

Management Manual

Rösler Oberflächentechnik GmbH

Management Manual

As part of our corporate due diligence with regard to the quality assurance of our products and environmental protection, this management manual defines our management systems for the areas of quality, environment and occupational health and safety.

It is put into effect by the signature of the managing directors.

The manual has been prepared by the appropriate management representative and will be amended as necessary.

It is valid at all German locations of Rösler Oberflächentechnik GmbH.

October 2022

The Managing Directors



Volker Löhnert



Stephan Rösler



Oliver Grün

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1. Company portrait, scope of application and user instructions

Dear Sir or Madam,

The name Rösler stands for trend-setting technologies in the field of mechanical surface processing. We offer our customers innovative solutions for customer-specific challenges.

User- and application-oriented solutions are our strength, ensuring our customers the highest level of quality and cost-effectiveness and thus providing decisive competitive advantages. They receive a comprehensive machine program for the two most important areas of surface processing from a single source. Based on the requirements of our customers, we develop concrete concepts in our development and test centers.

Rösler Oberflächentechnik GmbH was founded in 1933 by Richard Stephan Rösler in Dessendorf (Sudetenland) and is now in the third generation of family ownership. Currently, about 1,100 employees work at our German locations in Untermerzbach, Hausen and Bad Lippspringe. Rösler employs around 1,600 people worldwide. At the two main locations in Germany alone, the company's premises encompass over 225,000 square meters.

The Untermerzbach site



The Hausen site



The company's many years of above-average growth and expansion can be attributed to its love of innovation, its renowned quality standards and the commitment of its employees. The majority of these originate from the company's own training program and are always at the cutting edge thanks to continuous technical training.

Today, Rösler is the only surface processing supplier in the world to offer the two main technologies of vibratory grinding and blasting in combination with industrial washing systems and to develop and produce all components in-house.

Mass finishing systems from Rösler are the best-selling systems in the world thanks to their high level of cost-effectiveness and their time- and resource-conservative technology. They make real cost reductions possible and can be used wherever surface processing was performed manually or with a high degree of technical effort in the past.

In the AM Solutions division, Rösler offers comprehensive automated solutions for post-processing and surface finishing. Additive manufacturing has developed from strict application as a prototyping technology to a process used for the mass production of standard components. Post-processing and finishing on additive components continues to be a major challenge for manufacturers and a considerable cost factor. AM Solutions, a brand of the Rösler group, offers you post-process and finishing solutions for a wide range of tasks along the entire AM production chain. These solutions can be individually adapted to customer requirements, regardless of the type of material (metal, plastic, ceramic, glass, composite, etc.) or the 3D printing technology used to produce them.

Rösler shot blasting is characterized by intelligent design, innovative details and especially long-lived components. The Rösler shot blasting machine program includes systems for precise pressurized air blasting as well as blasting with highly efficient turbines.

As a system provider, we don't only look after you with regard to our processes and products. The qualification of your employees is also very important to us. With Rösler Academy, we pass on our technological knowledge to you in practice-oriented seminars so that you benefit from even greater product quality and higher system availability.

In recent years, the global development of important markets has created and secured new jobs at home and abroad. The success and stability of our company depend on the high flexibility and quality of our products and services.

Rösler Oberflächentechnik GmbH also has 16 branches and several representatives worldwide, ensuring that competent contact persons for our customers are always on site. This also guarantees prompt spare parts support.

This manual refers to all management systems – in particular **DIN EN ISO 9001** and **DIN EN ISO 50001** – which Rösler, as an innovative company, uses and implements as a matter of course.



1.1 Mission and vision

Our mission:

- ▶ We are an appealing, family-owned business in the field of surface technology
- ▶ "Finding a better way..." drives us forward.
- ▶ We put long-term and sustainable thinking ahead of the short-term pursuit of profit.

Our vision:

Customers want to buy from us because, together with our employees,

- ▶ we are the world's leading customer-oriented company,
- ▶ we deliver the best quality,
- ▶ we perform the best service,
- ▶ and we are more innovative.

**To live our mission and vision...
...we must say what we think,
...we must do what we say.
And what we do, we must also be.**

1.2 Management guidelines

Give orientation

- ▶ We are role models.
- ▶ We provide information quickly.

Live appreciation

- ▶ We create a positive atmosphere and solidarity.
- ▶ We are always open to questions, ideas, concerns and problems.
- ▶ We show appreciation.

Promote development and innovation

- ▶ We give our employees scope to make decisions and demand personal responsibility.
- ▶ We promote the development of professional and social competencies.

Ensure networking

- ▶ We ensure effective networking and communication within the company.

Initiate great processes

- ▶ We initiate seamless, resource-conserving processes.



2. Context of the organization

Over the past few decades, signs of constant competition have emerged in all markets for all sectors, so the challenge is to stand out from the competition with individual solutions and outstanding products. Efficient work and cost-conscious action are the prerequisites for the continued existence of our company. All tasks are solved pragmatically in the interest of the customer.

To achieve this, Rösler Oberflächentechnik GmbH conducts continuous research into the further development of its own products – of course in compliance with relevant standards, laws and specifications. Every employee has the obligation to announce recognizable and relevant changes in the market and to develop solutions to improve our positioning.

We consider it an obligation of all globally operating companies to inform themselves about foreseeable legal changes at an early stage and to react to them proactively. After all, the guidelines defined by governmental organizations ensure that fair and free trade is possible for all participating economic partners.



This also means that financial institutions can provide secure loans that guarantee sustained growth in keeping with our economic system.

Considering the demands made by our customers, often at an early stage – especially in the automotive and medical industries – as well as our self-imposed responsibility for people and the environment, Rösler Oberflächentechnik GmbH has decided to introduce several management systems conforming to standards and to have them certified accordingly:

2.1 Understanding the organization and its context

Rösler Oberflächentechnik GmbH operates a functioning quality management system based on **DIN EN ISO 9001 (QMS)**, which is continuously validated for compliance by TÜV Süd. In this context, all external and internal parameters that have an influence on the purpose, the strategic orientation and the capability of the defined system have been determined and are continuously monitored via annual evaluation of company-relevant influences. Rösler Oberflächentechnik GmbH sees itself as a provider of products and services that are primarily intended to meet customer requirements, while also fulfilling the conglomerate of applicable legal and regulatory requirements by means of a dynamic and proactive compliance management system. Customers, suppliers, financial service providers, authorities, insurers, competitors, consultants, employees, society, software service providers and government institutions have been identified as interested parties for the quality management system.

Rösler Oberflächentechnik GmbH has also decided – especially for the benefit of the environment – to implement an efficient and advanced energy management system in accordance with **DIN EN ISO 50001 (EnMS)**. This is also audited by TÜV Süd. In this context, all external and internal issues were identified that are relevant to the purpose of the energy management system and could impact the intended results to improve energy-related performance. Customers, energy suppliers, network providers, financial service providers, and government institutions are considered interested parties for energy management.

2.2 Understanding the needs and expectations of interested parties

For this purpose, both the interested parties relevant to the QM system and their requirements for the QM system were determined. To maintain and continuously improve the existing quality management system, processes, including their interactions, have been defined for all relevant areas, documented and can be viewed by all employees in the management procedural instructions, which are managed in an in-house, ISO-compliant document management system. These include both the inputs required to achieve the planned outcomes and criteria and procedures for monitoring and measurement. Required resources and their ongoing availability are ensured, responsibilities and authorities are defined, and risks and opportunities are taken into account when defining processes. Continuous evaluation of the processes ensures that they are not only efficient, but also subject to the continuous improvement process.

The same or similar considerations apply to the area of energy: The interested parties relevant to energy-related performance and the energy management system, as well as their requirements, have also been determined for this sub-area. By means of our energy management system, we are contributing to the realization of the overall ecological goals of the German government. It ensures that, on the one hand, access to the applicable legal requirements and other compliance issues is available. Based on this, we have determined the requirements to be met in terms of energy efficiency and energy consumption and how these are to be taken into account. The requirements are continuously reviewed and adjusted where necessary.

Ecological aspects are also a top priority, which our certified compliance with the German Water Resources Act makes clear.

We are an officially recognized known consignor (according to regulation EC 300/2008 and its implementing provision (EC 185/2010)). This means that we meet the requirements of the Luftfahrt-Bundesamt (Federal Aviation Authority) and are therefore entitled to dispatch "secure" air freight.

2.3 Defining the scope of application of the management systems

The Bad Staffelstein site, as headquarters, and Untermerzbach have been defined as the scope of application for all the management systems mentioned. By consistently implementing these requirements, we can ensure our competitiveness and economic success. It is guaranteed that Rösler Oberflächentechnik GmbH has complete authority to control within the defined scope of application.

2.4 Quality management system and its processes

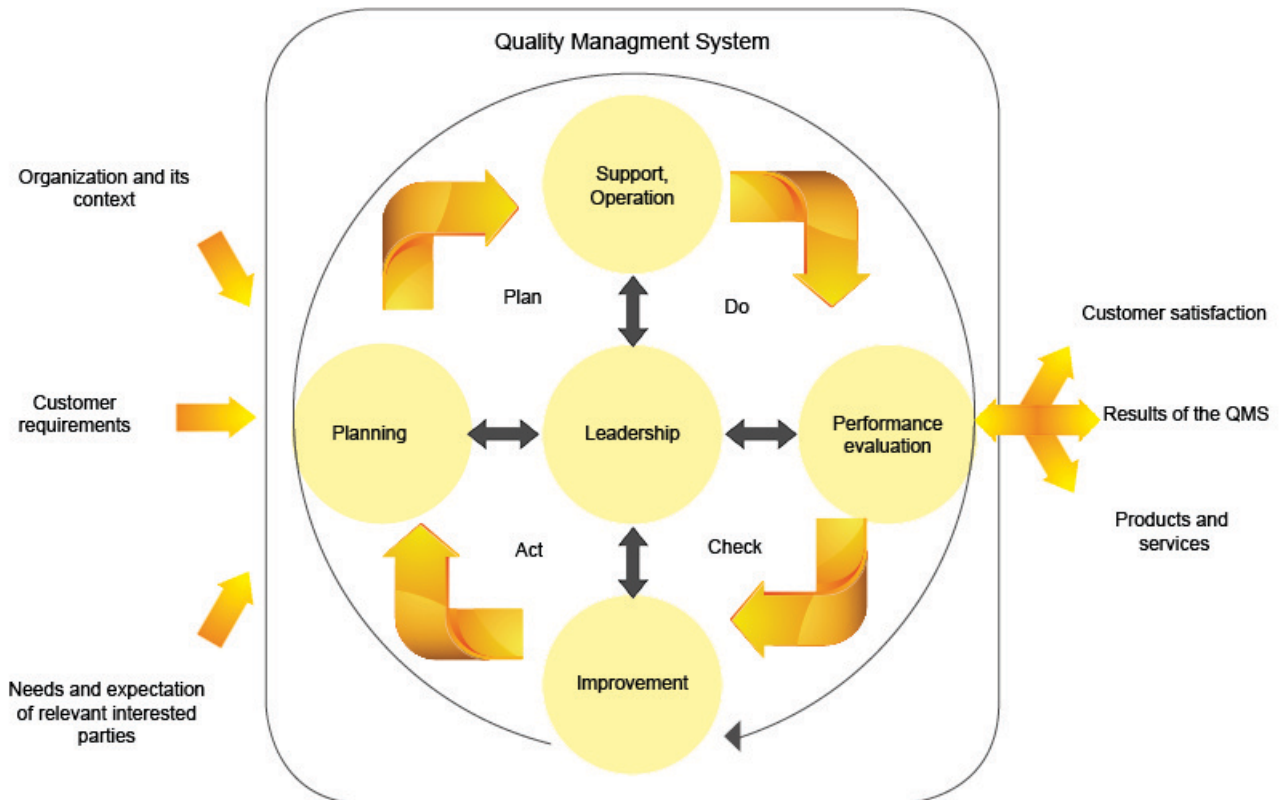
Based on the current edition of **DIN EN ISO 9001** as well as previous revisions, Rösler Oberflächentechnik GmbH operates according to a process-oriented approach with regard to their implementation.

With our dynamic change in size in recent years as well as restructuring due to the introduction of SAP, this methodology has proven to be extremely efficient and has consistently driven forward the continuous improvement process.

An essential basis for achieving our goals is the consistent implementation, maintenance and further development of the implemented QM system and the commitment of our employees. The quality of the services provided is the result of structured work and qualified personnel. The smooth interaction between all participants within the organization as well as clear definitions of the assigned tasks and responsibilities ensure that the requirements of the customers (input) achieve a maximum of satisfaction (output).

Specifically, the individual process tasks of the value chain can be subdivided into the following sub-areas:

- ▶ Management processes
- ▶ Resource management
- ▶ Core processes
- ▶ Measurement, analysis, improvement



2.5 Energy management system

In addition to the environmentally friendly disposal of waste, the topic of energy is an essential component when it comes to conserving natural resources. For this reason, Rösler Oberflächentechnik GmbH has decided to implement a certified energy management system based on **DIN EN ISO 50001**.

To reduce the total volume, analyses are carried out continuously on the basis of all consumption values, which are collected and stored centrally in one system and separated according to individual divisions. The resulting key figures are normalized in accordance with the standard requirements.

In accordance with standard **ISO 50001**, an annual report is prepared using defined analysis methods, which is coordinated and discussed with management. In order to ensure that the system remains viable in the long term and to drive the required continuous improvement process forward, short and medium-term investment plans are drawn up and energy-saving investments are determined and their implementation monitored and evaluated. In addition to purely physical energy-saving projects, all Rösler employees are trained annually in energy awareness.

2.6 Occupational health and safety

We recognize that the human being is an irreplaceable factor for the success of a company, so we attach great importance to occupational safety and security.

Due to the handling of hazardous materials and mechanical, ceramic and electrical systems, our employees are exposed to potential risks, which are countered with the appropriate means. Managing directors and the respective managing staff are responsible for compliance with the relevant legal requirements and are supported and advised by the responsible safety specialist and the defined safety officers.

To maintain and improve occupational safety, all employees are instructed in the subject on a regular basis – at least once a year. The follow-up of the implementation is monitored and documented accordingly.

In addition, internal meetings are held quarterly with the company doctor and management in accordance with the guidelines of the employers' liability insurance association.

To ensure that all legal requirements regarding the handling, storage and transport of hazardous substances are met, instructions are also provided and documented on an ongoing basis – Rösler Oberflächentechnik GmbH has state-of-the-art storage facilities.

The company provides all employees with free personal protective equipment depending on the type of activity and the resulting hazard potential, the use of which is monitored.

For control reasons, regular preventive medical check-ups are carried out.

The working environment of the employees is designed so that the hazard potential is minimized based on the workplace-related hazard assessments of the employers' liability insurance association. Accident statistics are recorded with the same intention and coordinated with the official institutions. If repetitions become apparent, countermeasures are initiated immediately.

All our employees have the necessary qualifications for their area as well as the necessary training, including certificates (e.g. crane, forklift ,and industrial truck certificates, etc.)

In procurement and investment measures, security aspects are given priority and we attach great importance to the topic of security (technical, organizational and personal protection measures) in the development and planning of our products. If any questions that arise cannot be answered immediately, competent contact persons are available at the responsible employers' liability insurance association or trade supervisory center.



2.7 Environment management

As a company certified according to **ISO 9001**, we also see it as our task to treat natural resources and the environment with care. Therefore, we assess and monitor the effects of our services and products with regard to their relevance to both the present and future environment.

We record, evaluate and document all significant effects on the environment and compile these in the annual environmental balance sheet. The collected data form the basis for the proof of the intended operation and are equally the basis for continuous improvements and/or corrective measures that may be required.

The packaging of finished products is carried out according to packaging regulations, with the recycling and recyclability of the materials used being important decision criteria.

Waste prevention is a top priority. Any waste produced must be separated at the appropriate supply depots, collected and passed on by the waste management representative to disposal companies for recycling or disposal.

In addition to waste that is not subject to monitoring and commercial waste that is similar to household waste, the company generates waste from production that particularly requires monitoring. We are subject to the waste balance sheet and the obligation to develop a concept, which are prepared by the waste management representative.

Furthermore, environmentally relevant data (e.g. company balance sheet with key figures) are statistically processed and used as a basis for continuous improvements.

3. Management

The management tasks are described in the actual main processes. These include all monitoring and control tasks of the management. In addition to operating business, strategic management is also part of this process.

Rösler Oberflächentechnik GmbH understands management processes to include not only actual company management but also processes relating to personnel planning / employee development, various target agreement processes, internal audits and aspects of financial planning.

The management demonstrates its commitment by being accountable for the effectiveness of its management systems through the preparation of annual reviews. It is ensured that the defined management policies with the set goals are in line with the strategic direction of the organization. To this end, appropriate business processes are integrated to promote the process-oriented approach as well as risk-based thinking. Senior management is committed to providing the necessary resources for the management systems.

In accordance with the requirements of **DIN EN ISO 9001 / DIN EN ISO 50001**, all employees are allocated in such a way that their qualifications are in line with their assigned activities. If there are any differences in this respect, or if they arise over the course of time, targeted employee development measures are implemented. All employees are trained on the importance of the effectiveness of the management systems as well as the need to meet the requirements for them. This ensures that the management systems achieve their intended results and promotes continuous improvement. Specific responsibilities and roles in the company have been defined for all areas and specific activities, and management provides them with the necessary support to implement the specifications from the management system.

The overriding goal is to meet or exceed all parameters in all divisions – regardless of the respective management system. The comparison or analysis of the attainment of objectives is carried out on the basis of defined documentation requirements.

3.1 Management and commitment

By deciding to implement the standards mentioned above, Rösler Oberflächentechnik GmbH has committed itself to providing all the necessary resources and to checking the effectiveness of all systems (management evaluation).

The quality and energy policy of Rösler Oberflächentechnik GmbH is designed to guarantee maximum customer satisfaction and efficient use of energy and ecological resources. Improving customer satisfaction is ensured on an ongoing basis through dynamic opportunity and risk assessment to ensure the conformity of products and services.

The management board is responsible for ensuring that all necessary permits for operating sites, systems and processes are in place and that the relevant official requirements are met.

A company-specific overview of the relevant laws and regulations has been drawn up, which is subject to constant review to ensure that it is up to date. The responsibilities for compliance with these regulations have been defined.

In addition, the management board shows its commitment to the implementation and improvement of management systems by means of communication to meet customer expectations and the definition of appropriate corporate policies/goals. To achieve this, all tasks, responsibilities and powers are defined and appropriate management representatives are appointed.

Accordingly, the energy policy as well as the energy targets related to it are also defined in such a way that they are compatible with the strategic orientation of the organization. Similarly, the requirements of the energy management system are integrated into the organization's business processes to ensure that the corresponding action plans can be implemented pragmatically and quickly and that the intended results can be achieved. Necessary resources are made available for this purpose. All employees have been made aware of how important it is for the energy management system to be effective.

A properly selected and forward-thinking energy team can achieve continuous improvements in energy-related performance. All management areas are consciously committed to implementation and have adopted an energy-efficient mindset. Energy-related performance is monitored using area-specific key performance indicators (EnPIs), which enables undesirable changes to be identified quickly. If this is the case, countermeasures are taken with suitable analyses and the resulting plans of action.

3.2 Customer orientation

Meeting the needs, demands and expectations of our customers and increasing customer satisfaction are key concerns for our company. For us, quality means that it's the customer who comes back, not the product. Assuring the quality of each work step ultimately guarantees the desired properties of the end product.

We look after our customers individually during inquiries, quotations, orders and otherwise. For us, providing an adequate service with adherence to schedules and delivery dates is a basic prerequisite for long-term cooperation.

In order to obtain feedback from our customers at regular intervals, we conduct relevant surveys on satisfaction as well as market analyses.

Our Rösler Academy offers tailored, topic-specific training and continuing education courses in the areas of mass finishing and shot blasting technology as well as additive manufacturing. You can find current offers on our homepage.



3.3 Defining and communicating the quality policy

The management board defines the quality policy, taking into account the typical characteristics of Rösler products, applications and markets.

The quality policy is defined in the management manual and is thus accessible to all employees and other interest groups on our homepage. This information is continuously available and is maintained appropriately. The aim is to achieve a zero-percent error rate in all business areas.

With the decision to implement **DIN EN ISO 9001**, Rösler Oberflächentechnik GmbH has committed itself to fulfill all requirements and to define the given policy as achievable. This is appropriate for the purpose and context of the organization. It supports the strategic orientation and provides a framework to set appropriate quality objectives. The quality policy is so defined that it includes a commitment to the continuous improvement of the QM system.

The objectives derived from corporate policy are set out in writing. These can be measured and are continuously monitored.

The following final strategic objectives have been defined for the individual divisions:

1. In the mass finishing division, market leadership will be further expanded.
2. In the shot blasting division, we want to be sustainably profitable and to become the benchmark as a quality leader.

To achieve this, it is essential to achieve the following goals:

- ▶ Create transparency in the company.
- ▶ Secure and further develop company expertise.
- ▶ Avoidance of human error.
- ▶ Sustainable treatment of the environment.
- ▶ Increase efficiency with process-oriented thinking.
- ▶ Continuously improve product quality (promotion of CIP).
- ▶ Constantly improve customer service and strive for maximum delivery reliability.
- ▶ Implement an open communication and cooperation policy.
- ▶ Flexibility in dealing with customer requests.
- ▶ Adherence to all compliance requirements.

3.4 Energy policy

The defined energy policy provides the general framework and path for implementing and maintaining the system and defines the basis for possible savings activities. In defining the policy, it was important that it be appropriate to the purpose of our organization and provide a framework for setting and reviewing energy goals.

All product development processes are constantly optimized and modernized with the aim of minimizing energy consumption. New input materials and production technologies are analyzed and evaluated from the point of view of energy efficiency.

In addition, all procurement, disposal and production processes specific to Rösler and the use of service providers, are handled under consideration of energy aspects.

The aim is to reduce energy consumption in the long term and to increase our energy efficiency in a continuous improvement process.

There is an obligation to ensure that

- ▶ the availability of information and necessary resources for the achievement of goals are ensured.
- ▶ all employees are integrated into the implementation and execution of the energy management system and responsibilities are defined.
- ▶ relevant obligations (compliance) and other requirements are met.
- ▶ energy efficiency, energy use and energy consumption are regularly assessed and energy-related performance is continuously improved.
- ▶ energy efficiency programs are properly introduced and implemented.
- ▶ energy-efficient products, services, and design-related activities are acquired that contribute to the improvement of energy-related performance.
- ▶ the results are measured and verified by means of regular internal and external audits.

3.5 Environmental policy

Rösler Oberflächentechnik GmbH follows the guidelines of **DIN EN ISO 14001** and seizes the opportunity to integrate the most important elements into the overall management and to have them certified in conjunction with **DIN EN ISO 9001**.

Furthermore, Rösler Oberflächentechnik GmbH is a company specialized, according to German Water Resources Act, for the installation, setup, maintenance and cleaning of plants with water-polluting liquids.

The management board ensures that all employees are trained in environmentally friendly conduct in accordance with the defined environmental guidelines and that the specified parameters are observed. Environmental aspects are documented in the corresponding process-related documentation.

3.6 Roles, responsibilities and powers in the organization

To ensure that the respective objectives specified by the management systems are implemented, it is essential that appropriate responsibilities are defined for the various fields of activity. Only in this way can we ensure that the processes deliver the intended results and that customer orientation is promoted within the organization.

All far-reaching strategic decisions are made on the basis of the consolidated information of the division managers by the three managing directors, Stephan Rösler, Volker Löhnert and Oliver Grün. In order to at least partially relieve the management level, most of the division managers have proxy powers.

Rösler Oberflächentechnik GmbH recognized early on that having in-house training is the best way to ensure qualified personnel trained to Rösler requirements. Accordingly, training managers are specifically defined for each area and are always available to provide advice and practical support to trainees throughout their professional careers.

To meet the requirements of the German Occupational Health and Safety Act, a sufficient number of safety representatives and first-aid workers have been appointed. In addition, a qualified specialist has been defined who is responsible for the "electrical" area in particular.

Rösler Oberflächentechnik GmbH also has representatives for data protection, energy management, environmental management, hazardous substances, and quality management at its disposal. They report directly to senior management on the performance of the relevant management systems and on opportunities for improvement. The same applies if changes to the systems are planned and/or implemented with a view to maintaining the integrity of the management systems.

In the area of energy management, the organization has assigned the following responsibilities and authorities to the energy management team:

- ▶ Realization, maintenance and further development of the implemented system.
- ▶ Ensuring compliance with the relevant standard requirements of **DIN EN ISO 50001**
- ▶ Continuous implementation of action plans for continuous improvement after release by the management.
- ▶ Regular reporting on the performance of the energy management system and the improvement of energy-related performance.
- ▶ Establishment of criteria and procedures to ensure effective functioning and control of the energy management system.

A CE/machine representative is defined to deal with the subject of CE labeling and associated compliance with relevant laws.

The waste management representative is responsible for monitoring how waste is handled in accordance with environmental law. The waste management representative systematically administers and archives the proofs required under environmental law (record books, proofs of disposal, transport permits, declarations of acceptance, certificates of the disposal companies). The waste management representative is required to constantly search for potential ways of avoiding waste.

According to the requirements of **DIN EN ISO 9001**, test equipment monitoring is regulated separately by those responsible. The primary task in this case is to ensure that all test equipment used is always ready for use and calibrated on the specified dates.

Rösler Oberflächentechnik GmbH is certified as a "Known Consignor". Compliance with the relevant requirements is monitored by a trained committee.

4. Planning

Rösler Oberflächentechnik GmbH regards the standard specifications as an aid in meeting global market requirements. This is the only way to ensure the continued long-term existence of the company. It is important to plan and structure the implementation of all systems employed.

4.1 Measures to deal with risks and opportunities

Business activity is always associated with uncertainties. The task of risk management is to systematically identify opportunities and risks and to evaluate them with regard to their potential impact on the company so that the intended results are achieved. This ensures that undesirable effects are prevented or at least reduced and desirable effects are enhanced.

External risks cannot be influenced because they are caused by outside conditions and environmental influences. These can include changes in the market situation, competition, and technological and legal regulations.

Internal risks are generated by the company itself through its decisions and actions. These can involve risks arising from the provision of services, risks in the financial sector, or risks arising from the management of the company. They can usually be influenced directly by decisions and measures.

Depending on their type, risks are classified according to their extent and their probability of occurrence. In order to ultimately keep the risk impact on the company as low as possible, Rösler Oberflächentechnik GmbH plans appropriate countermeasures in advance, thus securing a solid basis for surviving on the markets.

To achieve sustainability, risk assessment is carried out on an annual basis so that we can react to any changes in the environment. Should measures become necessary as a result of the analysis, they will be integrated into the quality management processes and their effectiveness in terms of the achievement of goals will be evaluated. They are selected such that they are proportional to the possible impact on the conformity of the products and services.

Since in recent years the number of relevant laws, guidelines and regulations has continuously increased, we have committed ourselves, in our own interest, to integrate compliance management into our company.

A collection of all relevant laws, local regulations and voluntary commitments exists for this purpose. This applies to development, production, storage and shipping as well as to our integrated management systems.



By considering risks and opportunities, we ensure that the intended results can also be achieved in the area of energy and that an improvement in energy-related performance can be achieved. This prevents or at least reduces undesirable effects. The top priority is to achieve continuous improvement in every respect.

Rösler Oberflächentechnik GmbH guarantees compliance with the valid European standards, directives and regulations for the marketing of machines and plants.

4.2 Quality objectives and planning to meet them

In order to implement the quality objectives, it is necessary to plan an appropriate QM system in which all necessary processes are documented. This is the task of the company management and all employees who interact with each other so that all relevant processes are included in the QM system in the necessary detail, and the respective measures and responsibilities are defined and documented in procedural, work, and test instructions. The quality objectives are in line with the quality policy, are measurable, take into account applicable requirements, ensure conformity of products and services, and contribute to enhancing customer satisfaction. They are monitored annually in a review and communicated to employees on the intranet. The goals are corrected where necessary. When planning the quality objectives, the corresponding responsibilities, necessary resources, the deadline and the requirements for evaluating the result are determined.

4.3 Planning changes

If changes are required, the purpose of the change and possible consequences must be taken into account. With regard to resources, attention is paid to their availability as well as to possible assignments or reassignments of responsibilities and authorities in terms of the integrity of the management systems. Among other things, this helps to identify and eliminate interface problems relating to measures that are to be implemented across departments. Yet planning, once carried out, does not represent a completed process. Rather, it is a foundation that requires ongoing reviews, improvements, and adjustments.

4.4 Energy planning

In all divisions, the technical status of the plants is exemplary, as the cost factor of "energy" was recognized early on. We have also done the necessary preparatory work with regard to documentation, as Rösler Oberflächentechnik GmbH is certified according to **DIN EN ISO 9001**.

The ultimate goal is to meet the “standard” as well as to act more energy-efficiently in the long term, to achieve corresponding economic profit and at the same time to relieve the environment. When planning the energy goals, measures for dealing with opportunities and risks as well as measures resulting from the processes of the energy management system are drawn into the calculation so that their effectiveness can be evaluated: For this purpose, all incoming data is analyzed so that decisions for investments can be made on this basis. Besides pure investment analysis, employees are trained at regular intervals to improve their awareness of energy consumption in the long term. The continuous communication of the energy policy by the specially formed energy team obliges all participants to act in accordance with the energy strategy.

Goals are set for all relevant functions and levels. These are of course in line with the defined energy policy. They are measurable and take account of any applicable requirements. Across all areas, the main consumers with a share greater than 5% of total energy consumption (SEUs) are taken into account and serve as a means to improve energy-related performance. The key figures formed for these SEUs are continuously monitored and updated, and the lessons learned from this are communicated to the individuals involved.

Established action plans include what to implement, who to implement, by when, and how to evaluate implementation.

4.5 Energy assessment

In its energy evaluation, Rösler Oberflächentechnik GmbH analyzes the energy use and consumption of all energy sources used. This involves comparing and evaluating both past and current consumption quantities. As already mentioned, the main consumers are verified in this context and relevant influencing parameters (external factors as well as the personnel influencing the SEUs) are determined for them. This provides the opportunity to determine opportunities to improve energy-related performance and to prioritize them. It also provides the basis to better estimate future energy use and consumption. The energy assessment is re-evaluated and updated accordingly at specified intervals and also as a result of major changes to plants, equipment, systems and/or processes. Records of this are kept and maintained.

4.6 Energy performance indicators

The EnPIs have been determined such that they are suitable for measuring and monitoring energy-related performance and provide evidence for improvement. Procedures for determining and updating the key figures are defined and maintained as documented information. Where relevant variables (internal/external) are known to have a significant impact on energy-related performance, this has been taken into account in determining the EnPIs. The key figures obtained are analyzed and validated on an ongoing basis.

4.7 Energy baseline

Taking into account the information from the energy-related assessments, an energy-related baseline has been established for all EnPIs. The absolute values obtained are normalized using suitable correlation influence quantities to make them comparable. If there are significant changes in operation and the normalized key figures are no longer comparable, a new baseline is selected. The underlying circumstances are documented in the management review.

4.8 Planning for energy data collection

All major activities that impact energy-related performance are identified and measured, monitored and analyzed at scheduled intervals. An overview – covering all measuring points appropriate to the organization – shows how, where and with what frequency data collection is carried out using which measuring equipment. It also specifies the accuracy of the measuring equipment. The energy review records all relevant variables of the SEUs, their energy consumption, operational criteria, statistical factors, and data specified in action plans. The energy data collection plan is reviewed and updated at regular intervals, at the latest annually.

5. Support

The management processes of Rösler Oberflächentechnik GmbH ensure that required resources – such as qualified personnel, adequate financial resources and the necessary equipment procured from external suppliers – are identified and made available. To reach our goals, we must create a working environment that enables every employee to face the daily challenges with commitment and motivation. We are firmly convinced that only high-quality products can be produced and the highest level of customer satisfaction achieved, provided that the framework conditions are optimal – in every respect.

5.1 Personnel

Rösler Oberflächentechnik GmbH has determined the human resources necessary for the effective implementation of its management systems and for the operation and control of its processes. To ensure that all employees perform the tasks assigned to them in accordance with the relevant quality and standards, their need for training must be determined on an ongoing basis or reported by the employees themselves. If necessary, specific training courses must be carried out to guarantee sufficient qualifications to carry out the assigned activities. Our Rösler Academy also makes a long-term contribution to this factor.



5.2 Infrastructure

Technical equipment, installations, buildings and transport facilities are regularly serviced. For this purpose, there are machine-specific maintenance plans documenting all quality- and energy-relevant machines and technical equipment together with the corresponding maintenance intervals. The inspection of environmentally and safety-relevant systems is carried out by experts / external service providers in accordance with the statutory provisions.

The conditions of the working environment and the furnishing of the workplaces are regularly monitored by insurance providers (BGV) in compliance with the relevant laws and regulations and stipulated accordingly. In addition, the occupational safety specialist, in cooperation with the responsible employers' liability insurance association and the company doctor, carries out risk assessments of the workplace as well as ergonomic assessments in accordance with the guidelines of the German Occupational Health and Safety Act and regularly instructs the safety officers on occupational safety issues.

It is also ensured in the area of hardware and software that only the latest state of the art is used. This ensures the smooth transfer of information both internally and externally. Only with the use of modern information and communication technology is it possible to act globally in the market.

5.3 Process environment

Through the process descriptions and the procedural instructions resulting from them, communicative interfaces within the defined, system-relevant processes are shown and the effectiveness of the implemented management systems is ensured.

The respective supervisor or management representative is responsible for qualitative issues.

He must ensure that

- ▶ all set quality targets are applied,
- ▶ the quality, energy and environmental goals are communicated, understood, observed,
- ▶ and implemented by all employees,
- ▶ the necessary framework conditions have been created,
- ▶ the specified processes are implemented,
- ▶ and improvements can be introduced.

The management representative is independent of all other departments and is a member of senior management. He shall submit reports at regular intervals and as required.

As an environment, Rösler Oberflächentechnik GmbH provides surroundings that take into account social, psychological and physical factors in an appropriate form. Basic parameters related to this are defined in our Code of Conduct, which is available for download to all interested parties on our homepage.

5.4 Resources for monitoring and measurement

To demonstrate conformity to our products and services with the defined requirements, it is essential to allocate resources to ensure valid and reliable monitoring and measurement results. These are selected to be suitable for the type of testing and to ensure ongoing suitability. Corresponding documentation on the suitability of the respective measuring, testing and auxiliary equipment is provided by the person responsible for monitoring the test equipment. All testing and measuring equipment is calibrated and/or verified against defined standards at certain intervals or before use. The users are trained on this procedure. To avoid confusion, all measuring, testing and auxiliary equipment is marked accordingly and stored in such a way that any changes in settings, damage or deterioration that would invalidate the calibration status and consequently the measurement results are protected. If measurements have been performed with measuring equipment that was unsuitable for use, it is ensured that verification of previous measurement results is possible.

5.5 Knowledge of the organization

Based on our many years of experience, we can guarantee that the necessary know-how to carry out the processes and to achieve conformity of the products and services is identified, maintained and made available to the required extent. Our modern document management system, innovative CAD systems and advanced software solutions serve as our knowledge repository. In the case of changing requirements, we fall back on the aforementioned knowledge and check whether additional knowledge is necessary for updating. In the case mentioned above, this knowledge is obtained through external trainings, best practice visits, relevant forums, etc. and fixed in the existing documentation.

5.6 Competence

We ensure that only suitable and competent personnel are used for all activities, taking into account the effectiveness of the management systems. If employees do not have the necessary know-how from the ground up, they are trained accordingly. The respective person authorized to approve the training is responsible for approving the training (if necessary in consultation with the management). Subsequently, the efficiency of the training courses is determined and documented. The participant retains the certificate of attendance, the training certificates or testimonials. A copy of the certificate of attendance is also archived at the Academy.

All employees are specifically trained based on the hazards at their workplace. Accordingly, a course on hazardous substances is held annually for the employees concerned on the basis of the relevant safety data sheets. In addition, all employees of Rösler Oberflächentechnik GmbH are given special training in the areas of environment and energy awareness.

A clearly structured personnel management system forms the basis for any management system. At Rösler Oberflächentechnik GmbH, this is divided into the areas of personnel planning, personnel development, personnel support, and recruitment.

Before making the initial selection of new employees, the relevant specialist department creates a requirements profile. On the basis of this profile, advertisements – both internal and external – are prepared and interested parties are then invited to personal interviews. The final selection of the new employees is made by a joint decision of the department heads with the personnel officer and, if necessary, with the management board as well. New employees are introduced to their fields of activity with the help of existing initial training plans. During this phase, the new employee is familiarized, among other things, with the existing management systems, the provisions of employers' liability insurance associations (BGV), operational procedures and local conditions. The initial training plan is signed by the supervisor and employee after the initial training is complete and stored in the personnel file.

In the area of energy management, the required competence has been determined for all persons whose activities have an impact on their energy-related performance and the energy management system. It is ensured that these persons also have access to appropriate education, training, skills or experience. If this is not the case, they are trained accordingly. Evidence of this is kept in the relevant personnel records.

5.7 Awareness

To ensure that new employees are aware of the management policies (quality and energy) and the resulting goals and are aware of their responsibilities in the overall system, they are trained upon joining the company. The same applies to the consequences of not meeting the requirements for the management system. Annual management briefings are held to raise employees' awareness on an ongoing basis.

5.8 Communication

For the area of internal and external communication, guidelines have also been defined as to what is communicated about, when, with whom and to whom. The respective department heads are responsible for internal communication. External communication is handled exclusively by the marketing department and/or after release by the management.

Everyone involved in the company has the opportunity to make comments or improvements to the implemented management systems (CIP management) and is encouraged to do so.

5.9 Documented information

All valid documents of Rösler Oberflächentechnik GmbH are documents controlled in accordance with **DIN EN ISO 9001** and labeled accordingly (type of document, scope of validity, responsibility, revision status, date and title). A suitable medium and format is selected for all documentation in accordance with the defined standard. All documents are subject to a corresponding approval workflow, which ensures their suitability and appropriateness.

Both our document management system and ERP system ensure that the documentation can be accessed at any time and any place. A user concept for distribution, access, retrievability and use is defined and communicated. The documentation is protected against loss and improper use by the application of efficient IT security facilities.

The information required for the effectiveness of the implemented management systems is described in the following documents:

- ▶ Management manual (MM):
This gives an overview of the objectives, the implementation and the interpretation of the standard requirements. It thus serves as an information base for our customers, employees and creditors.
- ▶ Procedural instructions (PI):
These describe the processes in our company in more detail using flow charts (management, leadership, core and support processes). They thus ensure optimum transparency and traceability. The descriptions include responsibilities for individual or sub-processes, transaction identification codes as well as references to documents and training materials.
- ▶ Additional documents (data sheets, work instructions, training documents, initial training plans, forms, maintenance plans):
These describe division-specific requirements and individual work processes and provide the basis for internal and external correspondence.

5.10. Control of documented information

In compliance with the standard, every document that serves the business purpose has a control line. Release takes place via a system-controlled workflow, which ensures a check with regard to suitability and appropriateness.

An interactive document management system ensures that the documented information required by the standard is always available when and where it is needed. This also ensures adequate protection against loss of confidentiality, improper use or loss of integrity.

The control includes the following information:

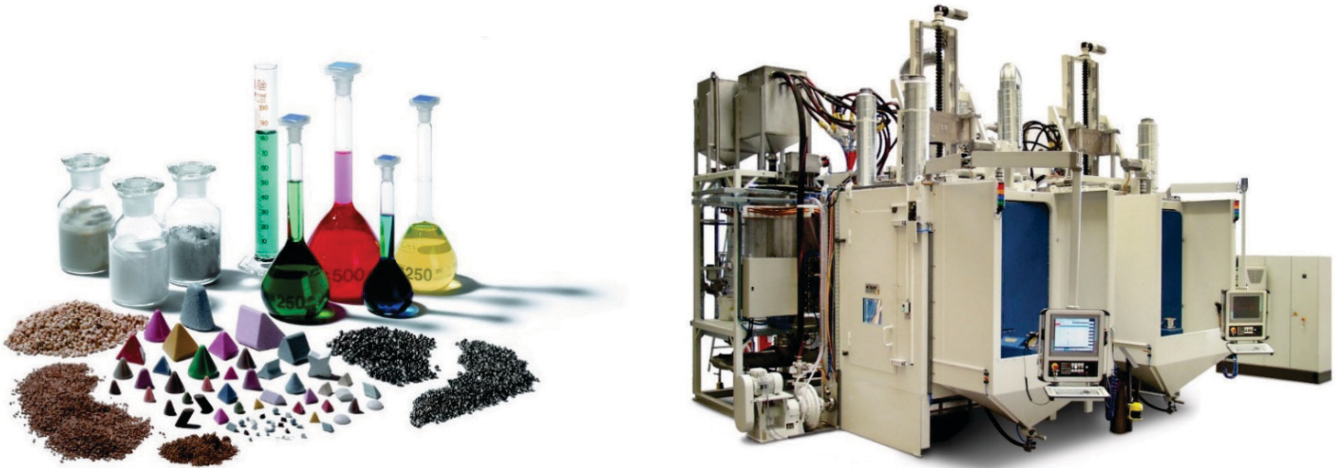
- ▶ Distribution, access, retrieval and use
- ▶ Filing/storage and preservation (including readability)
- ▶ Change monitoring
- ▶ Retention and disposition of further whereabouts

All records – which are always verifiable, e.g. the written record of test results – are to be presented in a legible and recognizable manner and archived for easy retrieval. Records relevant to product liability are kept for at least 10 years. In this context, the implemented SAP system is a means to an end and supports the maintenance of all data.

Document and record management describes exactly how internal documents (e.g. data sheets, work instructions, etc.) and external documents (delivery notes, release documents) are to be created, changed and stored in an audit-proof manner.

6. Operation

All requirements for the fulfillment of the provision of products and services that belong to the main field of activity of Rösler Oberflächentechnik GmbH are summarized in the value stream processes. They can be subdivided into the areas of planning and control, sales processes, development, procurement processes, quality assurance / test equipment monitoring, production processes, storage and shipping.



6.1 Operational planning and control

The planning and control of product realization ensures that the specified requirements are met during the execution of orders. Nevertheless, criteria are defined for both the processes and the acceptance of products and services. In addition, the resources required to achieve and demonstrate conformity with the product and service requirements are determined. Documentation in this regard is determined, maintained and kept in accordance with standard requirements. Planned changes are monitored and the consequences of unintended changes are assessed and appropriate action taken where necessary. If outsourced processes should arise, these are to be handled separately.

The contribution of each individual employee to the quality assurance of the products and services is the only way to ensure that only error-free work results will be passed on to the next person involved in the process or finally to the customer.

Basic and master data administration therefore defines exactly how data – e.g. entering, creating, changing and releasing parts lists, work plans and material, customer and personnel master data – is to be handled. All documents must be checked by the person responsible before release and kept up to date.

Before preparing a quotation or accepting an order, it must be ensured that the desired quality features of the product are fully met (feasibility and contract review). The work processes required in production and assembly must be planned, official and legal requirements complied with and the time required determined.

The following chapters refer to all quality-relevant product and service processes carried out in the company and at the site of the customer.

All processes related to the energy management system are planned, implemented and controlled accordingly. Criteria for maintaining effective operation and maintenance are defined so as to exclude significant deviations in energy-related performance. These are known to the assigned maintenance personnel. Corresponding maintenance records are maintained and retained in accordance with internal requirements and/or legally applicable regulations. Should planned changes become necessary and/or unplanned changes occur, these are evaluated according to their impact on the energy-related performance and, if necessary, measures are taken.

6.2 Requirements for products and services

Sales- or customer-related processes define which requirements must be met in order to meet the requirements specified:

- ▶ Determining customer requirements / energetic consultation
- ▶ Creating, discussing and approving quotations
- ▶ Check and enter orders
- ▶ Tracking deadlines
- ▶ Designing and optimizing products
- ▶ Arranging and providing material
- ▶ Planning and controlling production
- ▶ Product control
- ▶ Shipping planning
- ▶ Commissioning
- ▶ Packaging and shipping
- ▶ After-sales service



It has been defined that communication with the customer includes both all information about the required products and services, the handling of inquiries, contracts or orders, including any changes. How to deal with customer feedback and any complaints is also defined. Established process flows for the control of customer property and the implementation of special requirements for emergency measures are defined.

When defining the requirements for products and services, any legal and regulatory requirements must be taken into account. The main focus here is on the EC Machinery Directive and more extensive CE compliance requirements. However, necessities gained through experience must also be taken into account during product realization. Customer commitments (offers/orders) may only be issued after successful testing.

Before a product is delivered and/or a service is performed, the customer's specifications, including the intended use, are checked. This also includes requirements and compliance specifications not specified by the customer.

Contractual deviations should be clarified with the customer in advance. If the customer agrees to them, but not in writing, Rösler Oberflächentechnik GmbH keeps appropriate documentation. The specifications regarding retention periods shall be complied with.

In the event of changes during product realization, the relevant documentation is continuously adapted and the responsible persons are made aware of the new requirements. A change management system has been integrated for this purpose.

6.3 Design

When designing new, modified or renovated plants/sites, facilities, systems and energy-related processes, opportunities for improvement are taken into account via the energy-related performance in relation to the planned or expected useful life.

6.4 Development of products and services

Of course, Rösler Oberflächentechnik GmbH has also established a solid and market-driven development process and is constantly driving this forward with regard to both products and services.

New projects or optimizations of existing products and systems can be initiated on the basis of market observations or concrete customer requirements. In the case of development activities, their type, duration and scope must be clearly delineated. Processing is carried out according to clearly predefined milestones (project phases including applicable reviews). For this purpose, the desired product requirements and functional properties are determined in advance and the corresponding procedures are defined.

These are summarized in project plans and, once a set milestone has been reached, checked for goal fulfillment and feasibility (development verification and validation).



During the entire project phase, an ongoing assessment is made as to whether the corresponding quality requirements have been met, whether approval requirements for plants and processes can be identified and implemented at an early stage, and whether cost/performance/risk relationships need to be analyzed. With new developments and first-time products, the project manager checks the existence of legal requirements at the start of development and takes them into account if necessary. As a matter of principle, responsibilities and authorities are defined for each milestone, internal and external resource requirements are determined, and interfaces of all parties involved are known. If necessary, customers, users and other relevant interested parties are included in the development process to clarify follow-up requirements.

All development results are subsequently documented as formulas, drawings and application guidelines. All employees involved in the projects are constantly kept up to date.

To prevent quality, energy and environmental problems, a risk analysis (FMEA, energy assessment, environmental risk analysis, hazard and accident risk analysis) is carried out during the development of new processes. This allows deviations in the production process as well as accident, incident and emergency risks to be identified proactively and to limit their impact.

Functional and performance requirements – including in particular information obtained from previous, comparable development activities – and all compliance requirements are taken into account as development inputs. The same applies, of course, to possible consequences of errors. Importantly, inputs for development purposes must be appropriate, complete, and unambiguously clarified in advance by those responsible. Conflicting inputs are corrected immediately.

For each milestone, the results to be achieved should be defined by the respective project teams and their achievement verified upon completion. Subsequent verification and validation activities aim to ensure the intended use or application. Necessary measures to correct problems that occur during the development phase are assigned responsibilities and deadlines, and their implementation is monitored. The corresponding documentation is provided in accordance with the standards.

Regarding the development results, care is taken to ensure that the requirements contained in the inputs and the subsequent processes are suitable for the provision of products and services. Requirements for monitoring and measurement are documented where applicable, as are acceptance criteria. The same applies to the characteristics of products and services that are essential to their intended purpose and their safe and proper provision.

If changes occur during the development phase, the scope is identified, reviewed, and controlled so that there is no adverse impact on conformance to the essential requirements. It is therefore specified that only authorized persons may effect the release.

6.5 Control of externally provided processes, products and services

If purchased parts are necessary for the manufacture of our products, they may only be used if they meet the quality requirements with regard to type, material, design, grade, etc. The desired quality of our products must be guaranteed under all circumstances. Appropriate control measures are defined if products and services are provided by external suppliers for integration into the organization's own production or for customers on a contract basis. It is ensured that processes in this regard remain under the control of the integrated management system. Measures are defined on how external providers and intended outcomes are managed. Potential effects of externally provided processes, products and services are examined in advance with regard to compliance requirements and other requirements.

Orders may only be placed by the purchasing department via approved suppliers. These are summarized in a corresponding list.

The acceptance of a new product or a new supplier is decided upon by the designated responsible bodies on the basis of the following criteria:

- ▶ proven supplier for other products
- ▶ positive initial sampling
- ▶ Assessment of the supplier's quality management system

All products are clearly described by specifications. Taking quality and reliability into account, the suppliers are regularly subjected to a supplier evaluation and informed of the results with the aim of ensuring continuous positive further development and cooperation in the common interest. Standard-compliant documentation shall be maintained on an ongoing basis.

Unreliable suppliers are removed from the list. In the case of serious quality problems, an unscheduled evaluation can also be carried out. The external supplier should be provided with the following information regarding the processes, products and services to be provided:

- ▶ The scope and nature of the service to be provided, subject to approval
- ▶ The methodology and equipment of the processes to be performed
- ▶ Release criteria for acceptance
- ▶ The required competence and qualification of the persons to be employed
- ▶ Modalities for cooperation
- ▶ Monitoring and control requirements
- ▶ Verification and validation activities by Rösler and/or third parties

Purchasing continues to be responsible for the procurement of capital goods. This includes an energy assessment, which under identical conditions is decisive for the purchase. In addition, the suppliers and their subcontractors have committed themselves to the responsible use of energy and natural resources as well as to social responsibility in the manufacture of the products obtained and within the framework of the processes. This applies to the entire supply chain, from raw material selection and energy-efficient and environmentally friendly production and handling to packaging, transport, use and disposal.

6.6 Production and service provision

Documented information is available for the products to be produced, the services to be rendered or the activities to be performed as well as for the results to be achieved:

For standard orders, formulas, parts lists, production specifications and inspection plans exist for the product to be manufactured or the processing to be carried out. Our solid production planning ensures the availability and application of appropriate resources for monitoring and measurement. This is used at appropriate stages to validate process or outcome control criteria and acceptance criteria.

If customer requirements cannot be met with standard products from a quality standpoint, the responsible departments carry out the necessary tests or designs and specify the product or processing method with the test specifications.

For each item that goes through production, a project plan is created in SAP in which the required materials are defined in addition to the individual production and test steps. Production manufactures all products in compliance with the specifications of the valid production documents. By setting and checking the production facilities, a correct process sequence is ensured. In general, a suitable infrastructure and environment for the

implementation of defined processes is ensured by competent and qualified personnel. Measures to avoid human error are nevertheless indispensable and in place.

All purchased goods, semi-finished products and finished products are stored exclusively at the designated locations, as this is the only way to exclude damage or deterioration in quality. Systematic traceability via the corresponding locations is guaranteed.

The majority of all semi-finished and finished products are stored in a state-of-the-art, automated high-bay warehouse. This makes it possible to guarantee fast storage and retrieval times. The aim of internal logistics is to provide the required goods – both for internal production and for shipment – consistently in the right quantity, at the right time and in the right quality.

Deliveries are made, among other things, by the company's own fleet of vehicles. Order-based, daily updated route planning and scheduled maintenance of the vehicles ensure on-time delivery to the customer.

Due to the long-standing cooperation with reliable forwarding agents, deliveries via air and sea freight are also not a challenge for Rösler Oberflächentechnik GmbH. The error rate for external forwarding agents has always been less than 1%. The reliability of our partners is a matter of great concern to us.

The delivery of products which are banned and therefore faulty or not tested must be excluded as a matter of course. Appropriate precautions have been taken to ensure this – both in terms of process and system technology.

To prevent a recurrence of an error, it is necessary to trace it back to its origin, to verify it and to initiate sustainable countermeasures.



All products and associated documents are labeled in all production areas of Rösler Oberflächentechnik GmbH, starting with incoming goods, through production, storage and delivery so that clear identification, assignment, test status and the required traceability is provided. These measures ensure the traceability of the parts at all times. If documented information is required for clear traceability, it will be retained in accordance with applicable retention periods.

Products / materials that are the property of the customer are treated as purchased products with respect to testing, storage, identification, etc. The customer's documents are generally treated confidentially. The obligation to exercise due care and proper labeling are also paramount in this context.

In the test centers / service departments of Rösler Oberflächentechnik GmbH, products provided by the customer are processed as part of large-scale tests, subcontracting and repairs / maintenance. These are generally subject to a general incoming inspection. The customer is informed immediately of any defects found. During order processing, the customer's property is clearly identified, protected from damage and stored separately. Liability issues and quality criteria are taken into account by the respective responsible parties in the course of the contract review.

In the event of loss or damage or property of the customer or of an external supplier otherwise found to be unusable, information is passed on without delay.

Rösler Oberflächentechnik GmbH ensures that, in the course of production and service provision, the results are obtained to the extent necessary to ensure conformity with the requirements.

When determining the scope of activities required after delivery, Rösler Oberflächentechnik GmbH ensures that

- ▶ Legal and regulatory requirements
- ▶ Possible undesirable consequences associated with the products and services placed on the market
- ▶ The type, use and intended service life
- ▶ Customer requirements
- ▶ Feedback from customers

are taken into account.

Rösler Oberflächentechnik GmbH has a system-controlled quality assurance in the field of mechanical engineering, focusing on the following objectives:

- ▶ Sustainable reduction of quality and warranty costs
- ▶ Increasing the quality of our products (keyword: customer satisfaction)
- ▶ Maximization of reaction speed in case of complaints
- ▶ Execution of targeted evaluations to determine the causes of errors

The term “constructive quality assurance” refers to the fact that the required quality of the product cannot be produced retrospectively by any tests; instead, the quality of the producer is decisive. This means that preventive measures, such as supplier audits and/or internal advanced training, are necessary in this context. These are actively carried out and continuously monitored by the quality assurance department.



The aim of quality assurance is the implementation of analytical quality assurance for testing and evaluating the quality of individual test objects while maintaining statistical methods. However, this tool is not intended to function as a controlling body, but rather as a further development of the continuous improvement process. Currently, all parts that are manufactured internally are subject to “worker self-monitoring”.

This means that each part is checked against drawing specifications by the respective finisher at the end of the work process. The testing of purchased goods, semi-finished products and finished products is regulated in a comprehensive test plan and test instructions. This ensures that the product in question meets the specified quality requirements. Tested and approved or blocked products or batches are clearly identified.

In addition to mechanical engineering, the areas of compound and abrasive production have separate inspection points. This also guarantees that during all phases – from the purchase of

the raw materials to the finished end product – conformity is monitored to the desired requirements. Should deviations occur, procedures are also implemented to prevent further processing or delivery to the customer.

Records of testing and measurement activities performed are maintained and retained.

All test equipment used for the quality inspection of products in incoming inspection, intermediate inspection, final inspection, maintenance and service is subject to regular internal or external monitoring. They are calibrated at specified intervals in accordance with applicable standards. If the specified measured values are beyond the tolerance limits, the test equipment is repaired and/or replaced.

New test equipment is procured by the respective department following coordination with the test equipment monitoring office by means of an order request via the purchasing department.

Before the first use, an input calibration and labeling is performed. The test equipment is added to the test equipment list and the test equipment sheet is also created.

Each user of test equipment is responsible for handling it carefully and in accordance with regulations.

6.7 Approvals of products and services

To offer our customers the greatest possible security and to minimize the product liability risk, all approval processes are monitored by system technology. This applies to all stages of the entire value chain, starting with the development process, through initial sampling, design, production and testing procedures, to delivery.

Approvals are only granted when an authorized person has satisfied himself of their admissibility. Proof of compliance with the acceptance criteria is documented. Combining internal regulations regarding responsibilities with the SAP system ensures maximum process reliability and minimizes the risk of errors.

6.8 Control of non-conforming results

This section describes the principles for handling detected deviations (defective products) from the specified quality requirements as well as appropriate corrective measures and documents them in compliance with the standard.

This entails detecting defects at an early stage and eliminating them sustainably, as well as responding flexibly to changing market situations and customer requirements.

If defects should arise during the monitoring and measurement of products, these are identified immediately after detection and stored in defined restricted areas until the final usage decision.

The further use depends on the extent of the deviation. This is decided exclusively by authorized persons (rectification, scrapping, rejection, special approval). Services that have been rectified must be verified again.

If product faults are found after delivery or during use, or if defective services are discovered, measures must be taken to remedy the effects of the defect. Delivery of defective products is excluded by means of suitable locks in the system.

Should non-conformities nevertheless occur after delivery or during or after the provision of services, it is specified that suitable measures are to be taken. These may include corrections, blocks, returns or suspension of the provision of products and services. In these cases, the customer is notified immediately and an acceptance with special release by an authorized person may be requested.

7. Performance evaluation

The continuous performance improvement of our management systems requires regular monitoring, measurement and analysis of all individual processes. This is necessary if we are to describe the product requirements and demonstrate the conformity of the management systems and continuously improve their effectiveness.

7.1 Monitoring, measurement, analysis and evaluation

We ensure product quality by planning the necessary tests according to defined criteria (what, when and how), carrying out the tests on the produced parts, monitoring assemblies and systems using checklists, removing defective products from production and forwarding them to the point of origin. Our process-oriented production and process structures are helpful in this respect. We have also defined measurable targets in the production divisions, which we analyze for compliance.

All tests and measurements from incoming goods through production to acceptance are carried out by expert employees with the aid of appropriately documented and constantly updated procedural instructions.



Process quality is ensured by collecting all data in our ERP system and evaluating them statistically. If unexpected deviations should arise, processes for their elimination are integrated. This ensures that all internal processes are checked for efficiency and – if necessary – constantly optimized for the benefit of our customers.

All key figures obtained are summarized once a year in a management report, new targets are set and then evaluated, and measures are taken in the event of deviations.

The periodic measurement of customer satisfaction allows us to always receive feedback on the quality of our products and services. In this context, we offer our customers the opportunity to participate in the aspired continuous improvement process (CIP) themselves.

To learn from past experience, the results from monitoring and measurement are continuously analyzed and evaluated. The resulting findings are taken into account in the conformity assessment of products, customer satisfaction analysis, the effectiveness of the quality management system, opportunity and risk management, the performance of external suppliers, and the need for potential improvement opportunities.

In the area of energy management, the evaluation of energy-related performance and the energy management system specify which key characteristics must be monitored and measured. These include the defined key figures, operation of the SEUs, a target/actual comparison in energy consumption, and effectiveness monitoring of the defined plans of action. The methods for monitoring, measurement, analysis and evaluation are determined so as to achieve sustainably valid results. The same applies to the points in time for carrying out such monitoring and measurement and the findings obtained from them. The energy-related performance and the effectiveness of the energy management system are evaluated on an ongoing basis. Evidence of improvement in energy-related performance is provided by comparing standardized EnPI values. Significant deviations in energy-related performance are addressed immediately. Compliance with legal and other requirements relating to energy efficiency, energy use and energy consumption is checked at regular intervals. Standard-compliant documentation is ensured.

7.2 Internal audit

Annual internal audits are an integral part of our management systems. With the participation of as many departments and employees as possible, all normative requirements are checked for compliance and implementation, taking economic, qualitative, energy-related and environmentally relevant parameters into account.

The respective management representative is responsible for the preparation of the audit program (planning of the audit, methodology, reporting, definition of measures) and its implementation. The auditors are highly knowledgeable about the management systems implemented and have corresponding expertise in the individual specialist areas. The heads of the audit teams have no direct responsibility for the areas to be audited.

On the basis of the audit reports, measures are defined in cooperation with the management board and their implementation monitored by the specialist department. In this regard, it must be ensured that the responsible persons implement the defined corrective measures without unjustified delays.

If unexpected problems arise or defects are repeated, the responsible management representative can schedule unscheduled audits.

In addition to cross-process audits, department head meetings, work safety meetings and a number of other quality meetings are held. As proof of the realization of the audit program and the audit results, documented information is provided and kept accordingly.

All internal audits are designed to improve energy performance and maintain the implemented system. The audit questions are designed to meet the requirements of the organization, the standard and the management policy. For each audit, specifications are made regarding frequency, methodology, responsibility, requirements and scope. It is ensured that the assessment is carried out exclusively by objective and impartial auditors.

7.3 Management evaluation

The management report serves as the basis for evaluating the results of the objectives set out in the manual and assesses the effectiveness, suitability and adequacy of the systems. It also takes into account changes caused by internal and external influencing parameters that affect the QM/EnM system.

At least once a year, an overall management evaluation is carried out at management level, which includes an annual review, including identifiable trends. Based on these findings, measures are derived for the following year, including goal alignments and decisions on needs for improvement and resources required.

Basic contents of the QM review include:

- ▶ Feedback on customer satisfaction and relevant, interested parties
- ▶ Degree of fulfillment of departmental or product-specific quality objectives
- ▶ Process performance and product and service conformity
- ▶ Non-conformities and corrective measures
- ▶ General results from measurement and monitoring activities
- ▶ Audit results
- ▶ Supplier assessments
- ▶ Measures for dealing with opportunities and risks
- ▶ Potential for improvement
- ▶ Need for change
- ▶ Need for resources

Basic contents of the energy review include:

- ▶ Status of measures from previous management reviews
- ▶ Changes in external and internal issues and the associated risks and opportunities
- ▶ Information on the performance of the energy management system
- ▶ Opportunities for improvement
- ▶ Energy policy

The management representative reports on the status of the management system via regular communication in the individual divisions. The aim in particular is to create close links between day-to-day business and its development with the management systems.

As the basis for energy resource planning, for tracking progress in effectiveness and for monitoring consumption, specific energy indicators are created and continuously further developed. These are also used for internal benchmarking, comparison with competitors, other sectors and exchange with other users.

8. Improvement

The rapid detection and implementation of possible improvement potentials is an essential component of our systems. This is where our company expertise comes into play, which we are constantly developing further.

To enable us to implement the aforementioned success factors, we expect an appropriate degree of commitment from our employees as well as active participation in the continuous improvement of the systems. Suggestions for improvement and the discovery of inadequacies and risks lead to new ideas for goals, corrections and preventive measures. These are the lifeblood of continuous improvement.

In addition to the goals, the so-called corrective and preventive measures are essential tools to make the organization more efficient, better and safer.

8.1 Non-conformity and corrective measures

To meet the expectations and requirements of our customers, we constantly strive to evaluate and further develop the efficiency of all processes and procedures. Measures have been taken to monitor this so that any consequences can be quickly addressed. The issue of sustainability in particular is of primary importance in eliminating causes. An in-depth analysis, including any comparable non-conformities, is essential. Management is committed to taking any action necessary to rectify the situation. If new opportunities and risks arise as a result, these are taken into account in the overall planning. The same applies to changes to the quality management system. An effectiveness evaluation in the follow-up is a matter of course for us. Records are kept of all measures taken.

8.2 Continuous improvement

All quality-relevant data is collected and consolidated according to defined procedures. For the continuous improvement of products, processes and management systems, regular meetings (shop-floor management) take place, in which the further procedure is discussed and corresponding specifications are made. These encompass qualitative, energetic, ecological and economic aspects. Of course, findings from previous analyses and assessments are taken into account when defining optimization potential, as are the results from the management review.

Conclusion

With the specifications made in this management manual, we are sure that we will be able to satisfy your wishes for many years to come.

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