

Tooling Safety Specification

Appendices

The appendices listed below and those included as part of the Appendix A are not attached to this document. These appendices are updated from time to time, as necessary, and are available for download under www.autoneum.com. It is the supplier responsibility to make sure it complies with the then current version of this document as well as the appendices applicable at the time of the delivery of the tool

This tooling Safety Specification forms part of any purchase order issued by Autoneum group companies in relation to tolling, irrespective of whether concerning new tooling devices, refurbished or second hand tooling or tooling related services, and shall apply automatically, even if not expressly mentioned in the order document itself. The supplier automatically accepts this Tooling Safety Specification by accepting the order in relation to the tooling.

List of Minimal Safety Requirements – Equipment and Machinery appendices:

- Appendix A: Requirements and Standards - Regional Requirements

- **Applicable to Autoneum European Sites (BGEU):**
 - ConSense Procedure 0509: Tooling Standards – “Tool Safety Equipment and Machinery Safety Requirements”.
 - Directive 2006/42/EC for partly completed machinery.

1. INTRODUCTION

1.1. Scope

The purpose of this document is to provide Environmental, Health and Safety (EHS) requirements for tooling suppliers (hereinafter, suppliers) and to ensure the identification and mitigation of risks related to tooling design, construction, and refurbishment. Risks shall be identified and reduced much as reasonably practicable.

This document applies to partially complete machinery, hereinafter referred to as tooling, such as (without limitation):

- New tooling devices and infrastructure facilities supplied by a supplier, including an Autoneum legal unit;
- Refurbished and second-hand tooling devices and infrastructure facilities, transferred by the customer to an Autoneum legal unit or between Autoneum legal units.

In such case where Autoneum's customer is transferring a tooling to an Autoneum manufacturing location, such Autoneum legal unit has the responsibility to ensure the compliance of this tooling to applicable standards, local legislation, and site requirements. Where no compliance is identified, such Autoneum legal unit shall inform the customer as soon as reasonably possible to mitigate any resulting risks and remedy any non-compliance. No tooling must be used, which does not fulfil local legal requirements.

If an Autoneum legal unit transfers a tooling to another Autoneum legal unit (intercompany), the Autoneum legal unit owning the tooling shall be responsible to provide all the technical information required under this Tooling Safety Specification to the receiving Autoneum Legal entity. If there is the need to refurbish a tooling in order to comply with applicable standards, local legislation or site requirements, the costs shall be considered in the respective project (hereinafter referred to as the Tooling Transference Project).

The supplier is responsible to ensure that the tooling and its components, as identified in the purchase order, comply with all applicable standards (ISO, ANSI, CSA, EC, etc.), local legislation and any Autoneum specific requirements identified in the purchase order or any other related documents.

The Autoneum employee or representative responsible to manage the tooling project or responsible for the Tooling Transfer project has the role and the responsibility to ensure that any Autoneum specific requirements are sufficiently described in the purchase order scope and that the supplier is contractually committed to fulfil all the requirements contained in this specification and the local legislation, if any.

1.2. Definitions According to Directive 2006/42/CE and ISO 12100

“Partly completed machinery – Tooling ”

- Means an assembly which is almost machinery, but which cannot in itself perform a specific application.
- Partly completed machinery is only intended to be incorporated into or assembled with other machinery or other partly completed machinery or equipment. Examples include: Tooling to be assembled in a press, drive system of a robot, drive system of a press door, industrial robots, etc.
- This specification focus in the tooling to be assembled in presses, robots, and other Autoneum machinery.

“Hazard”

- Source or situation with a potential to cause harm in terms of injury, ill-health, damage to property, damage to the environment, or a combination of these;
- Either permanently present during the intended use of the machinery or can appear unexpectedly

“Risk”

- Combination of the probability of occurrence of harm and the severity of that harm
- Risk = severity of harm x likelihood of occurrence.

“Residual Risk”

- Risk remaining after protective measures have been implemented

“Risk Analysis”

- Combination of the specification of the limits of the machine, hazard identification and risk estimation

“Risk Evaluation”

- Judgment, on the basis of the risk analysis, of whether the risk reduction objectives have been achieved

“Risk Assessment”

- Overall process comprising a risk analysis and a risk evaluation

“Protective Measure”

- A measure intended to achieve risk reduction implemented by the designer through safe design, safeguarding and protective measures, information for use and/or
- A measure intended to achieve risk reduction, implemented by the user through safe working procedures, supervision, use of PPE, training, etc.
- The tooling supplier is responsible to define protective measures to reduce the assessed risks.

“Safeguarding”

- Protective measure using safeguards to protect persons from the hazards which cannot reasonably be eliminated or risks which cannot be sufficiently reduced by inherently safe design measures.

1.3. Supplier Assessment

Prior to sourcing, Autoneum will carry out a tooling supplier assessment as per Autoneum QEHS Assessment for Machinery, Equipment, and Tools in order to ensure that Environmental, Health and Safety requirements are met. The person in charge of tooling development and construction is responsible to execute this assessment.

The supplier must conform to all EHS requirements as set out in the assessment in order to be approved. If requirements are not met, the supplier will provide Autoneum with an action plan and verifications of completed actions. After Autoneum deems the corrective actions acceptable, the supplier can be sourced.

2. GENERAL REQUIREMENTS

Before placing a tooling into the market, the supplier or their authorized representative shall ensure that Autoneum minimum requirements and local legislation applicable to each country are followed.

2.1 Autoneum Minimum Requirements for Tooling Devices

All documents supplied by the tooling manufacturer must cover the design, manufacturing, and operation of the tooling device to the extent necessary for the assessment of conformity with the essential health and safety requirements applied.

The supplier is responsible to provide the relevant technical documentation in English and in local language, as follows:

Technical Document	Language
Tooling manual containing information about maintenance, handling and assembling instructions	English and Local language
Declaration of Incorporation (if applicable as per local legislation such as the European Directive 2006/42/EC)	English and Local language
Assembling and clamping drawings, Tooling Construction File, BOM and List of spare parts (if requested by Autoneum or Autoneum's customer)	English

Any failure to present the relevant technical documentation in response to a duly reasoned request by the competent national authorities may constitute sufficient grounds for doubting the conformity of the tooling with the essential health and safety requirements applied and attested and are considered a substantial breach of supplier's obligations resulting from this Tooling Safety Specification as well as the respective tooling purchase contract. Records must be maintained for a period of minimum 10 years following the date of tooling manufacturing or refurbishment.

2.1.1. Compliance with Regulations and Standards

The supplier must comply to relevant product Directives, Regulations and Harmonized Standards applicable to each country, state, or region. Tooling design must be done in compliance to local legislation, harmonized standards, Autoneum Tooling Safety Specification and referred appendices. All tooling devices must be compliant with applicable laws and standards.

2.1.2. Tooling Construction File

The supplier must record and maintain the Tooling Construction File for a period of 10 years from the date of manufacturing or refurbishment, which includes as a minimum:

- The overall drawing of the tooling and drawings of the control circuits;
- Full detailed documents such as drawings, calculation notes, test results, certificates, and other documents required to check the conformity of the tooling with the essential health and safety requirements;
- Tooling design Risk Assessment, as per defined term above under chapter 1.2.

2.1.3. Design Risk Assessment

The supplier must execute a tooling Risk Assessment during the design stage, the results of which must be presented to Autoneum immediately upon the latter's request. This assessment is done by the supplier or by a qualified 3rd party in order to:

- Assess the risk of bodily harm or technical damage that could result from identified hazards, covering all stages of the tooling lifetime (from design to final decommissioning).
- The design Risk Assessment shall consider the operations that will be executed with the designed tool, such as tooling set-up, handling, operation, maintenance, and cleaning.
- Determine the degree of protection and the type of safeguard to be provided
- Ensure that all the Protective Measures have been taken into account
- Evaluate residual risk and countermeasures to be implemented to reduce the identified risks to a lower level.

The supplier must take in consideration all (potential) hazards when designing and constructing a tooling and follow the requirements in Table 2 Hazards in Appendix A – Requirements and Standards – Regional Requirements.

A definition of all terms used in this chapter is described above under chapter 1.2.

2.1.4 Declaration of Incorporation

A declaration of incorporation shall be provided according to European Directive 2006/42/EC for partly completed machinery. For the U.S. and Canada, the local legislation shall be checked and must be complied with by the supplier.

2.1.5 Series Manufacturing / Refurbishing of Tooling

The tooling supplier is responsible to ensure that components, fittings and the tooling material is capable of being assembled and used safely, in case of series manufacturing and tooling refurbishing. The relevant reports and results shall be included in the Technical Document, as per defined above under chapter 2.1.

2.1.6 Assembling Instruction

The supplier must provide a clear, unambiguous assembly instruction for tooling devices, which must contain a description of the necessary conditions for correct incorporation in the final machinery.

For Autoneum legal units purchasing tooling from the supplier, which are located outside of Europe, the assembly instructions must be provided in either English and/or in local language, at the selection of Autoneum or authorized representative.

For Autoneum legal units purchasing tooling from the supplier, which are located in Europe, the assembly instructions must be provided in one or more European Community languages, with preference to the local language of the Autoneum site.

In both cases, the assembly instructions shall accompany the tooling device until it is incorporated into the final machinery. Assembly instructions shall include detailed information, whenever it is applicable, such as:

- How to assembly the tooling, ensuring health and safety;
- Location of the anchorage points;
- Devices necessary to assembly the tools;
- The frequency and criteria for tooling preventive maintenance, ensuring that the tool is and remains in a safe condition during usage until end of life;
- Other critical topics identified by the supplier during the safety Risk Assessment.

2.1.7 Life Cycle Principle

The supplier guarantees supply of spare parts and technical information for servicing to Autoneum during the period defined in the tooling purchase contract.

2.2 Pre-Production Test at Autoneum

Autoneum EHS and Manufacturing Engineering teams will evaluate the tooling performance and execute an initial safety risk assessment as per MEHS 1.1.1 Work Environment Risk Assessment during pre-production testing. If at any part during the pre-production testing Autoneum deems the risk is higher than an acceptable level or a hazard

still exists after measures taken, the supplier must take action to reduce the risk.

If defects or hazards are revealed, or Autoneum deems the risk too high, the supplier at its own cost must eliminate these deficiencies immediately.

2.3 Pre-Production Acceptance

Autoneum will provide the supplier with a pre-production approval if no defects are detected, risks are reduced to as low as reasonably practicable and conformity control is verified.

2.4 Final Acceptance Tests

After the successful termination of pre-production tests, running tests will be conducted in which the specified automotive parts are produced using materials and tools provided by Autoneum as set out in the general specifications. The final acceptance tests will include the evaluation of the completion of the equipment and that it is suitable to produce automotive parts in series according to the specification.

2.5 Final Acceptance Certificate

Autoneum will provide the supplier with notification of a final acceptance of the tooling safety performance, if no defects are detected and risks are reduced to the lowest feasible extent.

If the supplier fails to remedy or make up for neglect of duties stipulated in this document, particularly fails to eliminate the defects or hazards immediately, Autoneum shall be entitled to claim damages. If the supplier fails to eliminate defects or hazards within a reasonable time frame determined by Autoneum, Autoneum shall be entitled, without prejudice to any other rights or remedies set out in the tooling purchase contract, to withdraw from the respective purchase order and the supplier shall not have the right to claim any compensation or damages.

2.6 No Deemed Acceptance

For the avoidance of doubt, such safety risk assessment and/or any other pre-production or other acceptance procedure conducted by Autoneum as mentioned above shall not relieve or be deemed to relieve the supplier of any of the obligations or responsibilities set out in this Tooling Safety Specification and/or the tooling purchase contract or release the supplier from any warranties, guarantees or liability agreed or available at law or be deemed to constitute acceptance of the manufacturing processes or procedures, materials, tooling, etc. by Autoneum. Any defects of the tooling discovered after issue of the final acceptance certificate and during the warranty period will be remedied by the supplier in accordance with the terms set out in the respective tooling purchase contract.

3. Revisions history

Revision	Date	Writer	Description
00	11.04.2022	Group Q&EHS	Initial Emission