



Production of Metal Works & Aviation Parts.

Procedure No	DATE	REV	Procedure Name
WI-09	7/2023	L	Purchase Orders Quality Requirements Spec

REVISION CONTROL

Change By	Description Of Change	DATE	REV
Guy Ilarov	Requirements Update - IAI-CAG	03.2011	C
Guy Ilarov	Requirements Update According AS9100	05.2012	D
Guy Ilarov	Quality Requirements Was Update For LM -QJ	07.2012	D1
Avi Prins	Update Requirements for subcontractor, logo update	10.2012	E
Igor Cherner	Update the requirement to confirm the previous stage approval.	08.2015	F
Yacob Yair	Adding missing paragraph 6.9.5	09.2016	G
Yacob Yair	Update of lockheedmartin link 5/5	09.2016	H
Ben-ad Corem	General update with respect to AS9100 rev D. customers links update. Records retention period. Prevention of counterfeit parts.	08/08/2017	J
Ben-ad Corem	Product safty, code of ethics, LM link updated. Rafael requirements per 93.00.63. IAI code 507. Environmental update	08/05/2018	K
Guy Marom	An updated link	12/7/2023	L

Signature	DATE	NAME	
	08/05/2018	Ben-ad Corem	EDIT
	08/05/2018	Avi Tager	APRROV



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1. General

1.1. All Mechano-Deen supplier purchased items are defined including all the technical and general specifications necessary to meet our internal and customer requirements.

2. Scope

2.1. The scope of this work-instruction is to clearly define the quality requirements of all purchased items.

2.2. This document is an integral part of this purchase order.

3. Applicable documents

3.1. ISO 9001:2015

3.2. AS9100:D

3.3. ISO 14001:2015

3.4. QA-11 Mechano-Deen procurement procedure

3.5. QA-12 Mechano-Deen external providers evaluation procedure

3.6. QA-01 Mechano-Deen quality statement per quality manual

3.7. WI-10 Mechano-Deen packing and preservation work instructions

3.8. WI-22 Mechano-Deen foreign object damage prevention work instruction

4. Definitions

4.1. Supplier - An independent entity (not necessarily a manufacturer) supplying goods, materials or services designated to be incorporated in Mechano-Deen manufactured products and bearing a direct impact on the product characteristics.

4.2. Subcontractor - Manufacturer producing parts or operations according to Mechano-Deen specifications or requirements.

4.3. Catalogue item - Purchased catalogue item. Not a Mechano-Deen specification.

4.4. Processes – refers to any process which cannot be done in Mechano-Deen. Mostly refers to special processes

4.5. Of the shelf item – catalog item. A part purchased per catalog number.



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4.6. Counterfeit part - Fraudulent materiel that has been confirmed to be a copy, imitation or substitute that has been represented, identified, or marked as genuine, and/or altered by a source without legal right with intent to mislead, deceive or defraud.

4.7. F.O.D – Foreign Object Damage/Debris

4.8. Product Safety - The state in which a product is able to perform to its designed or intended purpose without causing unacceptable risk of harm to persons or damage to property.

5. Method

5.1. This work instruction involves several quality requirement levels as indicated.

5.2. The policy statement, environmental policy statement and the code of ethics of Mechano-deen is communicated through Mechano-Deen's QA internet site:
<https://mechano-deen.com/forms>

5.3. It is the sole responsibility of the supplier or subcontractor to fulfill the delivery of purchased goods/services in accordance with the specifications indicated in the purchase order.

5.4. All requirements listed in this Quality specification are binding with the Purchase order

5.5. The Supplier / Subcontractor is required to fulfill all Final Customer Quality requirements as indicated in the Purchase order as follows:

5.5.1. Boeing as per D1-4426 www.boeing.com/d14426

5.5.2. Lockheed-Martin as per QCS-001**see LM unique requirements
<https://www.lockheedmartin.com/en-us/suppliers/business-area-procurement/aeronautics/quality-requirements.html>

5.5.3. IAI as per CAG 9000 http://www.iai.co.il/2013/10143-en/Suppliers_Net.aspx

5.5.4. **Rafael** Advanced defence systems products per 93.00.63 in its latest revision. Please contact your POC to provide you with this spec.

5.6. Mechano-Deen at its own discretion is entitled to define incoming inspection criteria for any purchased item or service



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5.7. Mechano-Deen, Customer or Legal authority representatives are entitled to access (subject to prior coordination) to any of the supplier facilities or documentation relevant to the production/handling/storage of the items on order.

5.8. Supplier committed to maintain and manage the records for each product or process for Mechano-Deen produced, so it can be available for accessibility for a period of 10 years.

5.9. Each supplier shipment is to contain a single production batch/lot number unless otherwise authorized by Mechano-Deen. Mixed production batches shall be returned to the supplier, shipping charges collect.

6. **General Quality requirements for Subcontractor**

6.1. **Communication and job transfer**

6.1.1. It is the supplier's direct responsibility to delegate all Mechano-Deen Quality requirements and specifications to any subcontractor operations related to the production of the part and ensure conformance thereto when inspecting these operations.

6.1.2. All supplier subcontractors operating in conjunction with Mechano-Deen part production require prior approval by Mechano-Deen Quality Assurance.

6.1.3. Defective items with any non-conformance relating to the PO, Mechano-Deen Quality Assurance is to be notified immediately.

6.1.4. The supplier is required to notify Mechano-Deen regarding any change related to the Purchase Order and receive Mechano-Deen's engineering prior consent there to.

6.1.5. Supplier shall not repair or use (as-is) any defective component without the prior consent of Mechano-Deen quality assurance.

6.1.6. All communication regarding the quality of a product or service will be in writing.

6.2. **It is the suppliers full responsibility to review the order**

6.2.1. Review that all the specifications are received and it is in its power to fully fulfil the requirements.

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6.2.2. Do not rely on the quotation documents or those provided in previous orders

6.2.3. In any case of contradiction, lack of understanding, incomplete documents provided, supplier is obliged to contact the company.

6.3. External providers evaluation:

6.3.1. The company manages external providers evaluation system. This system controls and analyze external providers performances on delivery time and quality.

6.3.2. External provider which does not meet the requirements or whose level of performance does not comply with the requirements, will be warned and if necessary, removed from list of approved suppliers.

6.4. Prevention of counterfeit parts

6.4.1. The external provider undertakes that all materials, components, parts supplied to the orders of the company are authentic, provided from authorized original manufacturers or authorized distributors or authorized sources and that they are not counterfeit parts.

6.4.2. The Supplier shall maintain a system for verifying the originality of the items. On each and every shipment there will be certificates that indicates full traceability to the original manufacturer.

6.5. Product safety

6.5.1. The external provider is fully aware to his impact and contribution to product safety. Therefore will raise awareness to the entire system.

6.5.2. If applicable, the external provider will ensure that the products supplied to the company do not constitute a risk to person or property. The products will meet the relevant legislative and regulatory requirements. The external provider will update the risk If discovered in the product.

6.6. The code of ethics

6.6.1. The Company's Code of Ethics is published on the company's website. We expect our suppliers to act according to its principles and spirit.

6.7. Competence of persons



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6.7.1. The external provider shall insure that the employees which perform the work are qualified, competence and experienced in execution of their work. If necessary provide credentials for their accreditation.

6.7.2. Persons who perform work for the company will be aware of their contribution to product quality and safety.

6.8. Environmental contribution

6.8.1. Mechano-Deen maintain the ISO 14001:2015 standard and encourages its external providers to protect the environment and to improve continuously its environmental performances.

6.9. Packaging Requirements

6.9.1. The following information shall be indicated on each packing:

- 6.9.1.1. Supplier details
- 6.9.1.2. Mechano-Deen Purchase Order number
- 6.9.1.3. P/N according Mechano-Deen Purchase Order
- 6.9.1.4. Quantity per packing

6.9.2. Items shall be packed in suitable packing ensuring proper transportation and delivery conditions according WI-10 procedure.

7. Documents and inspection requirements for subcontractor

7.1. Documents and inspection requirements for processes contractors

7.1.1. It is the supplier's sole responsibility to verify that the item revision and all related documents comply with the details specified in the Purchase order.

7.1.2. Each individual item will be supplied together with a Certificate of Conformance (COC). In addition to the supplier declaration, the COC shall include specific details indicating the batch/lot number. The batch/lot number will be marked on each individual part (if applicable) or part packing otherwise

7.1.3. The COC certificate shall specify under applicability to all processes carried out and the duty shall include at least the following information:

- 7.1.3.1. Work order of Mechano-Deen.



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- 7.1.3.2. Quantity + Quantity of QC sample.
- 7.1.3.3. Applicable procedure and revision.
- 7.1.3.4. Signature of a qualified inspector
- 7.1.4. QC sampling shall be performed in accordance with acceptance level 2.5
C=0 as defined in: ZERO ACCEPTANCE NO. SAMPLING PLANS /
SQUEGLIA
- 7.1.5. Perform visual inspection in proper light condition.
 - 7.1.5.1. Process propriety – full coverage, cleanliness
 - 7.1.5.2. Masking according to spec
 - 7.1.5.3. Marking – readable and according to spec.
- 7.1.6. Coated threads will be tested with a thread gauge/ the company will provide the specified gauge to the vendor.
- 7.1.7. Subcontractors for helicoil inserts will check the assy with the specified screw.
- 7.1.8. The supplier is required to address all key characteristics (KC) in the QC and COC documents.
- 7.1.9. Items manufactured for the first time in the past 24 months or if specified in the purchase order, require FAI (First Article Inspection) as per AS9102. Mechano-Deen Quality Assurance manager is entitled to amend this request by means of a written approval. Any modification to the item or item manufacturing process requires a new FAI.
- 7.1.10. The provider refer to key features KC when required by the acquired product documents
- 7.1.11. Foreign Object Debris (FOD) test shall be performed on every item on order.

7.2. Documents and inspection requirements for mechanical items contractors (assemblies, packaging, machining, manufacturing, finished products)

- 7.2.1. The following documents shall be added to each items (depending to applicability):



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7.2.1.1. Raw material manufacturer COC with the relevant batch/lot number shall be provided for each item on order.

7.2.1.2. A detailed batch/lot QC report listing all specified dimensions and actual readings shall be provided for each item on order. Each item shall be clearly identified with a serial number (if required) or a batch/lot number as indicated in the COC.

7.2.1.3. Ballooned drawing

7.2.1.4. Supplier shall provide process Quality Control reports indicating the COC batch/lot number for all finish processes.

7.2.2. Supplier Type 12 (BTP) machining subcontracting, must comply with the requirements of procedure "Standard Digital product quality assurance" (DPD) according to the suppliers web of IAI (if relevant).

7.2.3. BOEING items will follow the D6-51991 "Doing Business-quality requirements" on suppliers web https://www.boeingsuppliers.com/supplier/D6-51991_REV_N.pdf

7.2.4. All QC reports shall be signed and stamped by an authorized inspector acknowledging conformance with item specifications and PO requirements.

7.2.5. Processes will be carried out only by approved suppliers of Mechano-Deen.

7.2.6. Raw material manufacturers and suppliers for all items on order require prior approval by Mechano-Deen Quality Assurance. Mechano-Deen reserves the right to reject any item that does not conform to this requirement.

7.2.7. Foreign Object Debris (FOD) test shall be performed on every item on order.

7.3. PCB Assembly

7.3.1. PCB assembly shall be performed in accordance with IPC610D Class

7.3.2. Each PCB shall be clearly identified with a serial number (if required) or a batch/lot number as indicated in the COC.

7.3.3. Process temperature profile graphs will be provided with the COC documents.



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7.3.4. The supplier will maintain a system which will prevent counterfeit part to delivered

7.4. Wiring and Cables

7.4.1. Wire harnesses and cables shall be produced in accordance with IPC620 Class 3.

7.4.2. Each item shall be clearly identified with a serial number (if required) or a batch/lot number as indicated in the COC.

7.4.3. All connectors shall be plugged and protected against damage or foreign objects.

7.4.4. The supplier will maintain a system which will prevent counterfeit part to delivered

8. General Quality requirements for all purchased Catalogue items (Applicable for all of-the-shelf items)

8.1. A Supplier and Manufacturer Certificate of Conformance (COC) shall be provided for each line item linking the Supplier COC (shipper) with the Manufacturer COC.

8.2. The supplier will maintain a system which will prevent counterfeit part to delivered.

8.3. Supplier of raw materials shall provide a Manufacturer Certificate of Analysis (COA) for all items on purchase. This certificate shall link the Manufacturer Lot/Batch number with the indications on the item packing. MSDS materials shall be delivered with a toxin report as well (if required).

8.4. Shelf life limited items shall be delivered with an expiry date ensuring a minimum of 75% of the original manufacturer specified shelf life from date of receipt.

8.5. Shelf life limited items shall bear an expiry date, the date of manufacture and required storage conditions on each individual packing.

8.6. Items requiring cold storage shall be transported and delivered in suitable conditions as per Manufacturer specifications.

8.7. Date code of all electronic components shall not exceed 24 months.

8.8. All electronic components shall be delivered with a ROHS compliant manufacturer certificate.



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8.9. Components with extended contact points shall be packed in suitable packing avoiding any deformation.

8.10. Quality Control equipment shall be furnished with a calibration report by a certified national authority, installation, operation and maintenance instructions.

8.11. ESD sensitive items shall be delivered in suitable protective packing.