

**FRAME AGREEMENT FOR EQUIPMENT PURCHASE****Appendix 3c Safety requirements for food product machinery****Requirements for production equipment****1. General requirements:**

- a) The manufacturer must ensure that the Equipment/assembly of Equipment delivered:
  - o is safe and suitable for the work and the working conditions that it is intended
  - o is in conformity with all necessary regulations
  - o comes with a Declaration of Conformity and user instructions in local language of the Site
  - o is CE marked.
- b) Equipment must be designed and constructed so that it is fitted for its function, and can be operated, adjusted and maintained without putting persons at risk when these operations are carried out under the conditions foreseen but also taking into account any reasonably foreseeable misuse thereof.
- c) The Equipment must be designed and constructed in such a way as to prevent abnormal use if such use would engender a risk. The need for user intervention in the Equipment must be minimized.
- d) Equipment must be supplied with all the special equipment and accessories essential to enable it to be adjusted, maintained and used safely.
- e) Equipment must be fitted with means to isolate it from all energy sources. Such isolators must be clearly identified. Isolators must be capable of being locked if reconnection could endanger persons.
- f) Lock-out/tag-out procedure must be designed for the Equipment and information in relation to isolation from the energy sources provided in instructions

**1.1 Risk assessment**

The manufacturer of Equipment or his authorized representative shall perform risk assessment for the Equipment and must secure that the Equipment is then designed and constructed taking into account the results of the risk assessment. In selecting the most appropriate methods, the manufacturer must apply the following principles, in the order given:

- o eliminate or reduce risks as far as possible (inherently safe Equipment design and construction).
- o take the necessary protective measures in relation to risks that cannot be eliminated.
- o inform users of the residual risks due to any shortcomings of the protective measures adopted, indicate whether any particular training is required and specify any need to provide personal protective equipment.

The aim of measures taken must be to eliminate any risk throughout the foreseeable lifetime of the Equipment including the phases of transport, assembly, operation, maintenance, dismantling, disabling and scrapping. Risk assessment performed by Supplier/Equipment manufacturer shall be sent to Purchaser with separate agreement (as minimum the Supplier shall provide HKScan a copy of the list of residual risks)

**1.2 Safety of cleaning**

The Equipment must be designed and constructed in such a way that it is possible to clean internal parts which have contained dangerous substances or preparations without entering them. Any necessary unblocking must also be possible from the outside. If it is impossible to avoid entering the Equipment, it must be designed and constructed in such a way as to allow cleaning to take place safely.

**Related documents to be fulfilled:**

- *EN-ISO 12100 Safety of machinery. General principles for design. Risk assessment and risk reduction*
- *BS EN 1672-1; Food processing machinery- Basic concepts – Part 1: Safety requirements*

- *EN 1672-2:2005+A1; Food processing machinery – Basic concepts – Part 2: Hygiene requirements*
- *EN 614-1:2006+A1; Safety of machinery. Ergonomic design principles. Part 1: Terminology and general principles*
- *EN 614-2:2000+A1; Safety of machinery. Ergonomic design principles. Part 2: Interactions between the design of machinery and work tasks*
- *EN 1005 series; Safety of machinery- Human physical performance*
- *EN ISO 14738; Safety of machinery. Anthropometric requirements for the design of workstations at machinery*
- *EN ISO 11688-1; Acoustics – Recommended practice for the design of low-noise machinery and equipment – Part 1: Planning*
- *EN ISO 13850; Safety of machinery. Emergency stop function. Principles for design*
- *EN 60204-1; Safety of machinery. Electrical equipment of machines. General requirements*
- *EN 1037:1995+A1; Safety of machinery – Prevention of unexpected start-up*
- *EN ISO 4413: Hydraulic fluid power – General rules and safety requirements for systems and their components*
- *EN ISO 4414 Pneumatic fluid power – General rules and safety requirements for systems and their components*
- *EN 953:1997+A1 Safety of machinery – Guards – General requirements for the design and construction of fixed and movable guards*
- *ISO 14120; Safety of machinery. Guards. General requirements for the design and construction of fixed and movable guards*
- *EN ISO 14119; Safety of machinery. Interlocking devices associated with guards. Principles for design and selection*
- *EN ISO 13857; Safety of machinery – Safety distances to prevent hazard zones being reached by upper and lower limbs*
- *EN 349:1993+A1; Safety of machinery – Minimum gaps to avoid crushing of parts of the human body*
- *EN ISO 14122 series; Safety of machinery – Permanent means of access to machinery*