

GUIDELINES FOR SUPPLIERS



PERFECTLY IN TUNE WITH YOU.



THE COMPANY WOLF

SUSTAINABILITY IS OUR ULTIMATE GOAL

WOLF Group is one of the leading manufacturers of air conditioning and heating products with about 1.750 employees and an annual turnover of € 362 million. The company is based in Bavaria between Munich and Ratisbon in the midst of the famous hop region "Hallertau". In 1963 the air conditioning and ventilation sectors were the beginning of a rapid development to the top of the European building services. Opera houses, airports and office buildings are equipped with air conditioning and ventilation devices of WOLF. For example the Allianz Arena in Munich, the Kremlin in Moscow, buildings of the German government in Berlin up to the hotel of the new exhibition centre in Abu Dhabi.

In the early 1980s WOLF introduced the production of heating technology. This access marks an important milestone in the successful history of WOLF. WOLF's ecological, economical and energy saving heating products established rapidly to brand-name products with high quality. Test winners at the German "Stiftung Warentest" confirm this in an impressive way. The basis therefore is development and service at the highest stage - hence WOLF was elected in 2011 to the category winner "excellent assembly" in the competition "Factory of the Year" of the German industry.

The heating and air conditioning technologies of WOLF are designed to serve humans and their environment. As a system provider WOLF presents its products in the sectors heating, air conditioning, ventilation and solar, as well as block heat and power plants according to the slogan:

Energy saving included. Sales offices throughout Germany and agencies all over the world grant a close relationship to our customers.



Our suppliers have a significant share in WOLF's positive development. The cooperative partnership and the application of efficient Supply Chain Processes is to be expanded further on, to secure long term success together. The WOLF solution for integrated supplier collaboration was awarded with the prize "Excellence in eSolutions 2012" by BME [Federal Association of Materials Management, Purchasing and Logistics e. V.]. This award reflects the efforts, to increase the performance of co-operation, made together with our distributors. For an even more efficient collaboration in the future, we summarised these guidelines, which are part of the "WOLF Purchasing System" (WES), for our suppliers. Transparency, open-mindedness and open communication with distributors should bias our partnership further on. Your comments and suggestions to improve our cooperation and the design of joint processes will be gratefully received. We look forward to a continued good cooperation also in the future.

WOLF Group

WOLF PRODUCT RANGE

HEATING TECHNOLOGY

- Oil condensing boiler COB / TOB
- Wall mounted gas condensing boiler Comfort Line
- Gasfired condensing unit CGW-2 / CGS-2 with integrated stratification storage tank
- Gas-fired wall-mounted unit CGU-2K
- Gas condensing solar centre ComfortLine CSZ-2
- Commercial boiler MGK-2 for gas
- Industrial boiler GKS
- Heat pump air / water BWL-1-A, BWL-1-I
- Heat pump brine / water BWS-1
- Split heat pump air / water BWL-1-S
- Floor standing cylinder / buffer cylinder / multi cell cylinder
- Hot water cylinder
- Combined heat and power plant
- Control system WRS-2 for all WOLF products
- Control via WOLF SmartSet App
- SmartHome Connectivity



SOLAR TECHNOLOGY

- Solar collector TopSon F3-1
- Solar collector CFK-1
- Tube collector CRK-12
- Solar cylinder SEM-1
- Stratification cylinder with fresh-water station
- Industrial solar systems

AIR HANDLING TECHNOLOGY

- Air handling unit KG Top
- Air handling unit KG Top hygiene technology
- Air handling unit KG Top with integrated cooling
- Air handling unit KG Top with 90 % heat recovery
- Oil/gas air heater with bypass



VENTILATION TECHNOLOGY

- Home ventilation unit CWL-Excellent
- Comfort large space ventilation unit CGL
- Comfort flat ventilation unit CFL
- Comfort compact ventilation unit CKL/CRL
- Air heater Topwing TLHK for heating, cooling or ventilation
- Ceiling mounted air heater for heating, cooling or ventilation
- Roof extract fan DV / ceiling mounted fan LD
- Air heater WS/WO
- Smoke extract fan ER
- Warm air curtain unit TL



WHAT DOES WOLF EXPECT FROM ITS SUPPLIERS?

Great strategical potential: The strategic potential of a supplier is judged by product competence, manufacturing technology and productiveness, as well as the compliance of legal requirements and last but not least the readiness for the modernisation of the customers' and suppliers' processes.

The classification as an A1 supplier by the annually carried out supplier's evaluation

Active, continuous and long-term co-operation in product design as well as further development and product improvement, concerning

- quality
- economic
- manufacturing

Aspects based on the "WOLF Development Methodology" (WEM). This means common structured and systematic development steps from concept to first series supply.

Demonstration of process improvements during the entire life cycle of the product i.e. from the implementation of the product up to its status as a spare part. In addition to cost reduction potentials in the manufacturing technology at the supplier as well as at WOLF, logistic and administrative processing costs are also to be considered.

Support and active cooperation in the implementation of joint value analysis projects.

Short delivery times of up to 7 calendar days with high flexibility in pack quantity according to one week demand.

Active cooperation in the rationalisation of the purchasing of procurement and supporting the introduction of electronic methods. Goal of a long-term partnership is to make the daily business in purchasing as „slim“ as possible.

Implementation of the „WOLF-production systems WPS“. Continuous delivery taking into account the following available processing concepts:
Kanban - consignment stock - individual orders.



The basis of each order are WOLF's terms of purchase. These are available on request from our purchasing department or on our website: www.WOLF.eu

Adherence to the contractually stipulated quality rates and remittance of the required evaluation per item about re-assignments of refused goods, failures in field and customer complaints.

Required in the implementation of the „WOLF Production System WPS“ zero defect strategy,

- not to accept errors
- but to make errors visible
- thus, to avoid errors

Active co-operation in the creation of product-and production-audits carried out by WOLF auditors at the supplier.

Every product-defect, the supplier is responsible for, is generally claimed in written form through a Quality Message QM. To complete a quality report, WOLF demands from the supplier a written and significant statement at due date, in form of a 7D-report, in order to ensure that the supplier has discovered and permanently remedied the defects. This form is sent to the supplier together with the quality message [see attached document].

Every supplier is obliged to provide a continuous supply of spare parts over a period of at least 15 years after the product is phased out.

Written approval requirements are to be sent to the WOLF Purchasing Department prior to the planned implementation of changes to purchase parts - and changes in the production process.

Concerning general questions, communication is carried out directly between the supplier and the purchasing department. For questions on procurement, the suppliers are in direct contact with the procurement department.

Using unitary standards and conformity in statutory provisions for the exchange of documents.

The annual provision of a long-term supplier's declaration pursuant to EC NO 1207/2001 v. 11.06.2001

PURCHASING STRATEGY

The WOLF Purchasing Strategy is oriented to the companies objectives for the next 5 years and to the associated corporate strategy. Herein the preservation and enhancement of the competitiveness is a key element. Our suppliers are an essential criterion for our power to compete. With our Purchasing Strategy we intend to co-operate with the best companies in your branch on a long term basis, to achieve the growth objectives set and to be able to place our product innovations successfully on the market.



OUR PURCHASING STRATEGY IS BASED ON A 6 COLUMNS-STRATEGY WHICH CONTAINS THE FOLLOWING ELEMENTS:

- Strategic partnerships with system competent suppliers as technological partners. Quality awareness is the central element in this relationship
- Risk minimization in the supply chain due to Two-Supplier-Policy for example
- TCO-evaluation as a preparation for purchase decisions
- Intensive communication with suppliers at all professional levels
- Automatization of data exchange and transition to Industry 4.0
- Sustainability and consistent adherence to corporate compliance



As a result our purchasers appropriately develop an individual commodity group strategy.

We assess our suppliers' strategical potential according to their quality awareness, product competence, manufacturing technology and productivity as well as the empowerment to logistical innovations. A particular requirement for our suppliers is the willingness and ability to reduce delivery times and to increase the flexibility of supply for the benefit of our customers. The introduction of technologies in the course of Industry 4.0 is a vital success factor to implement this requirement. The selection process for suppliers is aligned to the assessment of these abilities.

COMMERCIAL ASPECTS CONTRACTS

Moreover, it is necessary to conclude additional contracts with strategic suppliers:

Framework agreements regulate the necessary commercial aspects in the run-up. These rules are stipulated as both delivery of goods not according to the agreement and delayed delivery causing considerable damage to WOLF. They serve as a precaution in order to avoid business disputes.

Quality assurance agreements serve to help the agreed quality and reliability of the purchased parts. So, unnecessary rework and a standstill of the assembly lines should be avoided and unneeded double inspections should be reduced.

Loan contracts for tools are concluded if tools are produced especially for WOLF-purchased parts and if WOLF becomes the unrestricted owner of the tools by paying the tool costs. (Parts according WOLF drawing)

Loan contracts for test materials especially for WOLF-purchased parts will be completed, if WOLF will be the absolute owner of the test equipments by payment of the test equipment costs.

Agreement of buffer storage will be completed, if the supplier can store the product from a flexible supply in the space of 7 calendar days for free. Obligation to accept will be regulated therein.

In Kanban agreements articles will be defined which will be changed from individual orders to Kanban. Also the clearing, assembly, delivery and safety stock will be defined in this agreement.

Consignment stock contracts control the storage of goods at the premises of WOLF GmbH. Therein the guarantee and payment of the consignment stock goods will also be defined.

IMPLEMENTATION OF NEW PRODUCTS AND COMPONENTS

At WOLF, the implementation of new products is clearly defined, systemised and structured according to the "WOLF Development Methodology" (WEM). The "WEM" consists of 5 stages: concept, sample, prototype, initial batch / pilot lot and first production run. Generally, suppliers and their products have to pass through these 5 stages, too.

CONCEPT STAGE

During the concept stage, potential suppliers for the components are contacted in order to obtain suggestions and information which are used for the construction of the component and the product.

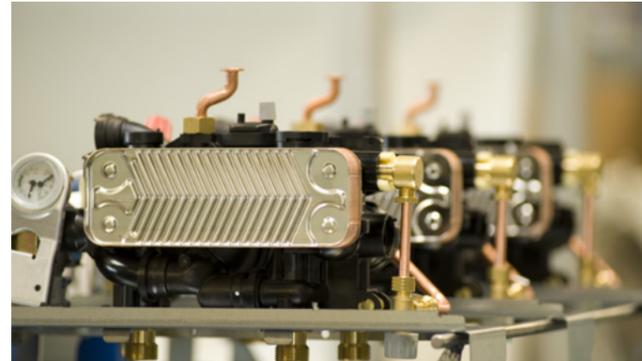
As soon as the rough construction of the component is a finished concept, the first enquiries will be placed.

Offers are analysed.

The best suppliers under TCO aspects are chosen.

SAMPLE STAGE

In this stage, we order first samples of the components, which meet the Material Qualification Specification (MQS), but which are generally still produced without the definite tools.



The exact version of the component is developed in co-operation with the suppliers. Therefore, WOLF asks the suppliers to bring in their know-how in order to optimise the component and also the new product regarding technical, qualitative and economic aspects as well as considerations concerning production.

Please enclose a sample inspection report according to MQS for each sample delivery so that it is clear to us that you have produced the samples.

If the sample inspection is not satisfactory or components have been changed due to findings from the sample inspection, new samples will be ordered, assembled and tested once again.

The single steps of the sample stage will recur until the best possible solution for the realisation of the concept is found and the next stage of development can be started.

PROTOTYPE STAGE

After the components have been qualified and the final MQS has been created, the necessary tools can be ordered.

The prices for the series and the tool costs are negotiated conclusively at that time.

Prototypes of untempered tools are ordered.

The supplier receives the latest MQS and confirms that he will deliver exactly according to it in the future.

The supplier encloses a sample inspection report for each delivery of prototypes so that we can see that the prototypes have been produced qualified and process-sure.

The prototype components are assembled into products for the field trial.

INITIAL BATCH / PILOT LOT

In order to test the logistic and the assembly of the new products intensively, the initial batch is launched before the production of the first series. Orders are placed as serial orders.

Tools are tempered if no modifications have been made during the prototype stage.

The supplier also has to enclose a sample inspection report for every delivery of initial batches.

The components of the initial batches are assembled to initial batch products which are 100 % ready for production so that the first series can be launched on time.

Parts - and application requirements for the pilot zero series can also serve as a test Oppm.

FIRST PRODUCTION RUN

The assembly runs according to the WOLF Production System (WPS).

The procurement of the purchased parts and every connected task changes from that time from the purchasing department to the procurement department.

RUNNING PRODUCTION

The operational sourcing tasks are executed by our sourcing department.

Where required and agreed, we give our suppliers a non-binding rolling forecast for 12 months via the integrated supplier integration. The kind of forecast and its scope will be regulated in the General Purchase Contract.

SOURCING

Individual orders are placed either in written form or via the electronic ordering platform.

The order processing for Kanban items is also done via our electronic ordering platform. The current stock situation is visible at all times.

WOLF reserves the right, to introduce further IT-based processes and to constantly improve the processes also in the interest of the supplier. The reduction of process costs is the main goal.



Prices are generally negotiated at least once a year and have to be confirmed by the WOLF purchasing department in written form. Changes in prices due to product changes will be negotiated separately.

Suppliers are held liable for standstills in the assembly lines which are caused by delayed delivery or delivery of deficient components.

LOGISTIC

If there is no agreement concerning packaging in the WOLF MQS, WOLF requests a cost-efficient, standardised and ecological package.

The weekly delivery of exclusive products is effected in green folding boxes in the framework of "WOLF Production System" (WPS). These boxes are provided by WOLF.

In order to coordinate the process in our incoming inspection it is essential, that a time slot is booked via internet by our service provider Cargoclix.

This applies only for deliveries consisting more than four load carries.

The description of the bundle, the designation of security relevant parts and the labelling via barcode is defined in the current MQS. [See attachment]

"Ex works" deliveries (except parcel services) have to be effected by WOLF's permanent freight forwarder. Information regarding addresses and contact person is available from the sourcing department.

The following procedure applies if modifications of purchased parts or in the manufacturing processes should be necessary:

Purchased parts may be modified, if there are qualitative, economic and/or functional advantages, also for WOLF.

Modifications effected by the supplier have to take place in a way that a continuous supply is assured.

The supplier informs the WOLF purchasing department in writing before any modification of purchased parts will be made. Further procedure and timing is made in mutual co-ordination in the framework of the WOLF - Development-Methodology" (WEM).

Modified parts may not be introduced in the production line until a written approval by WOLF and written confirmation of the current MQS and/or drawing by the supplier is made. Before that, the purchased parts have to be delivered in the original version.

Regarding changes in production processes, which may affect product quality or technical properties, a corresponding procedure should be applied.



QUALITY

ZERO DEFECTS

Why do we speak about zero defects even though nobody is perfect?

Do the components and products become unnecessarily expensive due to that?

The strategy "Zero defect" of the "WOLF Production System" (WPS) demands:

- Errors should not be accepted
- Errors should be made visible and thus be avoided.

Why do we expect that not only from ourselves, but also from our suppliers?

High quality standards are the basis to meet high expectations in quality. Producing quality is the measure of all things. The repair of defects requires time, money and ties up capacities. Therefore, defects should not be repaired; they mustn't be made in advance. That requires controlled processes and high process reliability.

We expect from our suppliers that every single delivery completely meets the agreed and specified requirements. The adherence to these requirements is reached by inspections parallel to the production at the supplier. The supplier is obliged to document these inspections entirely.

Defective components do not only cause a standstill of our assembly lines but also unnecessary rework which we have to charge to our suppliers. That situation has to be avoided in our own and in our supplier's interest.



INCOMING INSPECTION

It is a principle, that double inspections at WOLF and at the supplier should be avoided. Generally it is our aim, that the outgoing inspection is carried out by the supplier and should replace the incoming inspection at WOLF. When the supplier delivers zero defect components, the incoming inspection at WOLF reduced to checking identity, completeness and obvious damage in transit. The components themselves are only inspected in random checks.

QUALITY MESSAGES QM

The "WOLF Quality System" WQS includes quality messages QM. The following procedure applies if defects are detected in the random checks of the incoming inspection, in the assembly lines, in reconsignments by our customers or by our service technicians:

The consignment in question is blocked Agreement with the supplier, whether the goods have to be reworked, scrapped or sent back. The arising expenses due to the failure will be charged to our supplier's account. The supplier sends a 7D-report containing the reasons for the mistakes and containment actions and defines a person in charge as well as the time for the measures.

RETURN DELIVERIES BY CUSTOMERS SERVICE

The components are collected and sent back to the supplier periodically so that he can analyse the damage.

The supplier sends an analysis of the damage to WOLF in reasonable time.

The costs for the component as well as potential arising service costs are charged to the supplier 30 days after the reconsignment of the goods, if the supplier is responsible for the defect.

We follow up and analyse the occurring mistakes together with our suppliers in order to find the reasons for the defect and to solve the problem as fast as possible. The retrace ability of every component has to be guaranteed at any time by a special label on the component itself and on the bundle.

AUDITS

For all A and B supplier (classification due to turnover) a supplier evaluation should take place at least once a year. The supplier evaluation contains basically four criteria: Quality, delivery reliability, quantity reliability and communication. (See attachment for a sample evaluation)

Key figure (A1, A2, B1, B2 or C) which indicates the performance of the supplier is determined by these four criteria. Dependent on these key figures, measures with the supplier, which have to be fulfilled in a certain period of time, will be taken.

Suppliers who obtain a bad evaluation are blocked and have to qualify once again in order to supply WOLF in the future. In addition, all suppliers linked to our electronic platform receive a monthly current status of the evaluation criteria of delivery reliability, quantity reliability and quality.

SUPPLIER AUDITS, PRODUCTAUDITS AND PRODUCTION AUDITS AT OUR SUPPLIERS

We expect our suppliers to allow WOLF personnel the opportunity to carry out Audits in the factory at any time. These Audits serve for the early detection of errors and therefore mistakes can be avoided thus a high level of process reliability followed by zero mistakes can be achieved. The identified deficiencies and the potential for improvement according to these Audits will be demonstrated to our suppliers in a final meeting. As a result of this final meeting, an action plan will be created by WOLF. This plan includes the necessary measures for our suppliers and WOLF, which are clearly defined and scheduled.



