

ZOP Co. Ltd FORGING PLANT QUALITY REQUIREMENTS FOR SUPPLIERS

(Issue 03, dated 05.03.2015)

1 INTRODUCTION

This document is property of ZOP Co. Ltd. Forgings Plant. It concerns suppliers of basic materials used for manufacturing forged elements, technological processes as well as tests conducted on forgings and parts.

The supplier is obliged to apply contracts, orders, contractual terms and conditions as well as the requirements of the ISO 9001 Standard. QUALITY REQUIREMENTS FOR SUPPLIERS constitute a supplement to aforementioned requirements. It is the supplier's duty to get acquainted with and apply these requirements.

Current binding and monitored requirements are available on the www.kuznia-zop.pl web side under SUPPLIER AREA. Such requirements, when e-mailed or printed out, have an informative character.

In the case of any discrepancies between the requirements of a contract/order/agreement, and the stipulations of this document, the requirements of the respective contract/order/agreement shall apply.

2. ACCESS RIGHT

The supplier shall grant the representatives of ZOP Co. Ltd. Forging Plant, its customers as well as inspection organs the access to its all equipment, plants used for fulfilling an order (also owned by their subcontractors) as well as all materials and documents concerned with service fulfilment and Quality Management System.

3. TERMINOLOGY AND DEFINITIONS

Terms and definitions given in the ISO 9000 standard shall be applied hereinafter.

4. QUALITY MANAGEMENT SYSTEM

4.1 GENERAL REQUIREMENTS

The supplier must have the technical expertise to manufacture and/or supply goods meeting the requirements of the ZOP Co. Ltd. Forging Plant.

Every supplier shall be subjected to assessment and approval prior to placement of order, as well as a periodic assessment. Should the assessment yield negative results, corrective and improving actions shall be implemented by the supplier, in order for him to remain in the ZOP's Register of Approved Suppliers.

Every supplier of aircraft parts should possess a certified Quality Management System in accordance with the ISO 9001 standard.

4.2 DOCUMENTS AND RECORDS

ZOP Co. Ltd. shall be responsible for providing the supplier with own or its customer's documents (drawings, standards, instructions) necessary to the due fulfilment of the order.

The supplier shall be responsible to provide the openly accessible standards.

The supplier of aircraft parts shall be responsible for preparing, securing and storing of the documents and records pertaining to

manufacturing and inspecting (technologies, instructions, guide cards, test reports etc.). The storing period of records that have not been assigned to ZOP Co. Ltd. shall be 50 years for aerospace critical parts, 20 years for the other aerospace parts and consequently 5 years for non-aerospace ones. The copies of records assigned to ZOP Co. Ltd. shall be stored for 5 years.

5. LIABILITY

The supplier shall be fully liable for the quality of products/services. The supplier is responsible for meeting requirements within the framework of his own organisation as well as his suppliers.

6. COMPETENCES, AWARENESS AND TRAINING

The supplier shall ensure that the personnel dealing with quality will get acquainted with all the quality requirements provided by ZOP Co. Ltd. Persons with access to the documentation provided by ZOP Co. Ltd. shall comply with the confidentiality principle.

7. ORDER FULFILLMENT

7.1 AGREEMENT REVIEW

The supplier shall review the agreement/order/contract with respect to its feasibility and fulfilment date. For aircraft parts, a risk assessment shall be carried out.

7.2 COMMUNICATION

All supplier's correspondence concerned with the orders shall be mailed to the address of the person issuing an order. The supplier shall notify ZOP's Marketing Department about any inconsistencies regarding the order fulfilment.

7.3 DESIGN AND DEVELOPMENT

The supplier shall prepare all the technical documentation necessary to the manufacturing of given products. The technical documentation shall ensure identification and traceability of the product as well as acquiring precise data after its manufacture (e.g. through technology indexing). Technical documentation shall be updated in correspondence with any changes.

7.4 Purchases

In the case of purchases made by the supplier for the client, the order shall include request for:

- the fulfilment of these requirements and
- quality documentation.

Materials delivered to manufacture should have certificates containing results of tests carried out.

7.5 MANUFACTURING AND SERVICE DELIVERY

7.5.1 PRODUCTION MONITORING

Processes used for products intended for the aircraft industry shall be realised using the established technology.

The supplier of a product intended for the aircraft industry shall notify ZOP Co. Ltd. of any change in technological process approved by ZOP Co. Ltd./their customers or inspection organ, that may affect the product or/and its characteristics prior to any such change.

In the event that the supplier carries out technological operation or test on materials provided by ZOP Co. Ltd., the supplier shall not be entitled to assign the service to any other supplier without prior written consent from ZOP Co. Ltd.



Each delivery shall also contain quality documentation: Quality Certificate containing the required characteristics of parameters as well as reports from the tests carried out. Quality documentation shall include data allowing clear product identification.

7.5.2 VALIDATION OF MANUFACTURE PROCESS AND SERVICE DELIVERY

The supplier doing special processes shall receive approval from ZOP Co. Ltd. or their customers. Any changes of special processes shall require an approval prior to their implementation.

7.5.3 IDENTIFICATION AND TRACEABILITY

Materials and products shall be identified by: batch/melt number, serial number, and other identification signs in all stages of manufacturing and delivery.

The supplier shall retain any identification features provided by ZOP Co. Ltd. (heat treatment number, traveler number, serial number, ordering number) during the performance of services, tests, transport, as well as linking individual products to their quality documentation.

7.5.4 PROPERTY

Materials and products provided by or belonging to ZOP Co. Ltd. shall be monitored, marked clearly and may only be used for the purposes of the order. The supplier shall notify ZOP Co. Ltd. of any instances of products being damaged or lost, as well as return all incompatible products. The quantity of incompatible products shall be noted in the delivery documentation.

7.5.5 PRODUCT SAFETY

The supplier shall protect the product from possible damage and mix-up in the course of manufacturing and transport.

7.6 INSPECTION OF MONITORING AND TESTING EQUIPMENT

Testing equipment shall be identified and include calibration data.

8 MEASUREMENTS, ANALYSIS AND IMPROVEMENT

8.1 GENERAL

The supplier shall aim to fulfilling following principles:

- no inconsistencies in deliveries,
- deliveries in accordance with deadlines agreed upon in the order or ordering timetable,
- minimal losses in manufacturing process on forgings and parts provided by ZOP Co. Ltd. (limiting the number of deficiencies).

8.2 INSPECTION

The supplier shall inspect the deliveries of materials and the manufacturing process in order to ensure the product's compliance with the requirements.

The samples remaining with the supplier shall be stored 6 months after the tests (for products fulfilling the requirements) or 12 months after the tests (for products not fulfilling the requirements).

Samples constituting patterns of grain flow direction shall be returned to ZOP Co. Ltd. after the completion of tests.

The suppliers of machining services shall carry out dimension checks. For each delivery, a quality inspection report shall be

prepared, for at least 5 items. If applicable, statistical methods shall be applied.

8.3 Nonconforming product

The delivery of a product incompatible with the order shall be only with prior consent. To apply for the approval of a deviation from the order, a form must be submitted – deviation notice, Appendix 1.

Nonconforming or deviated products delivered to ZOP CO. Ltd. shall be isolated from conforming products and marked clearly. Granted deviation permits shall be noted in the quality documentation.

Should any doubt about the nonconformity of already delivered products arise, ZOP Co. Ltd. shall be notified immediately.

8.4 IMPROVEMENT

ZOP Co. Ltd. maintains supplier assessment, including:

- suppliers' audits,
- punctuality of fulfilment,
- quality of deliveries,
- deficiency level (with services on entrusted products)

Should the assessment yield negative results, improvement actions shall be implemented by the supplier.

8.5 CORRECTIVE ACTIONS

Any nonconformity stated by ZOP Co. Ltd. in products or supplier's documentation shall be analysed by the supplier and the results of the analysis in form of completed NCR report delivered to ZOP Co. Ltd. Completed NCR report shall contain:

- reason for the nonconformity,
- correction actions (rework or repair of the product),
- corrective actions (preventing from reappearance of nonconformity).

9 LIST OF APPENDICES

Appendix 1 - Deviation Notice.

702		1.Zgŵszenie niezgodno ci Deviation Notice 6.Kod dostawcy/ nr kolejny/ rok Vendor Code/ Sequence No./			2.Nowe uruchomienie 3.Wyrób produkcyjny New Development 7.Zamówienie (linia)/ Purchase Order			roduct	4.Wyrób eksperyment. Experimental Product 8.Kupiec/	Buyer	5.Strona Page		
		Year			(Item)		Nam						
Zakÿad Obróbki Plastycznej Sp. z o.o.		cz ci/ Part Number	10.Litera zmiany Change Letter	11.Nazwa c	z ci/ Part Name			13.Nr partii/ Batch No.	szt.niezgod./ P	Pieces	15.Wytop/ Wsad Heat/ Charge Code		
16.Zespóÿ	Assembly												
17.Detal/ Podzespóÿ Detail/ Subassembly													
18. Lp/ <i>Item</i>	19.Poÿ na rys <i>B/P Location</i>	20.llo szt./ Quantity				22.Przyczyna niezgodno ci Nonconformance <i>Cause</i>				POLA 27 i 28 WYPEÚNIA ZAMAWIAJ CY / FIELDS 27 AND 28 FILLED IN BY BUYER			
									27.Dyspozycja / Disposition				
				23.Dziaÿania koryguj ce/ Corrective Actions									
			25.Data, nazwisko i podpis Przedstawiciela Jako ci Dostawcy/ Date, Name and Signature of Supplier Quality Representative						28.Data i podpis przedstawiciela zamawiaj cego/ Date and Signature of Buyer Representative				
												PW zamawiaj	
1									Date, Stan		Signature Lepresenta	of Military App tive	roval
24.Nazwa Dostawcy materiaÿu/ Supplier Name			26.Data, nazwi Przedstawici Technicznego Do Name and Si Supplier Technic: Represer	ela Dziaÿu ostawcy/ Date, gnature of al Department									