

QA Agreement: Between Suppliers of with development input for Curtiss –Wright Antriebstechnik GmbH Neuhausen

1. SCOPE

This QA Agreement defines requirements and methods of quality assurance measures and establishes procedures at Curtiss-Wright Drive Technology GmbH (CWAT) and its suppliers. The following accords shall promote the policy of "Partnership" in order to ensure early identification of sources of error and avoidance of further mistakes or damage to as great a degree as possible. This concept forms the basis for the quality and optimisation of the products to be manufactured, plus smooth cooperation in development, design (in some cases in accordance with special requirements or specifications), planning, production and inspection (coordination of scope of inspection) of those products.

2. VALIDITY

In order to be valid, this QA Agreement is to be listed in calls for tender or purchase orders and is to be issued to the supplier if he was not already provided with a copy with an earlier purchase order. The individual items of this QA Agreement are only valid to the extent that no other requirements are specified in the purchase order.

3. QA RESPONSIBILITY

The supplier bears full responsibility for the quality of all those products supplied by him and his sub-contractors. By means of an effective Quality Assurance System or suitable quality assurance measures, the supplier undertakes to guarantee the required quality level of all the products for the entire duration, to the extent that receiving inspection at CWAT can be waived.

The supplier shall designate a responsible person to liaise with CWAT who is empowered to deal with CWAT on quality problems and to take appropriate corrective action to eliminate such problems.

4. REQUIRED SUPPLIER QA SYSTEM

The supplier has implemented a documented Quality Assurance System appropriate to his company which meets the requirements of ISO 9001 or EN 29001 (ISO 9002 or EN 29002 if no new developments are required). Other documentation relevant to the quality of deliveries shall be listed in the purchase order or on a separate attachment.

5. PLANNED INSPECTION

The supplier shall plan the required in-process intermediate and final inspections, whereby CWAT reserves the right to issue special inspection directives. In the case on new developments, certification of functionality and dependability must be done in accordance with the defined development procedure.

6. INSPECTION, MEASURING & TEST EQUIPMENT

The supplier shall ensure that all inspection, measuring and test equipment used at his facilities is subject to systematic monitoring, is periodically registered and calibrated and can be related to national standards.

7. INITIAL SAMPLING (FIRST PARTS)

Initial samples are first parts approved by the supplier which have been manufactured, inspected and documented under series-production conditions and which are in accordance with CWAT drawings and specifications or drawings approved by CWAT.

In any of the following cases, the supplier shall invariably submit initial samples to CWAT for approval:

- a) First parts required by CWAT in the purchase order
- b) Subsequent to an earlier inspection of initial samples, i.e.
 - amendment of the agreed specifications
 - amendment of manufacturing and inspection procedures
 - replacement or refurbishment of forming equipment

(e.g. blanked, moulded plastic, cast or forged components etc.) At initial sampling, the supplier shall measure all characteristics, and record the results (EFFECTIVE measurements) in an Initial Sample Report and shall submit these, together with the first parts, to CWAT for approval.

CWAT shall inspect the initial samples against the submitted Initial Sample Report. The supplier shall not be responsible for any resultant delay if he gave 10 days prior notice of readiness for initial sample inspection. CWAT reserves the right to verify on a random basis any characteristics which are functionally vital.

The supplier will be notified in writing of the inspection results (complaints/release).

The supplier is prohibited from manufacturing and delivering partial lots before receiving definite approval of the initial samples and, consequently, release for series production.

Should the supplier manufacture further products in the intervening period, he does so at his own risk and without constituting an obligation to CWAT to accept the product.

8. PRODUCTION AND INSPECTION

Manufacture and inspection of the products are in accordance with process documentation and inspection procedures. From these, the production status, the identity, plus the inspections conducted and their results are visible.

The supplier ensures that manufacturing of the products is undertaken with equipment and processes that guarantee the integrity of the product quality.

9. AMENDMENTS TO TECHNICAL DOCUMENTATION AND PRODUCTS

If amendments to CWAT documentation are necessary to improve processes, or to clarify missing specifications, the supplier shall report this to CWAT purchasing for transmission to the responsible department. If amendments are to be implemented (supplier request or CWAT in-house department) the supplier will be notified immediately by means of a Mutation Report. Modifications to products may only be implemented on the basis of written directives (approvals) issued by CWAT.

10. PRODUCT IDENTIFICATION

The supplier shall ensure that the products to be manufactured are accompanied by appropriate routing cards to which corresponding process documents and records can be attached, thereby maintaining identification at all times.

11. RIGHT OF ACCESS, OBLIGATION TO DISCLOSURE, AUDITING, CONFIDENTIALITY

The supplier shall grant to CWAT order-processing or QA staff, or other assigned bodies, free (accompanied) access to all facilities involved in the processing of a CWAT order. The supplier shall grant CWAT order-processing staff, or other assigned bodies, the right to inspect all production and quality assurance related process documentation and records. CWAT reserves the right to conduct necessary audits on suppliers. If a supplier is certified, CWAT can waive the need for QA System Audits.

Access to documentation and records per parag. 2 above, or auditing per parag. 3 above, do not discharge the supplier of his Quality Assurance responsibilities.

CWAT undertakes to maintain confidentiality towards actual and potential competitors of the supplier, in respect of all information obtained by CWAT employees or assigned bodies during the access and inspection mentioned above.

The supplier undertakes to maintain confidentiality towards actual and potential competitors of CWAT, relevant to calls for tender or issued purchase orders, new or further developments initiated by CWAT or if manufacturing is to special CWAT requirements.

12. RANDOM SAMPLING

If CWAT has not specified special inspection procedures for a given product, that product shall be tested in accordance with the manufacturing documentation.

For normal testing, random inspection plans are based on DIN 40 080/ ISO 2859 (Inspection Level II).

The following AQL values shall apply:

- AQL 0.65 for IT \leq 6 and tolerances <0.03 mm
- AQL 1.00 for IT $>=$ 7 and tolerances >0.03 mm
also for surface roughness classes $>N5$
- AQL 1.50 for dimensions without tolerances

The latest version of Standard DIN 40 080/ISO 2859 is applicable. It cannot be assumed from the agreement with the supplier on random inspection, that an entire delivery which has passed a random inspection, has been accepted by CWAT.

Despite inspection, CWAT reserves the right to return at any time and at their discretion, any defective individual workpieces within the delivery, for replacement free of charge, for repair or against a credit note.

13. CONTROL OF NONCONFORMING PRODUCT

If, during the suppliers in-process inspections, nonconforming products are identified, the supplier undertakes to notify CWAT immediately in writing. Finished product ready for shipment and in-process stock product are to be segregated immediately and, if necessary, sorted and/or reworked. Repair work required on product (e.g. rebushing, build-up by chrome plating, welding etc.) may only be executed with the approval and directives of CWAT At AG.

To avoid repetition of the same nonconformance on subsequent batches or orders, the supplier shall implement appropriate corrective action and ensure its effectiveness.

14. DELIVERY

Deliveries to CWAT shall contain only products which have passed through the specified test plan and have been released following final inspection.

Quality records (verification documents) containing the results of final inspection are to be included with each delivery.

Sorted, nonconforming product delivered with the prior agreement of CWAT under the status "Acceptance Subject to Special Test" shall be clearly labelled as such, kept separate and declared on the form "Supplier's Quality Certificate" by ticking the box "Dimensional Deviations".

15. PACKAGING, TRANSPORT, STORAGE

During delivery/transport, the products must be protected against mechanical damage and corrosion. If special storage conditions are required, corresponding directives must be issued by the time of delivery at the latest.

16. RECEIVING INSPECTION

As a rule, CWAT inspects the products supplied only with regard to identity, quantity and transport damage through visual inspection of the products and review of the Supplier's Quality Certificate provided. The products are then transferred to their destination (stores, assembly shops).

While received products are inspected by CWAT against the quality documents, CWAT reserves the right to conduct random verification tests.

17. QUANTITY INSPECTION

The quantities ordered by CWAT are binding. Depending on the value and quantities involved, excess deliveries or delivery shortfalls will be handled on a case to case basis.

18. QUALITY RECORDS

Quality records generated within the supplier's inspection planning, or which are specified in CWAT purchase orders, are to be properly archived by the supplier for 15 years and held available for CWAT.

19. SUPPLIER QUALIFICATION

Within the scope of supplier qualification, CWAT conducts an evaluation in the course of receiving inspection. Deliveries are evaluated against the criteria of quality and delivery to deadline. Suppliers may request the results of such evaluation.

20. COMMUNICATION WITH SUBSUPPLIER

If our articles will be passed on to subcontractors for a special treatment, all necessary information have to be advised to them, maybe with our documents.

21. STORAGE OF PRODUCTION DOCUMENTS

Documents, being used for production of our articles, have to be kept for a minimum of 13 years. Should we claim a longer storage period, we will arrange special terms with our suppliers. This applies also for their subcontractors.