# APPENDIX EQUIPMENT SPECIFICATIONS

# File name: CdC INTEGRATED METROLOGY MIRRA DESICA

### 

### ANNEXE A: Summary of Contractor’s comments

|  |  |
| --- | --- |
| **Contractor** |  |
| **Ref. of quotation** |  |

**A = Requirements thoroughly accepted**

**AA = Requirements accepted with adaptations**

**NA = Not Applicable**

| Ref.  Title | Contractor reply | | | Restrictions description | Alternative proposals  (to be negotiated between CEA-LETI and Contractor) | Final decision |
| --- | --- | --- | --- | --- | --- | --- |
| 1  PURPOSE | A | AA | NA |  |  |  |
| Appendix A |  |  |  |  |  |  |
| Appendix H |  |  |  |  |  |  |
| Appendix I |  |  |  |  |  |  |
| Appendix J |  |  |  |  |  |  |
| Packing list |  |  |  |  |  |  |
| 2  PROCESSES OR MEASUREMENT SPECIFICATION | A | AA | NA |  |  |  |
| Process n°1 – Test 1.1 |  |  |  |  |  |  |
| Process n°1 – Test 1.2 |  |  |  |  |  |  |
| Process n°1 – Test 1.3 |  |  |  |  |  |  |
| Process n°1 – Test 1.4 |  |  |  |  |  |  |
| Process n°2 – Test 2.1.1 |  |  |  |  |  |  |
| Process n°2 – Test 2.1.2 |  |  |  |  |  |  |
| Process n°2 – Test 2.1.3 |  |  |  |  |  |  |
| Process n°2 – Test 2.1.4 |  |  |  |  |  |  |
| Process n°2 – Test 2.2.1 |  |  |  |  |  |  |
| Process n°2 – Test 2.2.2 |  |  |  |  |  |  |
| Process n°2 – Test 2.2.3 |  |  |  |  |  |  |
| Process n°2 – Test 2.3.1 |  |  |  |  |  |  |
| Process n°2 – Test 2.3.2 |  |  |  |  |  |  |
| Process n°2 – Test 2.3.3 |  |  |  |  |  |  |
| Process n°3 – Test 3.1.1 |  |  |  |  |  |  |
| Process n°3 – Test 3.1.2 |  |  |  |  |  |  |
| Process n°3 – Test 3.1.3 |  |  |  |  |  |  |
| Process n°3 – Test 3.1.4 |  |  |  |  |  |  |
| Process n°3 – Test 3.2.1 |  |  |  |  |  |  |
| Process n°3 – Test 3.2.2 |  |  |  |  |  |  |
| Process n°3 – Test 3.2.3 |  |  |  |  |  |  |
| Process n°3 – Test 3.3.1 |  |  |  |  |  |  |
| Process n°3 – Test 3.3.2 |  |  |  |  |  |  |
| Process n°3 – Test 3.3.3 |  |  |  |  |  |  |
| Process n°4 – Test 4.1.1 |  |  |  |  |  |  |
| Process n°4 – Test 4.1.2 |  |  |  |  |  |  |
| Process n°4 – Test 4.1.3 |  |  |  |  |  |  |
| Process n°4 – Test 4.1.1 |  |  |  |  |  |  |
| Process n°4 – Test 4.2.1 |  |  |  |  |  |  |
| Process n°4 – Test 4.2.2 |  |  |  |  |  |  |
| Process n°4 – Test 4.2.3 |  |  |  |  |  |  |
| Process n°4 – Test 4.3.1 |  |  |  |  |  |  |
| Process n°4 – Test 4.3.2 |  |  |  |  |  |  |
| Process n°4 – Test 4.3.3 |  |  |  |  |  |  |
| Process n°5 – Test 5.1.1 |  |  |  |  |  |  |
| Process n°5 – Test 5.2.1 |  |  |  |  |  |  |
| Process n°5 – Test 5.3.1 |  |  |  |  |  |  |
| Process n°6 – Test 6.1 |  |  |  |  |  |  |
| Process n°7 – Test 7.1 |  |  |  |  |  |  |
| Process n°7 – Test 7.2 |  |  |  |  |  |  |
| Process n°8 – Test 8.1 |  |  |  |  |  |  |
| Process n°8 – Test 8.2 |  |  |  |  |  |  |
| 3.1  Equipment description | A | AA | NA |  |  |  |
| 3.2.3  Equipment consumption monitoring | A | AA | NA |  |  |  |
| 3.2.4  Idle mode management and interface with peripheral sub-equipments | A | AA | NA |  |  |  |
| 3.2.7  Vibrations | A | AA | NA |  |  |  |
| 3.3.1  IT configuration | A | AA | NA |  |  |  |
| 3.3.2  Antivirus & Data Back-up | A | AA | NA |  |  |  |
| 3.4.1  Wafers specifications | A | AA | NA |  |  |  |
| 3.4.3.  Handling and contact surfaces | A | AA | NA |  |  |  |
| 3.4.5  Handling system reliability | A | AA | NA |  |  |  |
| 3.5.1  Check of the physical characteristics of the air | A | AA | NA |  |  |  |
| 3.5.2  E.S.D. (Electrostatic Discharge) | A | AA | NA |  |  |  |
| 3.5.3  Particle check | A | AA | NA |  |  |  |
| 3.6  Interface with the rest of the clean room and its organization | A | AA | NA |  |  |  |
| 3.7.1  Particle Contamination | A | AA | NA |  |  |  |
| 3.7.2  Metallic Contamination | A | AA | NA |  |  |  |
| 4.1.1  Building characteristics | A | AA | NA |  |  |  |
| 4.1.2  Building fluids | A | AA | NA |  |  |  |
| 4.1.3  Building power network specifications | A | AA | NA |  |  |  |
| 4.1.4  Adaptation of the machine to the power network | A | AA | NA |  |  |  |
| **2014/35/EC** (Transformer)  Low voltage Directive |  |  |  |  |  |  |
| **CE marking**  (Transformer) |  |  |  |  |  |  |
| **NF EN 61558**  (Transformer)  Safety of transformers, reactors, power supply units and combinations thereof |  |  |  |  |  |  |
| **NF EN 60076**  (Transformer)  Power Transformers General |  |  |  |  |  |  |
| 4.1.5  Uninterruptible power supply (UPS) | A | AA | NA |  |  |  |
| 4.2  Management of the environment | A | AA | NA |  |  |  |
| 4.2.2  Exhaust & other internal equipment air systems | A | AA | NA |  |  |  |
| 5.1  EC conformity | A | AA | NA |  |  |  |
| **Directive 2006/42/EC**  Machinery Directive |  |  |  |  |  |  |
| **Directive 2014/30/EU**  EMC Directive |  |  |  |  |  |  |
| **Directive 2014/35/EU**  Low Voltage Directive |  |  |  |  |  |  |
| **Directive 2014/34/EU**  ATEX Directive |  |  |  |  |  |  |
| **Directive 2014/68/EU**  Pressure Directive |  |  |  |  |  |  |
| **NF EN ISO 12100**  Safety of machinery. General principles for design. Risk assessment and risk reduction |  |  |  |  |  |  |
| **NF EN ISO 13849-1**  Safety of machinery. Safety-related parts of control systems - General principles for design |  |  |  |  |  |  |
| **NF EN 60204**  Safety of machinery. Electrical equipment of machines. General requirements. |  |  |  |  |  |  |
| **NF EN ISO 14119**  Safety of machinery. Interlocking devices associated with guards. Principles for design and selection |  |  |  |  |  |  |
| **NF EN 14175-1 to 4, 6&7**  Fume Cupboards |  |  |  |  |  |  |
| 5.2  Risks connected with facilities | A | AA | NA |  |  |  |
| 5.3  Risks connected with fire | A | AA | NA |  |  |  |
| 5.4  Risks connected with chemical products | A | AA | NA |  |  |  |
| **EC 1907/2006** (REACH) |  |  |  |  |  |  |
| 5.5  Risks connected with handling | A | AA | NA |  |  |  |
| 5.6  Risks connected with pressurised equipment | A | AA | NA |  |  |  |
| 5.7  Risks connected with work at height | A | AA | NA |  |  |  |
| **NF EN ISO 14122-3**  Safety of machinery. Permanent means of access to machinery - Stairways, stepladders and guard-rails |  |  |  |  |  |  |
| **NF EN 795**  Personal fall protection equipment. Anchor devices |  |  |  |  |  |  |
| 5.8  Risks connected with laser radiation | A | AA | NA |  |  |  |
| **NF EN 60825-1**  Safety of laser products - Equipment classification and requirements |  |  |  |  |  |  |
| 5.9  Risks connected with radioactive sources and X-ray generators | A | AA | NA |  |  |  |
| **NFC 74-100**  Radiology equipment –X RAY apparatus construction and tests requirements |  |  |  |  |  |  |
| 5.10  Risks connected with noise | A | AA | NA |  |  |  |
| 5.11  Risks connected with temperature | A | AA | NA |  |  |  |
| **NF EN ISO 13732-1&3**  Ergonomics of the thermal environment. Methods for the assessment of human responses to contact with surfaces –  Hot surfaces (-1)  Cold Surfaces (-3) |  |  |  |  |  |  |
| **NF EN ISO 13849-1**  Safety of machinery. Safety-related parts of control systems - General principles for design |  |  |  |  |  |  |
| 5.12  Signaling | A | AA | NA |  |  |  |
| 5.13  Intervention conditions on the CEA-LETI site | A | AA | NA |  |  |  |
| 6.2  Sustainable development and development of the local economic fabric | A | AA | NA |  |  |  |
| 6.3  Energy performance | A | AA | NA |  |  |  |
| 7  EQUIPMENT DELIVERY CONDITIONS | A | AA | NA |  |  |  |
| 8  CONDITIONS FOR INSTALLING EQUIPMENT | A | AA | NA |  |  |  |
| 9  TRAINING & LEARNING | A | AA | NA |  |  |  |
| Training certificate |  |  |  |  |  |  |
| 10  DOCUMENTATION | A | AA | NA |  |  |  |
| 11.1  Warranty conditions | A | AA | NA |  |  |  |
| 11.2  Support during warranty | A | AA | NA |  |  |  |
| 11.3  Equipment performance indicators | A | AA | NA |  |  |  |
| 12.1.1  List of spare parts | A | AA | NA |  |  |  |
| 12.1.2  Process-kit : | A | AA | NA |  |  |  |
| 12.1.3  Storage area | A | AA | NA |  |  |  |
| 12.2  Maintenance contract | A | AA | NA |  |  |  |
| 12.3  Cost of ownership (COO) | A | AA | NA |  |  |  |
| 13.2  Check upon delivery and at unpacking | A | AA | NA |  |  |  |
| 13.3  Installation and commissioning | A | AA | NA |  |  |  |
| **NF X 08-100**  Fluid tracking device |  |  |  |  |  |  |
| 13.4  Qualification | A | AA | NA |  |  |  |
| 13.5  Acceptance | A | AA | NA |  |  |  |
| 13.6  End of warranty | A | AA | NA |  |  |  |
| 14  INSTALLATION PREPARATION SCHEDULE | A | AA | NA |  |  |  |
| Validate PID |  |  |  |  |  |  |

|  |  |  |  |
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| **POINTS TO BE CLARIFIED : VALIDATION** | | | |
|  | ***Nom*** | ***Date*** | ***Visa*** |
| ***Process Manager*** |  |  |  |
| ***Investment Manager*** |  |  |  |
| ***Contractor*** |  |  |  |

***Diffusion: CIPE - CP - SMA***