control / test is to be done,
  - With which instruments the control / test is to be done,
  - Which controls / tests are to be realized,
  - Who will perform the tests,
  - To which document / form the test result will be recorded.

  For the mechanical or thermal tests that will be realized by Material Laboratory, the sample will be sent to the laboratory with the Test Request Form. The Material Laboratory informs the Production Departments about the test results.

  The management of nonconforming products are realized according to the P01-004 - Control of Non-Conforming Products Procedure.

- **P01-013 : Final Control Procedure**

  Summary of P01-013:
  In Turk Prysmian Cable and Sys. Co., in order to ensure that the final product complies with the relevant standards and customer requirements, final controls and tests are realized by Quality Control Department. These tests are realized according to the Quality Plans and related work instructions.

  The scope of final tests and controls are as follows:
  - The convenience of the applied production processes to relevant standards and specifications,
  - The verification of the type and technical properties of the product with respect to the customer requirement,
  - The realization of the functional tests,
  - The control of the documents that will be sent to the customer,

  After the realization of the controls and tests, the results are recorded on the test forms. The approval label is put on the drum and the drum is sent to the delivery area.

  If the product is not conforming to the requirements, the Quality Department puts ‘CANNOT BE USED’ label on the drum and applies the non Conforming Products Procedure which is numbered P01-004.

  If Turk Prysmian Cable and Sys. Co. labs are not capable of realizing any tests, and if the tests are done by outside laboratories due to this reason, then the test results are reviewed in order to ensure that they are done according to the related standards and requirements. If the test result conforms to all of the requirements, then the product is released.

When the product is approved by the Quality Control Department, the product is labeled as 'APPROVED' and delivered to the Logistics department. The data about the product is entered to the SAP system.

The packaging and delivery conditions are realized according to the customer requirements.

The records, which show the convenience of the products to the requirements, are kept according to P01-002 Control of Records Procedure.

- **QMS Manual 7.4 Purchasing**

Türk Prysmian ensures the following aspects for the compliance of purchased product with the determined conditions,

- By preparing technical specifications for the products to be purchased,
- By giving order in accordance with the prepared technical specifications,
- By preparing the test and quality plans of purchased products under the basis of material technical specifications,
- By testing and controlling the purchased products in accordance with the prepared test or quality plans as described Material income test procedure numbered P01-011
- By taking improper products under control and sending them back to suppliers (See the "Control of Improper Products" procedure numbered P01-004),
- By transmitting the receiving inspection results to the purchasing division and ensuring the supplier evaluation.

Türk Prysmian selects its suppliers from the companies meeting its requirements and conditions and having the competence to supply the products. It has established criterions for selection and evaluation. The following principles are taken into consideration and evaluated for the selection and evaluation,

- Competence to fulfill requirements of the prepared material technical specifications,
- Its past performance,
- Precautions to be taken by supplier against the corrective and preventive activities, which have been informed, for the improprieties determined on the supplied product,
- Price advantages,
- Delivery in time,

The purchased product sufficiency and supplier performances are reevaluated and decisions are taken about the suppliers. Also, it will be an advantage for evaluations, if the suppliers have obtained the certificates of ISO 9000 and ISO 14001.

The responsibilities of purchasing process have been determined as follows,

Purchasing Division:

He is responsible from,

- Purchasing the products and services only from the convenient suppliers,
- Evaluating the suppliers by the viewpoint of quality, price, delivery date and environment management and issuing their reports,
- Keeping the accepted and unaccepted suppliers list as updated,
- Preparing external audit plan together with management representative,
- Preferring the suppliers, which have obtained the certificates of ISO 9000 and ISO 14001,

- Reevaluating the suppliers by taking the purchased product performance as the basis.

Research Development and Quality Department:
Receiving inspection is responsible from,

- Keeping the product quality values of the suppliers as updated,
- Preparing the material technical specifications,
- Transmitting these values to purchasing division periodically with definite time intervals,
- Keeping the quality records of suppliers and storing them for definite periods,
- Working in coordination with purchasing and management representative according to the related quality and environment management system for the supplier audits and selection of new suppliers,
- Performing receiving inspection to purchased products.

Management Representative:
He is responsible from,

- Establishing the instructions, which are necessary for maintaining the purchasing activities in accordance with the specifications indicated in ISO 9000 and ISO 14001,
- Preparing, organizing and applying the external audit plan together with management representative.

- **QMS Manual 7.5 Production and service provision**

Türk Prysmian plans and applies the production and service under controlled conditions as follows.

Information, which explains the Product:
a) The product characteristics are determined by the way of product type, material number, finished and semi product order numbers.
These are as follows:

- The product type, product design values and product criterions are indicated while preparing purchasing orders and entering into the system (SAP).
- The system automatically gives a number, when the product is introduced into the system. Each number describes one product.
- The product type, material number numbers and the numbers given to semi and finished products by the system are found on the working cards, which are prepared during the production stage. Also, the requested product values are indicated on the working cards (thickness, colors, etc.).

b) When the working cards are placed in their general usage places,
Then it means that the updated issues of working instructions, which are indicated as quality document in the procedure numbered P01.001, have been placed in their general usage places.
c) Equipments (computer, production machinery, and carriage vehicles), which are in compliance with the design, production, control and delivery processes, are used for in every stage from the design up to customer's product receipt.
d) By monitoring and measurement devices,
e) By making the controls, which are indicated in quality plans, at the production and control stages, and keeping these records according to P01-002 Control of records procedure
f) By applying the releasing, delivery and after sales customer relations,
g) By taking the improper product under control (See the procedure numbered P01.001).

h) By following and controlling of customer claims (P01-018 Customer claims procedure)

- **P01-014 : Preservation of the Product :**

Türk Prysmian ensures the product compliance by maintaining its description, transportation, packaging, storage and protection during the period of internal processes and till the intended delivery arrives in the destination place, as follows. A system described at the P01-014 Preservation of product procedure, which will protect against wear, damage, faulty dispatch during the periods, which cover entrance of all products to the factory, production stages, their storages, packaging, deliveries and receptions, is being applied.

Description:
The products are described and marked according to the procedure P01-010 Identification and Traceability of Product, with respect to their compliance, at all stages from raw material up to delivery stage and thus delivery of improper product to the subsequent production stage has been prevented. The improper products are processed according to the "Control of Nonconforming Products" procedure numbered P01-004.

Transportation:
Türk Prysmian has determined the product transportation methods, which will prevent damage and break down during transportation and has ensured them to be applied. The transporter and lifting vehicles are controlled by the viewpoint of their function and safety as indicated in the regulations, in order not to cause any damage or breakdown during transportation and waiting at workstations.

Storage:
Türk Prysmian has determined the convenient methods for using the determined storage areas and storage places for the sake of preventing the product against damage or breakdown during the period from usage of the product unto its delivery.
The "first incoming first outgoes (FIFO)" logic is applied to the incoming and outgoing processes of the stored products. In spite of this, the product state within the storage area is controlled with suitable intervals according to the related instructions for the sake of determining whether or not the products, which do not display too much circulation and are being waited for a long time, exhibit any breakdown and its records are taken.

- In case of any need, all of the products are stored within original supplier packages.
- All of the products are labeled and marked as indicated in the related working instructions, along the storage period.
- The products, which have limited storage periods, are continuously controlled in accordance with a definite program.
- If specific storage conditions have been indicated by the product suppliers, storage is carried on according to these conditions.

Packaging:
In Türk Prysmian, packaging, packing and marking processes (including the consumed materials) are controlled under scope indicated by the related instructions, for the sake of securing to ensure their compliance with the determined conditions.
- Packaging is made in accordance with the customer agreement, specification and/or the related standard.
- If these standards are not available, then packaging is performed in accordance with Türk Prysmian packaging conditions.
- The necessary protective precautions are taken.

Preservation:
Türk Prysmian has determined and documented the convenient methods, which are used for preserving and distinguishing the products as long as they are under its control and has ensured their continuity.
The products are marked as indicated in the agreement or specifications, related standard and norms, instructions or procedures and they are preserved under distinguishable and convenient conditions.

Delivery:
In Türk Prysmian, the necessary precautions are taken during delivery after the final inspection and experiments, or the sake of protecting the product quality and their continuities are ensured.
The following points are controlled by the personnel prior to delivery,

- Compliance of the packaging and if it is available, special security precautions,
- Whether or not marking and labeling are correct,
- Whether or not the delivery document is faultless and complete.