



## QUALITY CLAUSES

### 1. Foreword

Our business depends on a reliable network of skilled suppliers that provide the materials, parts, and services to make our products and deliver them to our customers mission-ready and on time. Goods and services provided by our suppliers have a key impact on the quality of the products, and services we offer our customers. To maintain a high level of quality, we are determined to establish and maintain close and long-lasting relationships with our suppliers.

The EXCALIBUR MACHINE AND SHEET METAL Quality Policy can be obtained upon request.

EXCALIBUR MACHINE AND SHEET METAL Terms and Conditions of trade shall apply to all contracts unless otherwise agreed.

Please note **II** Indicates an item of high importance that is sometimes overlooked by suppliers and causes potential high risk to product conformance.

### 2. Scope

The aim of this document is to formally communicate the Excalibur Machine and Sheet Metal quality requirements to the supply chain. This document supersedes any previously issued EXCALIBUR MACHINE AND SHEET METAL Quality Requirements for Suppliers.

#### 2.1 Definitions and Terms

In this Quality Requirements for Suppliers, the terms "**shall**" and "**must**" mean that the described action is mandatory; "should" means that the described action is expected with some flexibility allowed in the method of compliance; and "may" means that the described action is permissible or discretionary.

The term "supplier" means vendor, supplier of goods and services, sub-contractor, and distributor. Questions concerning this manual should be directed to your respective EXCALIBUR MACHINE AND SHEET METAL Buyer or Engineer.

#### 2.2 Order of Precedence

Any inconsistencies in this document shall be resolved in accordance with the following descending order of precedence: (1) the drawing, design data and any approved concession deviation (2) the Purchase Order, release document, as applicable, including any special terms and conditions; (3) any Statement of Work. Note: Not all drawing requirements can be covered by purchase order verbiage. Please reference purchase order AND drawing for processing, dimensional and specifications requirements.

Excalibur Machine and Sheet Metal maintains the highest standards for ethical business practices and performance in every aspect of its business conduct.

### 3. Supplier Approval

#### 3.1 Supplier Approval Requirements



## QUALITY CLAUSES

The minimum quality requirement for suppliers of goods and services to EXCALIBUR MACHINE AND SHEET METAL shall be Quality Management System (QMS) certification to ISO9001 and or NADCAP by an accredited certification body. This requirement guarantees the supplier has put in place a consistent QMS able to satisfy our basic needs. Suppliers that provide goods and services that are used in projects for aviation, defense and space applications should be certified to AS9100 and/or NADCAP or equivalent and listed on the IAQG Online Aerospace Supplier Information System (OASIS)

### 3.1.1 Exceptions

Requirement exceptions for suppliers that do not meet the minimum quality certification shall be authorized on the basis of:

- The supplier is mandated by our customer.
- The supplier is the manufacturer of a single sourced product mandated by our customer.
- The supplier is the only distributor of a product mandated by our customer.
- The supplier provides goods or services that have no direct or indirect effect on the goods and services we provide our customer.

### 3.1.2 Supporting Documentation

Documents required to complete the supplier approval process are:

- Supplier Quality Assessment and / or Supplier Assessment Questionnaire
- QMS certification
- Confidentiality or non-disclosure agreement (NDA) if applicable

### 3.1.3 Special Measures

Where the above criteria and exceptions cannot be met, depending on the product, its application, value and criticality, special authorization may be granted where evidence of compliance can be provided.

This may include EXCALIBUR MACHINE AND SHEET METAL audit to a set of alternative basic quality requirements.

## 3.2 Special Processes

A special process is a process that generates outputs that cannot be measured, monitored, or verified non-destructively or cost effectively. Therefore, deficiencies cannot be detected until after products are in use. In order to prevent output deficiencies, special processes must be periodically validated in order to prove that they can generate planned results.

Periodic material validation is performed using material samples. Suppliers and supplier sub-contractors providing special processes **shall** have a documented process control schedule (Process Control Document (PCD), Process Control Flow Chart (PCFC), job card traveler or similar) suitable of meeting all requirements prior to the /commencement of production



## QUALITY CLAUSES

including all preparatory treatments, post treatments, processing, significant surfaces, tests and all other processes and treatments. In some instances, depending on the criticality of product the process control schedule shall be subject to EXCALIBUR MACHINE AND SHEET METAL approval.

Suppliers and supplier sub-contractors providing special processes may be Nadcap accredited for the special processes they provide.

Nadcap Welding approval requires additional scope coverage and as such must be audited by Excalibur Engineering.

### 3.3 Site Visits and Supplier Audits

Where appropriate, suppliers shall be subject to on-site audit and / or site visit by the EXCALIBUR MACHINE AND SHEET METAL Quality, Engineering and / or supply chain representative. In some instances, EXCALIBUR MACHINE AND SHEET METAL will be unable to release a purchase order until supplier approval has been granted. Scheduled verification audits, site visits and business to business meetings shall be supported when required.

### 3.4 Scope of Approval

Suppliers approved for use will be allocated to the EXCALIBUR MACHINE AND SHEET METAL Supplier database (AVL). Suppliers shall not conduct work for EXCALIBUR MACHINE AND SHEET METAL outside their scope of approval unless authorized by EXCALIBUR MACHINE AND SHEET METAL Quality department through audit i.e., special process audits or EXCALIBUR MACHINE AND SHEET METAL specific approvals.

### 3.5 Approval updates – Supplier Responsibilities

**3.6 It is a requirement of the conditions of supply into EXCALIBUR MACHINE AND SHEET METAL that the contractor / supplier fully understands and adheres to the following. It is the supplier's responsibility to ensure:**

- EXCALIBUR MACHINE AND SHEET METAL shall be provided up-to-date copies of Quality Management System certification including scope of certification.
- EXCALIBUR MACHINE AND SHEET METAL shall be informed by the approved supplier when approval bodies are changed, and certificates are re-issued or revoked.
- EXCALIBUR MACHINE AND SHEET METAL shall be informed by the approved supplier when certificates scopes are amended which would affect work currently undertaken or scheduled for future delivery. This would also include any change of address.

### 3.7 Right of Access

Suppliers and their sub-suppliers shall provide to EXCALIBUR MACHINE AND SHEET METALS, their customer, and regulatory authorities.

- The right of access to facilities where parts of the contracted activities are being performed including sub-suppliers' premises.



## QUALITY CLAUSES

- Information pertaining to the fulfilment of requirements in the contract.
- Unrestricted opportunity to evaluate supplier compliance with this document.
- Unrestricted opportunity to conduct verification of product conformity to contract requirements.
- Assistance for evaluation, verification, validation, testing, inspection, or release of the product to verify that contract requirements have been accomplished at the supplier's or sub-supplier's premises.
- Working area and facilities
- The necessary equipment available for reasonable use for performing verification.
- Supplier and/or sub-supplier's personnel for operation of verification equipment as required.
- Access to information and communication facilities
- The necessary supplier documentation, to confirm product conformance to specification.
- Copies of necessary documents, including those on electronic media.
- Confirmation of capacity constraints.

### 4. Quality Management Requirements

EXCALIBUR MACHINE AND SHEET METAL are required by AS9100 to apply appropriate controls to their direct and sub tier external providers to ensure that requirements are met (AS9100 para 8.4.1). The sections following detail the minimum controls that the supplier shall implement to meet those requirements.

Suppliers shall plan, implement, and control the processes needed to meet the requirements for the provision of products and services to EXCALIBUR MACHINE AND SHEET METAL. Specifically, this will be focused on the following:

- Review of the Requirements for Products and Services
- Development provision (inputs, controls, and outputs)
- Configuration Management
- Process Control
- Control of Externally provided Processes, Products and Services
- Control of Equipment's, Tools and Software
- Validation of Special Process
- Production Process Verification
- Release of Product and Services
- Control of Non-Conformance
- Performance Evaluation
- Improvement Activities

Excalibur expects all suppliers to have the following policies in place:

- Harassment Policy
- Immigration Law Compliance



## QUALITY CLAUSES

- Child Labor Policy
- Human Trafficking Policy
- Ethical Behavior
- Product Safety
- Competence, including any required qualification of persons
- Adhere to all environmental and regulatory requirements of all federal, state, and local requirements. Including but not limited to DFAR, REACH, RoHS, Conflict Materials, and Counterfeit parts as per current laws, environment regulations or customer requirements, Purchase Order requirement or print requirements.

### 4.1 Review of the Requirements for Products and Services

The supplier shall ensure that they have the ability to meet EXCALIBUR MACHINE AND SHEET METAL's requirements for products and service including but not be limited to

- Scope of certified approval against what product or service is being requested.
- Technical ability i.e., can equipment or employee skills meet the requirements of the drawings. - Capacity constraints.
- Statutory and regulatory requirements.
- Contract or order requirements differing from those agreed at tender.
- Drawing pack i.e., tolerance, datum's and geometric tolerancing, material requirements (ensuring the material is available in size and condition stated), special processes, specific drawing notes including adherence to standards and specifications quoted within the context, destructive and non-destructive testing requirements i.e., mechanical, electrical, etc.
- Design and verification – if undertaking this requirement for EXCALIBUR MACHINE AND SHEET METAL, understand the conditions of the contract as highlighted in para 4.2.
- Reference documentation - it is the responsibility of suppliers to obtain, review, work to and maintain current issues of specifications and standards from appropriate sources.

When appropriate; Supplier shall use Table A1 of ASQR-01 to identify customer contractual requirements that are relevant to this PO that pertain to the type of service/product being supplied to Excalibur.

[https://www.rtx.com/-/media/project/united-technologies/rtx/home/suppliers/utc-legacy-suppliers/united-technologies-aerospace-supplier-quality-requirement-documents/media/asqr01-rev-11-final-08\\_31\\_2018.pdf?rev=dac50a0e3bc04606999ddb2ecdf3ce55](https://www.rtx.com/-/media/project/united-technologies/rtx/home/suppliers/utc-legacy-suppliers/united-technologies-aerospace-supplier-quality-requirement-documents/media/asqr01-rev-11-final-08_31_2018.pdf?rev=dac50a0e3bc04606999ddb2ecdf3ce55)

- Additional Resources – when reviewing the process controls required to assure compliance to the Design data, should the requirement for fixturing, hard gauging, specialist test equipment, specialized training etc. be identified this must be communicated to EXCALIBUR MACHINE AND SHEET METAL Supply Chain. It is not acceptable if risk is identified, and no

## QUALITY CLAUSES

action is undertaken or communicated to EXCALIBUR MACHINE AND SHEET METAL due to timescales or financial constraints. This will also apply to sub-contractors undertaking work on the product.

- Supplier selection of sub-contractors. EXCALIBUR MACHINE AND SHEET METAL must be informed if sections of work are to be subcontracted. EXCALIBUR MACHINE AND SHEET METAL reserve the right to audit that supplier if it is deemed a perceived risk to contractual requirements (see 4.5). Special Processes are covered in section 3.2.

### 4.2 Configuration Management

Supplier shall manage configuration through the implementation of Configuration Management Planning, Configuration Identification, Change Control, Configuration Status Accounting and Configuration Audit in accordance with the requirements of ACMP 2100 / ISO 10007. (AS9100 certified suppliers already meet this requirement).

### 4.3 Process Control and Verification

EXCALIBUR MACHINE AND SHEET METAL require the supplier to demonstrate control through the production process. The supplier shall demonstrate confidence that the processes have been carried out as planned and therefore be able to demonstrate the conformity of those products and services. This can be undertaken by the flow of information associated in the following documentation.

The following is an example of how the supplier can incorporate these activities that will show the flow of information needed to control the process (similar processes and documentation that meet the requirement are acceptable):

- Value Stream Mapping
- Process Flow Diagrams (identifying key characteristics, inspection stages, processes, frozen operations if identified by EXCALIBUR MACHINE AND SHEET METAL (no changes allowed unless agreed by EXCALIBUR MACHINE AND SHEET METAL delegate), associated documentation. Examples of layouts can be requested. Quality Requirements for Suppliers Doc No. Issue Date Page QM003 8 27-Feb-2019 9 of 25 Uncontrolled if downloaded or printed.
- PFMEA – Process Failure Mode Effect Analysis. Critical in analysis of the process flow showing anticipation of risks and actions to nullify those risks to the process.
- Control plans – detailing the stages of the process where inspection and our documenting of special process monitors are required.
- Inspections plans – identifying by whom (level of trained operators), with what (equipment's to be used), how (standard operation) and the frequency of how those checks/inspection will be carried out.

Further to this the supplier shall demonstrate the eradication of variability in the process (if required by EXCALIBUR MACHINE AND SHEET METAL on critical processes) using process



## QUALITY CLAUSES

capability measurement, statistical process control and MSA studies i.e., Gauge R&R. When specified by EXCALIBUR MACHINE AND SHEET METAL these activities should be covered in a Quality Plan agreed with both parties and the requirements flowed down the supply chain if needed. A Quality Plan will be required when specific controls not covered by ISO9001, AS9100 certification or detailed in this document are required by EXCALIBUR MFG.

### 4.4 Control of Externally Provided Processes, Products and Services

All outsourced processes will be evaluated per **\*\*SPECIFICATION NO. EXCAL-SPEC-001\*\***. Specification is available on our website.

The supplier, as the recipient of the contract, shall be responsible for meeting all requirements, including work performed by the supplier's sub-tier suppliers (also known as sub-suppliers or subcontract suppliers).

| Where the supplier intends to sub-contract work or service normally undertaken by the supplier, a written agreement **shall** be in place between EXCALIBUR MACHINE AND SHEET METAL and the supplier indicating the reason for the sub-contract and the sub-tier sub-contractor to be used.

When the supplier uses sub-tier sources to perform work on products and/or services for EXCALIBUR MACHINE AND SHEET METAL, the supplier shall flow down to its sub-tier sources, all of the applicable technical and quality requirements contained in the EXCALIBUR MACHINE AND SHEET METAL contract. This will:

- ensure that externally provided processes remain within the control of their own quality management system
- define both the controls that it intends to apply to an external supplier and those it intends to apply to the delivered product.

| EXCALIBUR MACHINE AND SHEET METAL representatives, customers and/or end users shall be allowed access to the sub-supplier's plant and facilities for the purpose of surveillance and inspection.

### 4.5 Control of Equipment, Tools and Software

Equipment, tools, and software programs used to automate, control, monitor or measure production processes shall be validated prior to release for production and shall be maintained. The supplier shall be responsible for maintaining traceability to national standards whether those items are calibrated internally or externally.

Storage requirements shall be defined for production equipment or tooling in storage including any necessary periodic preservation or condition checks. Items that have an extended replacement period (i.e. mold tools, die sets, software programs) are required to be detailed in a



## QUALITY CLAUSES

risk avoidance document that will detail the supplier's disaster recovery plan in such an event – see section 12.

### 4.6 Validation of Special Processes

Refer to para 3.2 for special processes validation.

### 4.7 Production Process Verification

When indicated on the purchase order the supplier shall produce a First Article Inspection report (FAIR) to verify the manufacturing process using a representative item from the first manufacturing run of a new part or assembly. The purpose of the FAIR is to verify that the production processes, production documentation and tooling, are capable of producing parts and assemblies that meet requirements. This process shall be repeated when changes occur that invalidate the original results (this will include transfer of work to another site, drawing changes, process changes etc.). The FAI requirement, once invoked, shall continue to apply even after initial acceptance.

The FAIR will be produced in accordance with AS9102 and shall be provided with the delivery of goods. Guidance on how EXCALIBUR MACHINE AND SHEET METAL require First Articles to be completed is detailed in EXCALIBUR MFG's 'First Article Inspection Guidebook'. A copy can be supplied by your EXCALIBUR MACHINE AND SHEET METAL Supplier Quality Engineer. It is strongly advised this is reviewed and its requirements understood. Its content details when a Partial/delta FAI is required but as an aid:

#### **A Partial/Delta FAI is required to the original when:**

- A change in design potentially affects form, fit or function.
- A change in manufacturing source, process, inspection method, location of manufacturer, tooling, or material potentially affect form, fit or function.

The FAIRs shall include all certification indicating conformity of materials, special processes, calibration, testing and personnel training qualification where applicable.

### 4.8 Release of Product and Services

Suppliers **shall** supply conforming goods and services on time in full (OTIF) including all required correct documentation and certification where applicable.

Certification refers to any document that states the goods or services meet or conform to specification or purchase order requirements. These include, but are not limited to:

- Certificate of Conformity
- Certificate of Compliance
- Certificate of Analysis
- Certificate of Attestation
- Certificate of Calibration



## QUALITY CLAUSES

The certifying document shall be deemed as an authorized contractual guarantee that the goods and services reference on the certificate meet drawing, specifications, technical data, and purchase order requirements. A signed copy or digital signature will be acceptable, but Certificates must be traceable to a certifying quality representative or company official.

### 4.8.1 Supplier Documentation

The following data/information **shall** be included on each certification document (normally referred to as a CofC or Release Note)

- Certificate or delivery unique identifier / Certification / Delivery Note number
- Certificate Date
- Purchase order number
- Drawing number and / or part number and revision (as stated on Purchase Order)
- Batch unique identifier (Batch number / Lot number / Date code / Serial number)
- Quantity
- Supplier Name and Address
- Statement that goods and / or services conform to the specified requirements
- Original Manufacturer's name, part number and lot / date code (when applicable)
- EXCALIBUR MACHINE AND SHEET METAL **Reference to all approved concessions/Production permits** applicable
- A certificate of conformity that accompanies a FAIR does not need to include the FAIR reference. However, a reference to a current and valid FAIR (where applicable) is needed on certificates with repeat deliveries
- Reference to the Quality Management System release

Suppliers shall ensure the correct documentation is supplied with products and services.

**I** Additional Delivery Quality Conditions required by NATO & Military contracts will be stated on EXCALIBUR MFG's purchase order. These will define the requirements for traceability and certification above those detailed in this policy and ISO9001. These will only apply when indicated by the delivery quality condition on the purchase order or other documentation associated with the contract.

### 4.8.2 Calibration and Test Certification

In addition, where calibration and test certification are issued to EXCALIBUR MACHINE AND SHEET METAL information shall include:

- The calibrated test apparatus / instrument / standards used traceable. These will be traceable to NIST, UKAS or the national equivalent from sources other than the UK.
- Calibration / test specification used to include tolerances and criteria.
- Items outside specified limits will be identified, especially if the item has undergone authorized repair to bring it into specification.



## QUALITY CLAUSES

### 4.8.3 Late Deliveries / Short Deliveries

If non-delivery, short or late deliveries are anticipated, suppliers shall immediately notify the buyer indicated on the purchase order.

### 4.8.4 Completeness of Supplied Documentation

**I** Certification documentation supplied to the requirements of any EXCALIBUR MACHINE AND SHEET METAL purchase order will be rejected and deemed not complete should it transgress any of the following:

- Certification supplied with CofC is illegible i.e., faint, blurred or ambiguous
- Certification supplied with concession/production permit whose approval is outstanding
- Incorrect / different material or subcontracted special process certification being referenced that do not tie up with FAI documentation
- Alternative material and or subcontracted special processes – will be rejected if authorized certification is not attached to the CofC i.e., production permit or concession approved with the prior agreement of EXCALIBUR MACHINE AND SHEET METAL.

### 4.9 Control of Non-Conformance

EXCALIBUR MACHINE AND SHEET METAL will inform the supplier of nonconformities that are highlighted at any stage of EXCALIBUR MACHINE AND SHEET METAL's process flow including, but not limited to, trials and subsequent service. The supplier shall respond to the Supplier Corrective Action Report (SCAR) when raised. The SCAR is structured around the 8D process which details the requirement for the following:

- Problem statement
- Containment Action (in production, in stores, in transit, delivered product)
- Root Cause Analysis (see below)
- Corrective Action
- Implement Corrective Action
- Define and Plan Preventive action to prevent recurrence.
- Review of Implementation or actions
- Objective evidence documented for SCAR

**I** SCAR's **shall** be processed to the following timescales by the supplier:

- Supplier has 5 working days to acknowledge receipt and undertake containment action - Supplier then has a further 25 calendar days to respond with a detailed corrective action.
- Supplier will submit on or before the agreed verification date, evidence of the implemented corrective/preventive action. This evidence will allow the EXCALIBUR MACHINE AND SHEET METAL Supplier Quality Engineer to close the SCAR.
- Should the SCAR be rejected by EXCALIBUR MACHINE AND SHEET METAL the supplier will have a further 10 working days to resubmit for approval and closure.



## QUALITY CLAUSES

### 4.9.1 Root Cause Analysis (RCA)

When nonconformities occur, the supplier must perform Root Cause Analysis (RCA) and corrective action activities to prevent recurrence of the problem. EXCALIBUR MACHINE AND SHEET METAL recommend that the suppliers Improvement teams use industry standard root cause analysis tools to aid in identifying these issues i.e. 5 why methodology & Cause and Effect Diagram (Ishikawa or fishbone).

### 4.10 Application for Concession or Production (Deviation) Permit

Suppliers shall request Concession or Deviation by contacting EXCALIBUR MACHINE AND SHEET METAL Engineering, via email or their own form. This must include the proposed corrective action to eliminate the cause and prevent recurrence. Documented approval from Excalibur will be included with submitted paperwork.

#### 4.10.1 Production Permit (Deviations)

Production Permits (Deviations) are considered permission to produce an item that deviates from design data. This may be because of design anomalies, material availability issues or other unforeseen reasons prior to manufacture. Requirement for a production permit should be identified by the supplier during production planning.

Completed production permits shall be submitted to the procurement representative indicated on the purchase order. All Production permits must be referenced on the applicable certificate of conformity (using the EXCALIBUR MACHINE AND SHEET METAL approved concession number).

Any production prior to production permit approval shall not occur unless entirely at the supplier's own risk. Products delivered against an EXCALIBUR MACHINE AND SHEET METAL approved deviation are considered as conforming.

#### 4.10.2 Concessions

It is the policy of EXCALIBUR MACHINE AND SHEET METAL not to accept a product that fails to meet the required standard. In certain circumstances however, concessions will be considered by EXCALIBUR MACHINE AND SHEET METAL design authority through a materials review board (MRB). This will allow, when approved, the supplier to deliver product against agreed concession for a set number of product or parts. The concession must quote the EXCALIBUR MACHINE AND SHEET METAL purchase order(s) reference, serial numbers or batch affected or, if required, the time span applicable. The concession will NOT be accepted if these conditions are not met.

Concession requests shall be submitted to the procurement representative indicated on the purchase order.



## QUALITY CLAUSES

Delivery of nonconforming product shall not occur unless an approved concession is in place. All concessions must be referenced on the applicable certificate of conformity (using the EXCALIBUR MACHINE AND SHEET METAL approved number).

### 5. Record Retention / Destruction Requirement

Suppliers shall retain records relating to processing, testing, calibration, manufacture, supply, traceability, and certification for a minimum of 7 years unless otherwise stated by contract.

Any loss or potential compromise of any classified material must be reported to EXCALIBUR MACHINE AND SHEET METAL without delay. All OFFICIAL + EXCALIBUR MFGPI documents must be returned to Excalibur Machine and Sheet Metal either:

- a. When they are no-longer required as part of the sub-contract; or
- b. At the end of the sub-contract.

### 6. Performance Evaluation

EXCALIBUR MACHINE AND SHEET METAL requirements for suppliers monitoring, measurement, analysis, and evaluation of internal performance is detailed in ISO 9001 para 9. No additional EXCALIBUR MACHINE AND SHEET METAL requirement is required.

### 7. Competence, Training and Awareness

The supplier shall ensure personnel processing orders or performing work affecting conformity to product or service are trained and aware of the relevance and importance of their activities in relation to meeting the requirements of EXCALIBUR MACHINE AND SHEET METAL purchase orders and associated documentation.

The supplier will as a minimum produce a skills matrix which details the training undertaken by suppliers' staff/operators in relation to the processes specific to EXCALIBUR MACHINE AND SHEET METAL product.

The skills matrix **shall** be maintained by supervisory/management level and demonstrate control of those activities. The skills matrix procedure shall also detail how risks associated with highly skilled operators are covered i.e., sickness, leave, succession planning etc. and the business decision on how that risk will be covered as well as capacity constraints.

### 8. Identification and Traceability

Traceability is an important factor in high end and safety critical products and is a basic requirement unless agreed in writing. Suppliers shall provide documentation that includes revision / issue nos., batch numbers, lot codes or where relevant date codes and serial numbers of goods provided.

#### 8.1 Serialization and Part Marking

Serialization and part marking identification **shall** be in accordance with the purchase order, design data, drawing or any contractually agreed specification or standard.

#### 8.2 Traceability to Source/Origin of Raw Material



## QUALITY CLAUSES

Where the Quality Plan requires demonstration of traceability and design provenance through the supply chain, the supplier shall include in any relevant sub-contract the requirement for certification from its sub-tier suppliers. The supplier shall ensure that full traceability is maintained throughout the sub-tier supply chain and can be provided on EXCALIBUR MACHINE AND SHEET METAL request. Material shall be identified and traceable to manufacturer's part number, lot number, date code for all electronic and electrical parts, raw material, mechanical machined parts. Raw material shall have traceability to the mill.

Please note: Commercial of the Shelf items (COTS) will only require traceability to original manufacturer unless otherwise stated on the Purchase Order.

### 9. Preservation of Product

The supplier shall preserve the product during internal processing, storage, and delivery to the intended destination.

#### 9.1 Workmanship Acceptance Criteria for Surface Engineering

Unless otherwise stated, the following workmanship acceptance criteria shall be used; Supplied product with surface finishes for functional or cosmetic applications shall meet the requirements of the drawing (or referenced specification) for surface conditions, uniform in appearance, free from blisters (adhesion), pits, nodules, scratches, stains. This includes but is not limited to electroplated, conversion coated, anodized, painted, mechanically finished and passivated surfaces.

Suppliers are expected to use best practices when handling to ensure there are no scratches, defects, or surface imperfections.

Excalibur has the right to reject parts if parts are deemed non-conforming by way of specs, dimensions, cosmetics, FOD and packaging standards. This rejection may result in non-payment and in some case require a chargeback for damaged goods or materials that are non-repairable.

#### 9.2 Deviation from Design Data

Deviation from design data shall not occur unless an approved deviation permit from EXCALIBUR MACHINE AND SHEET METAL is obtained.

#### 9.3 Foreign Object Debris (FOD)

The supplier shall establish a process to detect and prevent Foreign Object Debris. This should be in accordance with NAS412 or AS9146. As a minimum the process shall include:

- FOD process review
- Training of FOD practices
- Material handling and product protection
- Tool/hardware accountability
- Lost items search and documentation process



## QUALITY CLAUSES

- Inspection for foreign objects prior to closing apertures and compartments during assembly.

### 9.4 Shelf Life

Goods and products containing items with finite shelf life shall have the expiry date identified on the product and the delivery documentation. The remaining shelf life must be a minimum of 80% of the total shelf life for the material at time of delivery unless otherwise specified.

### 9.5 Packaging

The supplier shall adequately plan for packaging designed to prevent product contamination, deterioration, damage, or loss. Suppliers should provide expendable packaging or returnable containers, where appropriate, of sufficient density and protection from likely damage that could occur. The use of approved industry standard labelling and bar-coding shall be in accordance with any contractually agreed packaging specification.

## 10. DFAR

The term DFARS compliant refers to materials (metal or otherwise) that come from domestic or NATO sources. However, there are countries included in DFARS that are not members of NATO. Current list of countries can be found at [www.rsisecurity.com/dfars-compliant-countries/](http://www.rsisecurity.com/dfars-compliant-countries/).

## 11. Environmental Regulations

### 11.1 RoHS

RoHS stands for Restriction of Hazardous Substances. RoHS originated in the European Union and it restricts the use of specific hazardous materials found in process, materials, electrical and electronic products. Suppliers shall comply with the most current revision of the RoHS directives.

### 11.2 REACH

Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) is a European Union regulation. REACH addresses the production and use of chemical substances, and their potential impacts on both human health and the environment. Suppliers shall comply with the most current revision of the REACH directives.

### 11.3 Counterfeit Product Prevention

Where appropriate, the supplier shall establish and maintain a counterfeit parts / material prevention and control plan using AS5553 and/or AS6174 to ensure that counterfeit work is not delivered. The purpose of the supplier's plan shall be to develop a robust process to prevent the delivery of counterfeit commodities and to control commodities identified as counterfeit. Where possible, semi-conductor distributors should be certified to AS6081.

### 11.4 Conflict Minerals

Conflict minerals are minerals mined in conditions of armed conflict and human rights abuses, and which are sold or traded by armed groups. Suppliers shall be aware of the OECD Due



## QUALITY CLAUSES

Diligence Guidance. Further information can be found at the Excalibur Machine and Sheet Metal Conflict Minerals webpage.

### 12. Obsolescence Management

Obsolescence Management is 'the coordinated activities to direct and control an organization regarding obsolescence'. The suppliers shall notify EXCALIBUR MACHINE AND SHEET METAL of any pending obsolescence, the relevant last time buy date and last time ship date at least 6 months prior to the last time buy date.

### 13. Business Continuity / Disaster Management

Suppliers should have in place a business continuity plan in accordance with ISO 22301. This includes requirements to plan, establish, implement, operate, monitor, review, maintain and continually improve a documented management system to protect against, reduce the likelihood of occurrence, prepare for, respond to, and recover from disruptive incidents when they arise.

Essentially this is a management plan that ensures no disruption to the supply of goods to EXCALIBUR MACHINE AND SHEET METAL should the business fall foul of environmental circumstances such as fire, flood, power failure etc. This will include but not be limited to safety stocks of goods, fire protection of tooling/Jigs, safeguarding essential key machinery, off site holding of key software etc.

The extent of application of these requirements depends on the supplier's operating environment and complexity.

### 14. Chemicals and Hazardous Substances

Nothing in this section shall reduce or limit any statutory duty or legal obligation of EXCALIBUR MACHINE AND SHEET METAL or the supplier.

#### 14.1 Safety Data Sheets

Safety data sheets (SDS) provide information on chemical products that help users of those chemicals to make a risk assessment. They describe the hazards the chemical presents, and give information on handling, storage, and emergency measures in case of accident. By law suppliers of chemicals must provide an up-to-date safety data sheet if a substance is classified as dangerous in accordance with the Classification, Labelling and Packaging (CLP) Regulation 1272/2008.

If the supplier is required, under, or in connection with the contract, to supply articles or components of articles that, in the course of their use, maintenance, disposal, or in the event of an accident, may release hazardous materials or substances, they shall provide to EXCALIBUR MACHINE AND SHEET METAL a list of those hazardous materials or substances with a subsequent SDS.

#### 14.2 Lead, Asbestos and Radioactive Substances

Special regulations apply to Lead, Asbestos, and radioactive substances. In addition, refer to DEFCON 624 for Asbestos. Adequate packaging must be provided to prevent exposure of staff



## QUALITY CLAUSES

to these substances in accordance with the relevant Health and Safety Executive (HSE)  
Approved code of practice (ACOP)

### 15. Sensitive and EXCALIBUR MACHINE AND SHEET METAL Proprietary Data

EXCALIBUR MACHINE AND SHEET METAL proprietary and customer technical data must only be shared with 3rd party suppliers who have:

- Been approved by EXCALIBUR MACHINE AND SHEET METAL and the owner of the technical data.
- Confirmed in writing (e.g., hardcopy letter, email with return address header) that they are authorized to receive such data and they understand the implications of and requirements for handling sensitive and proprietary technical data.

Principally where data is identified as sensitive or EXCALIBUR MACHINE AND SHEET METAL Proprietary Data, restrictions apply to the control, handling, and monitoring of such data. Only authorized personnel shall have access to restricted data and the data shall be controlled in such a way as to prevent unauthorized transmission or access.

Suppliers that require Restricted and Official Sensitive Classification data shall have a procedure in place for the control, handling, and monitoring of such data. EXCALIBUR MACHINE AND SHEET METAL is always handled in accordance with the EXCALIBUR MACHINE AND SHEET METAL terms and conditions.

Where a supplier is identified on a Technical Assistance Agreement (TAA) or Manufacturing License Agreement (MLA), the organization must complete a Non-Disclosure Agreement (NDA) when requested by EXCALIBUR MACHINE AND SHEET METAL and shall continue to maintain access controls in accordance with the NDA and Quality Requirements for Suppliers any Technology Control Plan (TCP) that EXCALIBUR MACHINE AND SHEET METAL and the organization enter into. EXCALIBUR MACHINE AND SHEET METAL reserve the right to issue an NDA where EXCALIBUR MFGN deem sensitive information will be shared with the supplier.

#### 15.1 Sub-Tier Suppliers

Sub-tier suppliers and sub-contractors used by the supplier that have access to any sensitive or EXCALIBUR MACHINE AND SHEET METAL proprietary data must be authorized with an NDA in place.