# Quality Management Guideline for Suppliers

| | Release | Release | Release |
|---|---|---|---|
| | Vorwerk Group | Vorwerk Group | Eldisy GmbH |
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# 0 Introduction

This quality management-guideline (QMR) applies to all suppliers, who supply the companies of the Vorwerk group, as well as the companies of the *ELDISY Group*. The following method has been defined for the identification of any eventual differences within this document between the Vorwerk Group and the ELDISY group:

- Identification letter after the heading number:
  **Letter A = Vorwerk Group**
  **Letter B = ELDISY Group**

- Distinction in running text:
  "*Eldisy" in italics*

**Only the German version of the QMR is legally binding. Translations are meant for service purposes only.**

# 1 Jurisdiction

## 1.1 A: Vorwerk Group: Scope of Applicability

This quality management guideline for suppliers (QMR) applies to all the locations of the Vorwerk Group, which consists of the following companies:

- **Vorwerk Autotec GmbH & Co. KG**
- **Vorwerk Autotec Polska Sp. z o. o.**
- **Vorwerk Drivetec GmbH**
- **Vorwerk Drivetec Suzhou Ltd.**
- **Vorwerk Autotec Suzhou Ltd.**
- **Vorwerk Autotec de Mexico S.A. de C.V.**
- **Vorwerk Drivetec de Mexico S.A. de C.V.**

(Hereinafter referred to briefly as "Vorwerk").

The following central functions / coordination stations have been set up for the Vorwerk Group at the location of M's. Vorwerk Autotec GmbH & Co. KG.

- Corporate Management
- Central Purchasing
- Central Quality Control
- Central Development Laboratory

This QMR applies to all suppliers who supply Vorwerk and to all manufacturing materials (semi-finished goods, finished parts, auxiliary materials and consumables) which are supplied to Vorwerk.

### *1.2 B: Eldisy Group: Scope of Applicability*

*This quality management guideline for suppliers (QMR) applies to all the locations of the Eldisy Group, which consists of the following companies:*

- ***Eldisy GmbH Gardelegen***
- ***Eldisy Slovakia spol. Sr.o.***
- ***Eldisy GmbH Heinsheim***
- ***Vorwerk Dichtungssysteme Polska Sp. z o. o.***

*(Hereinafter referred to briefly as "Eldisy").*

*The following supporting function (assistance in negotiations, derivation of purchasing objectives, synchronization of purchasing tolls, etc.) with M/s. Vorwerk Autotec has been set up for Eldisy at the location:*

- *Central Purchasing in Wuppertal*

*This QMR applies to all suppliers who supply Eldisy and to all manufacturing materials (semi-finished goods, finished parts, auxiliary materials and consumables) which are supplied to Eldisy.*

## 2 Introduction

The ever-growing customer requirements and the related high quality targets of Vorwerk / *Eldisy* are the reason for the cooperation as partners by Vorwerk / *Eldisy* with their suppliers having assumed significant importance.
Customer satisfaction is a very demanding goal, and must be worked on afresh, every single day. The basis for this is the zero error strategy.
For a successful, long-term cooperation as partners it is necessary, therefore, to proceed in each phase of the co-operation with the necessary openness, without compromising confidentiality.
Our suppliers are our partners. This QMR is intended to contribute to the pursuit and implementation of a common quality strategy, to design the processes between our suppliers and Vorwerk to work smoothly, as well as to minimise costs in the interest of mutual benefit. The points listed are explanatory, and do not represent any limitations of the pertinent rules and policies such as DIN EN, ISO 9001, QS 9000, VDA and ISO.TS.16.949 in the editions applicable respectively. In any case, the standards which are more extensive and promote higher levels of quality apply respectively.

The quality of our products depends largely on the quality of the bought-out parts and components. Our objective is therefore to purchase only high-quality products with an above-average value-for-money factor.

To achieve this it is essential that our suppliers have an effective quality management system. This guideline describes the requirements which Vorwerk / *Eldisy* will expect from this system.
The Central Purchasing Department of the Vorwerk Group / *Eldisy* bears the ultimate responsible for these requirements.

The Quality Management Guideline supplements the current terms and conditions of purchase and is an integral part of any contract for products which are processed or worked on at Vorwerk / *Eldisy* or are marketed through Vorwerk / *Eldisy*. In this respect, the agreements of the respective purchase contracts apply with the foremost priority, followed by the stipulations of our terms and conditions of purchase, and finally the provisions of this guideline.

## 3 Quality Management System

Our quality management system complies with the requirements of DIN EN ISO 9001 certification and the additional requirements of ISO TS 16 949. Our suppliers are therefore obliged to have at least an appropriate quality management system and to keep this up to date at all times. If the supplier has not achieved the requirements of ISO TS 16 949, he shall be regarded as a target. We reserve the right to check this system by means of audits agreed upon mutually, and announced well in time.

Furthermore, the requirements in the reference manuals of QS 9000 and of the VDA must be taken into account.

## 4 Procurement Chain

a) Purchasing
The Central Purchasing of Vorwerk / *Eldisy* must ensure that the products to be procured meet the specified requirements without fluctuations and always with safety.

b) Supplier
The term "Approved Supplier" refers, in principle only to production locations of the supplier and not to entire companies or commercial organizations. Correspondingly an approval of a supplier applies only to the audited production location and not to the supplier's entire organization. The supplier undertakes to comply with the current customer requirements and to convey these demands to their suppliers.

c) Sub-supplier
The sub-supplier provides products or services to the supplier, which in turn go into the products or services of Vorwerk / *Eldisy*. The supplier is fully responsible for ensuring the quality of sub-suppliers. He must in all cases ensure the qualification ability of his sub-suppliers, assess it on an on-going basis, monitor it and integrate it into the advance quality planning process.

## 5 Ethics Guideline

Vorwerk / *Eldisy* expects of its suppliers, that they assume our commitments to integrity and high standards of moral and ethical behaviour. We expect all suppliers, their employees, representatives and subcontractors that they observe this code of conduct for global suppliers.

**a) Forced labour**
Suppliers may not use any forced or involuntary labour, irrespective of whether in the form of requisitioned labour, imprisonment, or bonded labour.

**b) Child labour**
No supplier of Vorwerk / *Eldisy* may use child labour. The term "child" refers to all persons under the age of 15 years or under the minimum age for earning eligibility in the country, in which the supplier operates, if this is the higher.

**c) Discrimination and harassment**
Suppliers must provide a working environment, free from harassment and unlawful discrimination. Suppliers may not discriminate against any person on grounds of personal characteristics or of faith, including ethnic origin, colour, religion, origin, sex, sexual orientation, age, or disabilities.

**d) Anti-Bribery and Corruption**
Suppliers may not provide, accept, offer or pay bribes or participate in other corrupt practices, if they are operating under orders of Vorwerk / *Eldisy*, and must comply with and follow all applicable laws against bribery in the countries in which they operate.

**e) Health and Safety**
Suppliers must provide a safe and healthy working environment for their employees.

**f) Environment Protection Laws**
Vorwerk / *Eldisy* operate their business in a manner which respects and beautifies the environment, and expects their suppliers to comply with all applicable environment protection laws and regulations of the countries in which they operate.

**g) Other Statutory Stipulations**
Vorwerk / *Eldisy* expect their suppliers to comply with all applicable laws, which are not set out in greater detail in these standards. "Applicable Laws" are all applicable laws, codes, rules and regulations, as well as valid contracts at the local, state, country and national levels.

**h) Data Protection**
We expect from our suppliers that they will protect confidential information of Vorwerk / *Eldisy* and their customers by means of secure storage and restriction of access to those who need the information for the purpose of their work. Confidential information is information that is not generally known, or is not easily accessible to the general public, and can belong either to Vorwerk / *Eldisy* or their customers. Confidential information could be, for example business and marketing plans, financial information, testing protocols, test reports, the status of the testing of products, customer information, drawings or diagrams of customers, internal business correspondence, plans for the acquisition or establishment of a partnership or alliance with other companies, plans for new and / or current products and services.
The obligation to protect the confidential information of Vorwerk / *Eldisy* will continue to exist even after a possible end of the business relationship between the supplier and Vorwerk / *Eldisy*.

# 6 Assurance of quality before serial production begins.

## 6.1 Manufacturing feasibility evaluation

For products that are not standard or catalogue products, we expect from our suppliers that prior to conclusion of the contract a verification will be performed to ascertain whether or not the requested product can be produced and supplied in the required quality and the requested quantity within the desired timeframe.

### 6.1.1 Vorwerk:

In case of any unclear requirements of **Vorwerk Articles** it is the responsibility of the supplier to discuss the matter with the Central Purchasing of Vorwerk / *Eldisy* and if necessary the appropriate departments of Vorwerk and obtain additional information if necessary.

This includes in particular, the definition of critical and significant product features.

If due to the manufacturing feasibility evaluation corrections are required with reference to the specifications of Vorwerk Articles, it is likewise, the Central Purchasing of Vorwerk / *Eldisy* that has to be informed in writing.

### *6.1.2 Eldisy:*

*It is the responsibility of the supplier to clarify any unclear requirements of **Eldisy articles** with the respective specialist departments of Eldisy.*

*This includes in particular, the definition of critical and significant product features.*

*If due to the manufacturing feasibility evaluation corrections are required with reference to the specifications of Eldisy Articles, the respective specialist departments of Eldisy must be informed in writing.*

## 6.2 Quality Planning

The quality of products is definitively determined in the course of their development. It is therefore necessary that the supplier adopts quality assurance measures, even as early as the development stage. A project schedule plan is to be put in place and submitted upon request. These quality assurance measures must include at least the following elements described below:

### 6.2.1 The Flow Chart.

The flow chart is the graphic description of the entire process-flow from the receipt of goods, through production, up to shipping / transport. This shows the flow of materials and is supplemented by a brief description of the individual stages of production and testing. Process flow plans are indispensable for quality planning and among other aspects, form the basis of FMEA and production control plans.

### 6.2.2 FMEA for Design and Processes

Failure mode and Effects Analysis (FMEA) is an important tool for the avoidance of errors, since due to the methodical approach the causes of potential errors can be detected at an early stage, and appropriate measures taken.

In the case of suppliers with responsibility for development a D-FMEA must be conducted. The D - FMEA will remain with the supplier and upon request will be submitted to the principal for review.

The process-FMEA must continuously be adapted to the current production process.

### 6.2.3 Production Control Plan

The production control plan must determine at least the following:

- Which feature
- How often
- To what extent
- By whom
- At what stage of the process
- With what testing equipment
- How

Must be checked and where the test is to be documented. In the event of deviations is method of control / incident response plan must be described.
The production control plan contains all the special features from the Design FMEA, as well as the special process features derived from the Process FMEA.
The results of the test planning must be compiled in a production control plan. This is essential during the entire life cycle of a product, and is to be kept up to date.

### 6.2.4 Tests

Testing laboratories commissioned by the suppliers must be accredited according to DIN EN ISO/IEC 17025 or a comparable national standard.

### 6.2.5 Planning of test equipment

In planning the test equipment the type, quantity, and accuracy of the necessary test equipment must be determined. Capability studies must be conducted with reference to the selected testing equipment to ensure that a safe and appropriate process assessment is possible based on the measurements.
The supplier must have a test equipment monitoring system.

### 6.2.6 Process and Operating Resource Planning

Manufacturing processes and operating resources must be planned and developed in such a manner that they are in a position, subject to sufficient capacity, to produce the required features within the tolerances.

The capability of equipment and processes must be demonstrated. The bases for these verifications are the requirements of our customers and / or the super-ordinate rules and regulations.

The minimum requirement for provisional process capability is $PpK \geq 1{,}67$ and for ongoing process capability $CpK \geq 1{,}33$.

For the calculation of the provisional process capability there must generally be 125 measurements available (at least random 25 samples of 3 - 5 pieces), which are taken from a production run of at least 300 parts. The calculation of the ongoing process capability is permissible only after 20 days of production. For additional background information may be obtained from the QS 9000 Reference Handbook "Statistical Process Control".

## 6.3 Packaging and cleanliness

The suppliers are obliged to handle the manufactured products carefully and to protect them against damage. In addition, the Supplier is committed to deliver the manufactured products without any contamination and in conformity with a standard of cleanliness corresponding to the generally acknowledged state of the art.
If no product-specific packaging has been agreed upon with the Central Purchasing of Vorwerk / *Eldisy* or with the *Packaging Management of Eldisy*, the supplier will arrange for appropriate packaging which must conform to the current safety and environmental protection standards and to be suited, to deliver the products/Components without any damage or other impairment of the quality. Before commencement of serial delivery these must be submitted to and agreed upon with the QVP-team of Vorwerk or the *Packaging Management of Eldisy* and then documented in packing instruction document.
The various modes of transportation must be taken into consideration in the course of selection of the packaging, as also the prevention of quality risks in particular those caused by moisture, corrosion and contamination.
The products which have undergone surface treatment may only be handled with clean gloves.
The supplier is responsible for ensuring that subcontractors commissioned by him also treat and pack the goods according to this provision.

## 6.4 Initial samples

### 6.4.1 Request

The initial sampling facilitates the release of serial production, which has the features according to the drawing and specification agreed upon between the Central Purchasing of Vorwerk / *Eldisy or the respective specialist departments at Eldisy* and the supplier.
Initial samples are samples (products, materials) which have been produced with serial production equipment, under serial production conditions and by the personnel to be deployed for serial production. Their purpose is to provide proof, prior to commencement of serial deliveries, that the quality requirements have been met.
Initial sampling must be conducted in the following cases:

- New Product
- Repeated sampling
- Modifications to the product design
- Modifications to the materials / ingredients
- Modifications of bought-out parts
- Modifications to the product manufacturing process
- Modifications and / or corrections of the tooling
- Use of new tools
- Deployment of new sub-suppliers
- Relocation of the production location
- An interruption of production of more than 12 months

Products submitted for acceptance must have been drawn from a representative production run. The volume of production of a typical production run may extend from within an hour to within a shift. The total quantity to be submitted is made up of the number of requested sample parts (see Matrix in the Annex) and by the production quantity defined in writing by the Central Purchasing at Vorwerk or by the purchasing department at *Eldisy*.

Initial samples will be requested stating quantity and the delivery schedule, in case of new products or products specially modified for Vorwerk / *Eldisy*. All quality features agreed upon in the specification and in the drawings must be sampled.

The Central Purchasing of Vorwerk / *Eldisy or the respective departments at Eldisy* reserves in principle the right to decisions on levels of submission.
As a standard for a production process and product release in according with VDA Volume 2 submission level 2 or PPAP submission level 3 is required.
Any change of the scope of the submission level can only be agreed upon in writing with the Central Purchasing of Vorwerk / *Eldisy* or *with the QVP Station at Eldisy*.

### 6.4.2 EMPB (Initial Sample Test Report) Implementation

The procedure for the implementation of an initial sampling is given in the enclosure. Repeated deliveries of initial samples are to be provided by the supplier free of charge.

### 6.4.3 Waivers for raw materials and semi-finished parts which have not been subjected to initial sampling

In principle, only products which have been released as "Cleared" by Vorwerk / *Eldisy* may be in production and fulfilment of serial production assignments. In cases where it is nevertheless essential to use a product without adequate release status for production and fulfilment of serial production assignments, a waiver must be applied for before such use can be continued.

The waiver is granted by the Central Quality Control of Vorwerk or *the quality assurance department of Eldisy*. After the grant of the waiver the supplier receives a copy of the waiver.

Depending on the "seriousness" of the deviation the initial test report is returned to the supplier with the decision "Provisionally Cleared" or "Dismissed" or "Rejected". Both of these decisions result in re-sampling.

### 6.4.4 Other Samples

The conceptual designation and the definition of the samples described are governed by the standard DIN 55 350, Part 15. In principle, here too, the rule applies that the samples to be delivered to Vorwerk / *Eldisy* must be sent as a separate delivery stating the name of the sample (e.g., test sample), to the respective quality control department concerned.
Likewise, the form in accordance with VDA Volume 2 with the indication "Report - Other Samples" is also used for samples. . The generation of the measurement report is essential even for samples. The packaging and the delivery papers must be clearly marked with the word "SAMPLE".

## 6.5 Hazardous Substances

Prior to the initial delivery of hazardous substances the corresponding safety data sheet must be sent unsolicited, the respective customer at Central Purchasing of Vorwerk *Eldisy and / or the Purchasing Department of Eldisy*

## 6.6 Preventive Maintenance

The supplier must demonstrate that he has a preventive maintenance system which includes at least all bottlenecks.

## 6.7 Training

The employees of the suppliers must be qualified for the tasks they are expected to perform. This also includes personnel deployed temporarily. The supplier has to ensure this by appropriate, internal or external training courses. The training courses must be verifiable.

# 7 Ensuring Quality During Serial Production

## 7.1 Statistical Process Control

Statistical Process Control (SPC) is used as a process-based tool to detect process deviations at an early stage and to intervene in the process with corrective measures before defective products are produced.

The supplier must demonstrate, with the help of appropriate control cards that statistical process control is applied to all special (critical or significant), controllable features. Vorwerk / *Eldisy* is entitled to examine these documents at any time on request.

If product features cannot be directly checked, SPC is to be applied with reference to the process parameters affecting these features. An unambiguous correlation is preferable in case of verifiable product features.

## 7.2 Acceptance Tests

In case of features which are incapable of being assessed in the process (i.e. cannot be evaluated via SPC); the supplier has to conduct suitable quantitative or qualitative acceptance tests, and to document these in acceptance cards or test reports. The conditions of the acceptance tests must be agreed upon with Central Quality Control of Vorwerk and / or with the quality control department of *Eldisy*.

## 7.3 Protection of processes which have not been enabled.

In case of processes which have not been enabled *(CpK < 1.33)*, appropriate tests are to be carried out in terms of the specified features, to ensure that our production is not disrupted by defective parts. A 100% inspection of the deviating features must be conducted until the required ability can be demonstrated once again.

## 7.4 Test Certificates

Basically, together with each delivery, suppliers must provide an acceptance test certificate in accordance with DIN EN 10204, 3.1 in which the chemical and mechanical properties of the material are to be confirmed. In addition, even other additional product features can be requested by Vorwerk / *Eldisy*. This certificate is to be submitted in the original (a copy of the original certificate will not be recognized) and must contain the target values, their tolerances, the actual values determined, as well as the test specification.

In case of mixtures, at least the following features are to be documented:
Hardness, density and rheometer data.

The product features to be confirmed and the number of measurements, to the extent that these are not obvious from the matrix, are to be agreed upon with the Central Quality Control of Vorwerk and / or *the Quality Control Department of Eldisy.*

## 7.5 Product Identification

### 7.5.1 General

The products supplied and/or the transport containers are to be marked in a manner in which they can be unambiguously identified and thus avoid any confusion or mix-ups. Different materials are to be separated from each other or delivered as an individual batch. Batches supplied by Vorwerk or *Eldisy* to the supplier must also be kept separate.
The manufacturing status and the test results must be identifiable on all manufacturing batches and partial batches. The labelling of the goods must conform to VDA 4902. In this process the requirements of detailed traceability are to be taken into account.

### 7.5.2 Application of the label

The labels of the goods (VDA 4902) are to be applied in such a manner that a scanner can process the printed barcodes. The horizontally mounted labels should not be covered by any container fastening elements and may not exceed in outer contour of the packaging.

### 7.5.3 Method of affixing the labels

The labels should be stuck on to the containers with four self-adhesive glue spots, and not fully glued to the containers. The adhesive properties must be such that subsequent removal is possible manually, without any mechanical aids. Similarly, self-adhesive document pouches can be used.

### 7.5.4 Location of affixing labels

The VDA label may not be affixed on the lid. In addition, for each master shipper must bear a master label is to be created, which summarizes the individual information of the individual packaging units, and this must be affixed on the upper right corner on the narrow side. (E.g. 1 pallet with n cartons on it.) A VDA label must be affixed to each shipping unit and on each container **on the upper right corner of the narrow side**. Likewise, a single label must be affixed to each carton / small load carrier in such a manner that all the containers on a pallet can be identified from the outside. Cartons / small load carriers that are in the middle of a packaging unit and are not visible from the outside, are to be marked on the narrow side.)

### 7.5.5 Load Securing (Load Restraints)

The lashing of the load must be done in accordance with national and international guidelines. The maximal load utilization of the transport modes is to be ensured. Load lashing is to be done according to the transport route and the nature of the cargo.

### 7.5.6 Product labelling in case of new / amended specifications

Upon publication of a drawing as a new edition or modification of an existing part an additional labelling requirement must be complied with.
Each packaging unit of the **last delivery** is to be provided with the **old drawing index status**, marked clearly in black script on clearly legible stickers. The stickers <u>and</u> the remark on the delivery note must bear the wording:

**"CAUTION! LAST DELIVERY AS PER OLD DRAWING STATUS!!!"**

.

The packaging of the **first three deliveries** with the **new drawing modified status** must bear the wording:

**"CAUTION! 1st / 2nd / 3rd NEW DELIVERY AS PER THE NEW DRAWING STATUS!!!"**

## 7.6 Traceability

The supplier has to introduce and maintain an appropriate system for identification and for traceability of products supplied to Vorwerk / *Eldisy.* The supplier agrees to its processes and deliveries to the First in – First out principle to align. A continuous improvement of this system must be worked on, in order to enable quick containment of defective products.
With this system, traceability in terms of:

- The batch delivered
- Manufacturing batch / material batch
- Production line
- Test Documentation
- Test Status

must be fully ensured. The supplier guarantees a delivery in unmixed batches (i.e. manufacturing batch).

## 7.7 Obligation to provide information in case of risks, emergency management

For the avoidance of damages it is necessary that the Central Purchasing of Vorwerk / *Eldisy* is informed immediately about the risks which could jeopardise the proper fulfilment of contractual obligations by the supplier, particularly risks such as:

- Impending Labour Disputes
- Other disruptions, which are expected or have already occurred
- Technical deficiencies
- Capacity bottlenecks
- Quality Problems

which could prevent the supplier from the provision of certain supplies and services to Vorwerk / *Eldisy*.
The supplier has to create in advance, meaningful and effective emergency plans for predictable incidents and submit them to the Central Purchasing of Vorwerk / *Eldisy* upon request.

In case of production disruptions or incidents which could cause an impairment of the product quality, the delivery schedule or the supply quantity of the products ordered, the supplier is obliged to immediately disclosure the problems to the Central Purchasing of Vorwerk / *Eldisy* immediately upon his becoming aware of them..

In order to supply zero-defect products on time, according to the agreed specifications, in the ordered quantity the supplier must secure and adopt appropriate preventive measures, such as, for example:

- Maintenance of a buffer stock
- Alternative production options
- Alternative sources of supply for raw materials
- Adequate EDP-Safeguards

The supplier must ensure and document in writing the fact that and the methods by which the management will be informed and engaged in the involvement in the proceedings in case of emergencies depending on the seriousness of the case.
This includes in particular, measures for avoidance of errors and for ensuring replacements.

## 7.8 Procedure in case of safety-relevant components

Safety-related components / features are identified by means of a red "D" or by means of a "DmbA" inscription on the drawing or specification. In case of components marked in this manner, the supplier is obliged to document the quality assurance measures and the results of the quality testing in a manner which is comprehensible, ensures traceability, and is batch oriented. These records are to be stored (preserved) for at least 15 years, and must be archived in such a manner that quick traceability is guaranteed at all times.
In case of inevitable deviations from the drawing prescriptions or the specifications, a written waiver must be obtained from Central Quality Control at Vorwerk *or the quality control department of Eldisy*:

Email: qualitaet@vorwerk-automotive.de
Email: qualitaet@eldisy.de

The form for this waiver can be obtained via Central Purchasing of Vorwerk / *Eldisy* or via the concerned quality control department at Vorwerk / *Eldisy*.

## 7.9 Re-qualification Testing

All products supplied to Vorwerk / *Eldisy* must have an annual re-qualification tests. Other intervals can be defined project-specifically.
The definition of the interval is also made in the framework of the advance quality planning and is usually in accordance with the specifications of our customers. The definitions are to be included in the production control plan.

These must include complete tests of materials, dimensions and functionality. The dimensional test covers the complete measurements listed in the development documents. If the supply is made against a defined 3D data record, it is the responsibility of the supplier to come to an agreement with the quality control departments of Vorwerk or *of Eldisy*, in connection with the planning of the quantity in advance, and the dimensions to be tested.

## 7.10 Process Modifications

### 7.10.1 Product-related modifications:

For each planned process modification within a current series, there is an obligation to provide information to the Central Quality Control of Vorwerk or *the quality control department of Eldisy* or the Central Purchasing of Vorwerk / *Eldisy*. In these cases a fresh process of sampling and release is required.

Possible changes refer to the following cases:

- Upon use of new or modified replacement tools
- After improvement or conversion of existing tools or equipment [1]
- In case of planned relocation of products (Manufacturing location)
- In case of planned change of sources of raw materials.

In case of planned modification of products, recipes, raw materials, or the composition of raw materials.

These changes are to be communicated in writing to the central Quality Control of Vorwerk or *the quality control department of Eldisy* or the super-ordinate Central Purchasing of Vorwerk / *Eldisy* in good time **before** the conversion, so that the resulting measures to obtain a release can be matched together. The following information is to be made available in this process:

- Risk assessment of the process change.
- Evidence of the protection of the process flows
- Evidence to the extent that sub-suppliers are affected by the modification, and how their processes were protected

If the supplier carries out changes without the written consent of the Central Quality Control of Vorwerk and / or *the quality control department of Eldisy* or of the Central Purchasing of Vorwerk / *Eldisy*, if the product manufactured by him is already defective due to the resulting deviation from the target features the appropriate remedies are available to Vorwerk / *Eldisy*. In particular, it is the supplier is obliged to make good damages which are caused directly or indirectly by the modification, to the extent that he has acted not without fault.

[1] Improvement means the reconstruction or the modification of a tool or a machine, in order to raise its capacity or to increase its output or to change its existing function. This should not be confused with normal maintenance, repair or the replacement of parts etc, if due to this activity no changes are to be expected in the performance, and were introduced in accordance with repair verification methods. Conversion is defined as an activity which modifies the sequence in the product / process flow shown in relation to the process flow diagram (including the addition of a new process).
Source: PAPP, 4th Edition

# 8 Procedure for serial production which does not conform to the specifications (raw materials and semi-finished parts)

If in the framework of the incoming goods inspection and / or in the subsequent process steps, deviations are detected, or all points of the customer's specifications have not been fulfilled, the quality control authority of the location concerned of the Vorwerk Group and / or *the quality control department of Eldisy* clarifies internally, what the effects of the observed deviations are, and whether they can be tolerated. If this is possible, a waiver is to be created by the concerned quality control department.

If further deliveries occur on the basis of the waiver granted, the respective quality control department concerned clarifies to what extent additional requirements for the labelling and marking of the products are required. This is to be entered on the form "Waivers" under comments. The quality control department concerned in each case will fax the waiver to the supplier.

Each waiver is provided with a **"Waiver Number"**. This number is to be **clearly marked** on all accompanying documents / delivery notes for the period of validity of the waiver. In the event that additional labelling requirements exist (e.g. identification of parts), this will be entered on the form "Waiver" under comments.

Regardless of whether or not a waiver can be granted, a complaint is made to the supplier.

If the goods cannot be used, a decision is to be made as to whether they will be returned or whether sorting is required. In the latter case the supplier is to commission a service provider with the sorting. Vorwerk / *Eldisy* prefers a return to the supplier.

## 8.1 Corrective Measures

Vorwerk / *Eldisy* expects its suppliers to follow up on targets concerning important processes in the production and administration and that action plans for goal achievement are available. In the event of deviations from the specification, a BD-report on the supplier will be opened.

See attachment: Instructions for the processing of 8D-reports (Appendix till now valid only for Vorwerk articles)

Any complaint which is processed by a supplier using an 8D-Report will be evaluated by Vorwerk. This assessment becomes part of the regular supplier assessment.

In the case of complaints the supplier must within one working day submit an initial written reply (completion of the 8D-Report up to and including point 3: Presentation of immediate emergency measures) and after ten working days, a final opinion on the cause of the error, and corrective measures adopted. The documentation is to be undertaken on the 8D-form, which is generated by Vorwerk / *Eldisy* in case of complaints.

The time limits (24 h response times) may be curtailed depending on the seriousness of the situation, or at the request of Vorwerk / *Eldisy* or the final customer, to the extent that the curtailment is required and is reasonable to the supplier.
The deadline (10 working days for the submission of the full 8D-Report) can be extended only on grounds of well-founded interim reports.
Final reports of the failure analyses must be meaningful, coherent and complete. If within the timeframe set by mutual agreement or within a reasonable timeframe unilaterally set by Vorwerk / *Eldisy* the supplier is not successful in restoring the agreed quality, Vorwerk / *Eldisy* can require that the supplier commission the assistance third parties at the expense of the supplier. In the event that the supplier does not comply with this request within an appropriate period, Vorwerk / *Eldisy* is entitled to themselves commission the assistance of third parties at the cost of the supplier.

## 8.2 Re-worked Parts

If due to poor compliance with the documentation, specifications or the agreed function, parts are reworked by the supplier and are to be delivered to Vorwerk / *Eldisy*, a prior written release is required from the Central Purchasing of Vorwerk / *Eldisy* or the Central Quality Control department of Vorwerk or *the quality control department of Eldisy*. The delivery of goods can only be made after authorization by a written waiver and shall be marked accordingly and delivered as a separate delivery.

If the supplier is not in a position to supply reworked parts in the required quantity to Vorwerk / *Eldisy* within period agreed upon, or a reasonable period unilaterally set by Vorwerk / *Eldisy*, then Vorwerk / *Eldisy* will entrust an external service provider with the task of sorting or reworking the parts.

A waiver is exclusively limited to a specified quantity, a specified delivery or a defined time period and is not to be considered as a quality concession for further deliveries.

# 9 Escalation Procedure

The escalation procedure (level 0 to 3) will be applied, to ensure a smooth progress of projects and production processes, and to detect problems at an early stage. This process is divided into two phases:

1. Project Phase (Development, pre-serial production phase)
2. Serial Production Phase

The following is the objective of the escalation process:

- To find effective solutions to major problems with the supplier during the vendor / purchaser relationship
- To ensure a strategic balance between the interests of Vorwerk / *Eldisy* and the responsibility of the supplier
- To ensure that all concerned recognize their responsibility to find fast and effective solutions to problems

Basically, each stage of the escalation process runs as follows:

- Root cause analysis
- Problem Description
- Concurrence on the action plan for the elimination of the causes and accordingly, definition of responsibilities
- Implementation of the Action Plans
- Depending on the result of the action taken an escalation to the next level takes place, or the escalation process can downgraded.

Other rights which are available to Vorwerk / *Eldisy* according to the contractual agreements or the law agreed upon, shall apply in addition to this escalation procedure, and remain unaffected by it.

Vorwerk / *Eldisy* reserves the right to pass on all costs in the context of the escalation to the supplier. The concerned department at Vorwerk / *Eldisy* will decides in each individual instance, if this is the case.

**Level 0 (Normal state of processing):**

Phase 1:

- Quality issues in the project phase;
- 2 successive unsuccessful sampling attempts.

Phase 2:

- Voluntary declaration by the supplier himself.
- Quality problems with repeated delivery
- 8D- Report complaint evaluation marks of less than 7 (only applies in case of Vorwerk Articles)
- Exceeding the ppm-number agreed upon
- Supply bottleneck and / or impending delay in delivery

Due to the (quality) problems described above, the supplier is to be informed of the problem in writing by means of an 8D-Report. In the course of the complaint process the supplier has to initiate effective corrective measures and to document these in the 8D-report (see chapter 8ff: "Corrective Measures :).

**Level 1:**
In the event of non-compliance with the quality requirements as a result of the escalation level 0, the escalation level 1 is reached.
Until a stable supply quality is reached with respect to the quality problems, the supplier has to conduct a 100 % check for the error feature. The 100% check has to be documented for at least the next 3 subsequent deliveries. The deliveries must be marked accordingly.
In case of logistics problems, the next 3 deliveries are placed under special observation.
In any event, the supplier has to present his corrective measures to Vorwerk / *Eldisy* in the form of a quality discussion.

**Level 2: YELLOW**
In the event of non-compliance with the quality requirements as a result of the escalation level 1, the action plan at the supplier's location will be checked for effectiveness and suitability on the spot with a by a process audit at expenses to the supplier.. The supplier is responsible for the implementation of the resulting measures. He must report back regularly to Vorwerk / *Eldisy* on the implementation status.

**Level 3: RED**
In the event of non-compliance with the quality requirements as a result of the escalation level 2 a team from Vorwerk / *Eldisy* will analyse the problem on-site. The supplier must be ready to support the activities of the team. The senior management of the supplier must ensure compliance with the measures agreed upon.

, The supplier will be down-grated to the evaluation level "C". The consequence of this is that the supplier will not be nominated for the period of classification for any new projects, and a change of the supplier is aimed for.
The ratings are generally limited in duration. De-escalation takes place in case of proof of the sustainability of the measures taken. The corrective measures introduced can be checked at any time by Vorwerk / *Eldisy* in the manufacturing process at the premises of the supplier and / or his sub-suppliers.

In cases where it is justified, Vorwerk / *Eldisy* reserves the right to order a direct classification to level 3.

# 10 Supplier Evaluation

## 10.1 A: Vorwerk Group: Supplier Evaluation

All main suppliers of the Vorwerk Group will be evaluated at least once a year on the basis of the following criteria:

Quality
- Incoming goods inspection
- Complaints
- Audit

Delivery
- Meeting deadlines
- Meeting quantity stipulations
- Shipping Instructions

Price
- Price level
- Price behaviour

Service
- Flexibility
- Communication

| Overall level of fulfilment As a percentage | Assessment | Code of the Assessment |
|---|---|---|
| 90 to 100 | Fully capable of quality | A |
| 80 To under 90 | Conditionally capable of quality | B |
| Under 80 | Not capable of quality | C |

The suppliers will be notified in writing about the evaluation results in order to identify potential areas for improvement. Suppliers who receive an overall assessment < 80 % or receive < 80 % in a sub-criterion must within four weeks submit a written action plan to the Central Purchasing of Vorwerk. Vorwerk reserves the right to check the implementation and effectiveness of the measures by means of audits.

## *10.2 B: Eldisy: Supplier Notification*

*All main suppliers of the Eldisy group receive an evaluation once in six months, according to the following criteria, which applies as a notification and is not to be included in the annual evaluation by the Central Purchasing at Vorwerk / Eldisy:*

*Quality*
- *Number of complaints*
- *Number of open 8D-Reports*
- *ppm count*
- *Rejected Quantity*
- *(Audit)*
- *(Incoming goods inspection)*

*On-time delivery*
- *Meeting deadlines*
- *Meeting quantity stipulations*
- *Incidents with transportation surcharges*
- *Special status intimation*
- *Special status message to customers*
- *Shipping Instructions*

*Price*
- *(Price level)*
- *(Price behaviour)*

*Service*
- *(Flexibility)*
- *(Communication)*

| ***Overall level of fulfilment As a percentage*** | ***Assessment*** | ***Code of the Assessment*** |
|---|---|---|
| *91 to 100* | *Fully capable of quality* | *A* |
| *80 to 90* | *Conditionally capable of quality* | *B* |
| *Under 80* | *Not capable of quality* | *C* |

*The suppliers will be notified in writing about the evaluation results in order to identify potential areas for improvement. Suppliers who receive an overall assessment < 80 % or receive < 80 % in a sub-criterion must within four weeks submit a written action plan to the Purchasing department of Eldisy. Eldisy reserves the right to check the implementation and effectiveness of the measures by means of audits.*

## 11 Statutory Safety and Environmental Prescriptions

All bought-out materials used in the process of product creation must satisfy the respectively applicable statutory environmental and work-safety requirements.
This applies both to the country of manufacture as well as to the country of acceptance. Additional requirements according to information about undesirable or prohibited materials will be informed to the supplier additionally.
If hazardous substances are supplied the statutory provisions and government regulations regarding the labelling and the transportation of these substances must be complied with.
A procedure is to be adopted that ensures the compliance with all applicable statutory safety and environmental legislation. This also includes the requirements of the German closed substance cycle and waste management act. The proof is to be provided by appropriate certificates, or declarations of conformity.

## 12 Goods which require special handling

In case of goods which require special handling the supplier is obliged to send instructions for the use of his products to the respective ordering entity from Vorwerk / *Eldisy*, well in time, prior to the initial delivery. These instructions are essential for the maintenance of the quality of the goods and must also cover transportation and storage. They are determined by different influences.
Each change is to be sent in good time, before the re-commencement of deliveries.

The following properties are the minimum prerequisites, and should be expanded depending upon the goods in question:

- Shelf Life (Duration / expiry date, temperature, humidity, UV-resistance etc.)
- Storage Conditions (Storage space, storage containers, incompatible materials, ventilation etc.)
- Transport conditions
- Handling of residues
- Special requirements for supply of electricity.
- Avoidance of corrosive properties

### 12.1 Goods with limited shelf life

Products with limited shelf life will be accepted only if the following conditions are met:

- Indication of the expiry date on the containers and the delivery note
- Residual shelf life of at least 6 months
- Provision of an updated safety data sheet

An exception to this is a product-specific low shelf life.

## 13 Documents and records

The supplier manufactures tests and supplies in accordance with the latest valid documents. Documents of Vorwerk / *Eldisy* and their customers are to be treated as trade secrets.
Transfer of documents to third parties is generally not allowed and may, in exceptional cases take place only after prior written approval from the Central Purchasing of Vorwerk / *Eldisy*. The retention of documents and records is to be governed by written rules, and must be done in such a manner that the documents can be found easily in case of need. The retention period is 10 years. For documents with special characteristics an extended retention period of 15 years after EOP is required. After the expiry of the retention period documents are to be destroyed in such a manner that their reconstruction is no longer possible.
Vorwerk / *Eldisy* reserves the right to view all documents and records which come into existence in the context of products delivered or to be delivered to Vorwerk / *Eldisy*.

## 14 Ownership Identification

All operating resources which are required by suppliers for the purpose of fulfilment, and are in their possession, but are the property of Vorwerk / Eldisy, must be clearly and permanently marked as such.

## 15 Spare Parts

The Supplier undertakes, in continuation of with the delivery of serial production to Vorwerk / *Eldisy*, to manufacture spare parts of the ordered products for supply to the customers of Vorwerk / *Eldisy* and indeed on the basis of the agreed serial production prices taking into account the interim price developments. If nothing to the contrary is specified in the general terms and conditions of business / the purchase conditions / customer-specific requirements this obligation to supply exists for a period of 15 calendar years from the notification by Vorwerk / *Eldisy* on the cessation of the serial production.
The quality requirements and specifications of this QMR - Quality Management Guideline for Suppliers apply without any limitation to the supply of spare parts corresponding to the above stipulation. The spare parts and products must have been manufactured on the original tooling.

## 16 Warranty

The rules and regulations of the warranty are specified in the Terms and Conditions of Purchase of Vorwerk / *Eldisy*.

The Supplier warrants that his products listed in the order documents fully comply with quality requirements.
If Vorwerk / *Eldisy* or its partners incur expenses as a result of customer notifications with corresponding penalties (for example, GM: "Controlled Shipping Level 1 " ), which arise due to improper deliveries for which the supplier of these are responsible, these costs must be borne in full by the supplier.

## 17 Patents or other intellectual property rights

Should a patent or other patentable invention occur as a result of joint development of the supplier, Vorwerk / *Eldisy* is to be informed immediately. Vorwerk / *Eldisy* receives the sole patent/intellectual property right.

## 18 Severability Clause

Should individual provisions of this contract be invalid or unenforceable or after conclusion of the contract become invalid or unenforceable the effectiveness of the remaining contract remains unaffected by this. In the place of the invalid or unenforceable provision a valid and enforceable provision should be incorporated, the effects of which come closest to the commercial objective which the parties to the contract had intended with the invalid or unenforceable provision. The foregoing provisions shall apply mutatis mutandis to the case, where the contract is proved to be incomplete.

## 19 Other applicable rules and regulations

Basically, the following applies to all the rules and regulations listed below: It is always the most recent edition that is valid and / or in case of abolition of the rule/regulation then the follow-up regulation that is binding:

- DIN EN ISO 9001
- ISO TS 16949
- ISO 14001
- VDA 6.1 and the associated VDA reference handbooks
- QS 9000 and the associated reference handbooks
- Acceptance test certificates according to DIN EN 10204
- Container labels in accordance with 4902
- Enclosures Instructions for the implementation of initial sampling
- Enclosures Instructions for the processing of 8D Reports
- Matrix for "Instructions for the implementation of initial sampling"
- Terms and Conditions of Purchase of the Vorwerk Group / *Eldisy* (July 2010 and subsequent)

## 20 List of modifications

| Date | Index | Description of the change |
|---|---|---|
| 2003-01-15 | A | Replaces Quality Management Guideline for Suppliers, Edition B dated 2000-09-28 of M/s. Vorwerk & Son GmbH & Co. KG |
| 2004-03-24 | B | Chapter 8, "Ownership Identification" added<br>Chapter 9, "Supplier Evaluation" evaluation grid completed |
| 2005-12-29 | C | Chapter 4.7 "Re-qualification Testing" added |
| 2006-04-11 | D | Chapter 4.3 "Securing of processes which have not been enabled" revised<br>Chapter 4.4 "Test certificates" 3.1B changed to 3.1<br>Chapter 4.8 "Process modifications" added |
| 2009-04-01 | E | Complete revision of this QMR |
| 2013-02-01 | F | Removal of the "Vorwerk Dichtungssysteme GmbH & Co. KG".<br>Expansion of the QMR to cover M/s. "Eldisy".<br><br>Chapter 5, "Ethics Guideline" added<br>Chapter 6.2.1 "Process flow chart added<br>Chapter 9, "Escalation Procedure" added<br>Chapter 18: "Severability Clause" added<br><br>New structuring of the chapter. |
| 2015-08-01 | G | Release for the Vorwerk Group / Central Purchasing and Eldisy Purchasing by new management<br><br>Chapter 1.1 „A: Vorwerk Group: Scope“: Vorwerk Autotec de Mexico, Vorwerk Drivetec de Mexico, Vorwerk Drivetec Suzhou Ltd. added<br><br>Chapter 1.2 „B: Eldisy Group: Scope“:<br>„Mönsheim“ replaced by „Heinsheim“;<br>„…supporting function…“ replaced „Central function“<br><br>Chapter 3 „Quality M0anagement System“: …if the supplier has no ISO TS 16 949, he shall be regarded as a target…“new added.<br><br>Chapter 4 „Procurement Chain“: „The supplier undertakes to comply with the current customer requirements and to convey these demands to their |

| | | |
|---|---|---|
| | | supplier“ New added<br><br>Chapter 6.3 „Packaging and cleanliness“: Extension to delivery without damaging or compromising the quality.<br><br>Chapter 6.4.1 „Request“: Correction of the VDA submission and expansion to PPAP submission<br><br>Chapter 6.4.4 „Other Samples“: Delete reference to Chapter 4 ( VDA Volume 2)<br><br>Chapter 7.6 „Traceability“: Extension to „First in – First out<br><br>Chapter 7.8 „Procedure in case of safety-relevant components“: The download of the waiver-form sheet was deleted from the internet side of Vorwerk.<br><br>Chapter 7.9 „Re-qualification Testing“: Change the interval of „regularly“ in „annual“; „other intervals can be defined project specifically“ added<br><br>Chapter 9 „Escalation Procedure“:<br>Level 0: Note added to the normal state<br>Level 2: Extension to „fee for the ..“; Deletion of „Selfaudits“<br>Level 3: Rephrasing<br><br>Chapter 10.1 „A: Vorwerk Group: Supplier Evaluation“: Evaluation scheme adapted to VDA 6.3 (AB-Evaluation deleted; Adjusted percentages).<br><br>Chapter 13 „Documents and records“: Concretization of the storage periods: 15 Years after **EOP**<br><br>Chapter 19 „Other applicable rules and regulations“: ISO 14001 added |