

RWA23001-10009 – SUPPLY AND INSTALLATION OF SPECIALIZED EQUIPMENT FOR FAB LABS SUPPORTING INNOVATION AND SMART CITY INITIATIVE IN RWAMAGANA

No	QUESTIONS	CLARIFICATIONS/AMENDMENTS
1	<u>ITEM 3: HOBBY GRADE 3D PRINTER</u> <i>Could you confirm whether the requirement “Print medium: SD card” is mandatory, or whether an equivalent or superior file-transfer and print-media method, such as USB storage and/or network-based transfer through Wi-Fi or Ethernet, will also be accepted, provided that all other functional and technical requirements are met or exceeded?</i>	<u>Clarification</u> Yes, it is a required specification. If it has/supports other printing medium as well, this is acceptable, provided that all other functional and technical requirements are met or exceeded.
2	<u>ITEM 4 – LASER CUTTER: RESOLUTION</u> <i>Could you confirm whether:</i> <i>a) 2,668 DPI is the intended and mandatory maximum resolution;</i> <i>or</i> <i>b) An engraving resolution of approximately 1,200 DPI or an equivalent/superior manufacturer-specified resolution may be accepted, provided that the proposed equipment delivers the required engraving quality and performance?</i>	<u>Clarification</u> The requirement of up to 2,668 DPI shall be understood as the specified maximum engraving resolution requirement.
3	<u>ITEM 6 – 3D SCANNER</u> <i>Could you confirm whether the FOV values and 150–400 mm working distance are correct as stated, or provide the intended/acceptable ranges for these parameters?</i> <i>We would also appreciate confirmation that equivalent or superior FOV and working-distance specifications may be</i>	<u>Clarification</u> The specified working distance of approximately 150-400 mm shall be maintained as the intended requirement for the 3D scanner. However, since the specification uses the term “approximately,” reasonable manufacturer-specific variations may be accepted, provided that the proposed scanner offers equivalent or superior

	<i>accepted where the proposed scanner provides equivalent or better scanning performance.</i>	scanning performance and is suitable for the specified minimum and maximum scan volumes.
2	<u>ITEM 7 – PROFESSIONAL EMBROIDERY MACHINE</u> <i>Could you confirm that:</i> a) The minimum six-needle configuration is the principal mandatory functional requirement; b) The stated dimensions are to be interpreted as approximate, in accordance with the general provision of the Technical Specifications; c) A commercially available six-needle or higher multi-needle embroidery machine with minor dimensional differences may be proposed, provided that the variation does not adversely affect the intended use, performance, safety, compatibility, installation or available space.	<u>Clarification</u> a) The requirement for a minimum of six (6) needles is a mandatory functional requirement. Accordingly, the proposed embroidery machine shall have at least six needles. <u>Amendment</u> Machine Size: “approx.” 60 × 60 × 80cm b) The specified dimensions shall indeed be considered approximate, in accordance with the general provisions of the Technical Specifications. Reasonable dimensional variations may therefore be accepted, provided that they do not adversely affect the intended use, performance, safety, compatibility, or installation of the equipment. c) A commercially available six-needle or higher multi-needle embroidery machine may be proposed, provided that it meets or exceeds the specified functional and performance requirements and any dimensional variation remains acceptable for the intended installation and use. d) Ethernet, <u>or</u> wifi <u>or</u> usb

	d) Ethernet connectivity is mandatory for this item. e) Embroidery Area: Approx. 300 x 200 mm;	
3	<u>Item 8 – Beginner Sewing and Embroidery Machine</u> Could you clarify: a) Whether the proposed machine is required to provide both conventional sewing and embroidery functions; b) Whether the specified embroidery area and sewing/embroidery speeds represent the principal functional and performance requirements; and c) Whether an equivalent or superior machine may be proposed where minor variations in dimensions or connectivity exist, provided that the required functionality and performance are maintained. d) Whether Ethernet connectivity is mandatory, or whether Wi-Fi and USB connectivity would be acceptable where the machine otherwise meets the required functionality;	<u>Clarification</u> a) The proposed machine shall provide both conventional sewing and embroidery functions, as these are part of the specified requirements for the item. b) Embroidery Area and Operating Speeds: Yes. The specified embroidery area of approximately 180 × 130 mm, maximum embroidery speed of 600–700 stitches/min, and maximum sewing speed of 700–900 stitches/min are considered the principal functional and performance requirements of the machine. c) yes <u>Amendment</u> d) Ethernet connectivity shall not be considered mandatory, provided that the proposed machine offers Wi-Fi or USB connectivity and otherwise meets the required functionality and performance specifications. Ethernet, or wifi or usb

4	<u>Item 22 – Electric Hand Planer: Technical Parameters</u> <i>Could you clarify:</i> <i>a) Whether 34 m/s refers to the cutting/peripheral speed of the planer knives or another parameter;</i> <i>b) Whether 1,200 rpm refers to the motor rotational speed, rather than electrical frequency;</i> <i>c) Whether the approximately 370 W power rating is a mandatory maximum/nominal value, or whether a commercially available planer with a higher motor power may be proposed provided that the required performance is achieved; and</i>	<u>Amendment</u> a) Cutting Speed – Max 34 m/s: The specified 34 m/s refers to the cutting/peripheral speed of the planer knives. b) Electric Motor Frequency – 1,200 rpm: The value of 1,200 rpm is intended to refer to the motor rotational speed, and not the electrical frequency. The bidder shall therefore interpret this parameter as a rotational-speed requirement. Electric motor rotation: minimum 1,200 rpm. <u>Clarification</u> c) Power Rating – Approximately 370 W: The specified approximately 370 W power rating is intended as an indicative/nominal requirement and shall not prevent the proposal of a commercially available planer with a higher motor power, provided that the proposed equipment meets or exceeds the other specified technical and performance requirements.
---	--	---

	<i>d) Whether equivalent or superior commercially available electric hand planers may be proposed where the manufacturer uses different nominal specifications but the required functionality and performance are achieved.</i>	d) yes
5	<u>Item 31 – Small Vice: Construction Material</u> <i>Could you clarify whether a die-cast zinc or equivalent high-strength precision vice providing the specified functionality and performance would be considered compliant, notwithstanding the difference in construction material?</i>	<u>Clarification</u> The requirement for a 75 mm precision vice with cast steel construction shall be maintained as specified in the Technical Specifications. Accordingly, the proposed vice shall be constructed of cast steel and shall provide the specified functional requirements, including the ability to rotate and pivot in all directions, including downward, as well as protective jaw covers.
6	<u>Item 39 – AVR Development Board</u> <i>Could you kindly clarify:</i> <i>a) Whether “6D” refers to a specific manufacturer, product series or model designation; and</i> <i>b) Whether an equivalent AVR development board based on ATmega16/ATmega32, providing an integrated programmer interface, I/O expansion headers, on-board power supply and LEDs, will be accepted provided that it meets or exceeds the stated minimum requirements.</i>	<u>Amendment</u> a) The reference to “6D development board” is not intended to restrict the procurement to a specific manufacturer or proprietary product series. It is understood as part of the description of the AVR experimental development board. b) Equivalent AVR Development Board: Yes. An equivalent AVR development board based on ATmega16 or ATmega32 may be proposed, provided that it meets or exceeds the specified minimum technical requirements, including: • ATmega16/ATmega32-based architecture;

		• Integrated programmer interface; • Input/output (I/O) expansion headers; • On-board power supply; and • On-board LEDs. “6D development board of the AVR experimental box ATmega16 development board.” Or equivalent that meets the required specifications
7	<u>Item 40 – Arduino-Compatible Microcontroller Development Board</u> <i>Could you clarify whether this compatibility refers primarily to:</i> <i>a) Compatibility with the Arduino IDE, programming environment, libraries and standard Arduino-compatible peripherals/modules; or</i> <i>b) Physical/hardware compatibility with the respective board form factors, pin arrangements and shields/connectors of all three Arduino platforms?</i> <i>This clarification would assist bidders in selecting an appropriate commercially available development board that meets the intended educational, IoT and prototyping applications.</i>	<u>Clarification</u> The compatibility requirement shall primarily refer to compatibility with the Arduino IDE, programming environment, libraries, and commonly used Arduino-compatible modules and peripherals. Both soft and hardware compatibility are required Physical compatibility with the specific board form factors, pin arrangements, shields, and connectors of Arduino Uno R3, Mega 2560 R3, and Nano is not required for all three platforms simultaneously, provided that the proposed development board offers the required functionality and supports the intended educational, IoT, and prototyping applications. An equivalent or compatible commercially available development board may therefore be proposed, provided that it demonstrates the required Arduino compatibility and functionality.

8	<u>Item 45 – Countersink Drill Bit Set</u> Could clarify whether the dimensions refer to: a) the required screw sizes, for which appropriate drill/countersink combinations are required; or b) the actual drill/countersink bit diameters?	<u>Clarification</u> The dimensions 5 mm, 6 mm, 7 mm, 8 mm, 10 mm, 11 mm and 12 mm refer to the screw sizes for which the countersink drill bit set is intended to provide appropriate drilling and countersinking functionality. They should therefore not be interpreted as requiring the actual drill or countersink bit diameters to correspond exactly to each of the stated dimensions.
9	<u>Item 49 – General Maintenance Tool Set: Number of Pieces</u> Could you confirm whether the required minimum quantity is: a) 220 pieces, or b) 227 pieces?	<u>Amendment</u> The discrepancy between the written quantity “two hundred and twenty (227)” and the numerical quantity “220” is acknowledged. For purposes of the tender, the required minimum quantity shall be two hundred (220) pieces.
10	<u>Item 51 – Soldering Station: Operating Voltage</u> As the equipment is intended for use in Rwanda, where the standard mains supply is generally 220–240 V AC, 50 Hz, you confirm whether: a) 120 V is a mandatory requirement; or b) a 220–240 V AC, 50/60 Hz soldering station meeting or exceeding the other specified requirements may be proposed?	<u>Amendment</u> The specification indicating “Soldering Station – 120 V” is changed as follows: A 220–240 V AC, 50/60 Hz soldering station may be proposed, provided that it meets or exceeds the other specified technical and functional requirements. The proposed soldering station shall maintain, at minimum: • Power: 70 W; • Temperature range: up to at least 450°C; • Digital temperature control; and

		• Replaceable soldering tips. Accordingly, 120 V shall not be considered a mandatory operating-voltage requirement, provided that the proposed 220–240 V equipment and complies with or exceeds the remaining technical and performance requirements.
11	<u>Item 51 – Glue Gun: Glue Stick Diameter</u> <i>Could you clarify whether the proposed glue gun must:</i> <i>a) accept both 11 mm and 12 mm glue sticks; or</i> <i>b) accept either 11 mm or 12 mm glue sticks, provided that the supported nominal diameter falls within the specified 11–12 mm range?</i>	<u>Amendment</u> Industrial hot melt glue gun • Compatible with 11 OR 12 mm glue sticks (nominal diameter range of 11 mm to 12 mm, including standard 11.2 mm / 11.5 mm sizes) The requirement “Compatible with 11–12 mm glue sticks” shall be interpreted to mean that the proposed glue gun may be designed to accept either 11 mm or 12 mm nominal diameter glue sticks. It is therefore not mandatory for the glue gun to accept both 11 mm and 12 mm glue sticks, provided that the supported nominal glue-stick diameter falls within the specified 11–12 mm range. Accordingly, commercially available professional glue guns designed for either 11 mm or 12 mm glue sticks shall be considered acceptable, provided that they meet or exceed the other specified technical and functional requirements.
12	<u>Item 51 – Glue Gun: Power Rating</u> “Power: 60–120 W.” <i>Could you clarify whether this power range refers to:</i> <i>a) the rated electrical input power;</i>	<u>Amendment</u> The Specs are updated: Type: Industrial hot melt glue gun Electrical Input: 220–240 V AC, 50 Hz power supply (230 V)

	b) the maximum heating/start-up power; or c) the normal/average operating power consumption?	Power Output: 60–120 W transient peak start-up/heating power, utilizing self-regulating PTC heating technology Thermal Control: Fast heat-up time with a temperature-controlled heating chamber to prevent adhesive backup or overheating • Adhesive Compatibility: Universally compatible with standard full-size industrial glue sticks (nominal diameter range of 11 mm to 12 mm, including standard 11.2 mm / 11.5 mm sizes) • Temperature-controlled heating chamber Grid Interface: Fitted with a Type G or Type C power plug compliant with Rwanda Utilities Regulatory Authority (RURA) standards The specified power range of 60–120 W shall be interpreted as the rated electrical input power of the glue gun during normal operation. The temporary heating/start-up power may exceed 120 W where applicable, provided that the manufacturer's specified normal/rated operating power falls within the required 60–120 W range.
13	<u>Number of Needles: min. 6; Question 1 , 6 Needles, but how many heads ?</u> <u>Question 2 , 30cm x 20cm equivalent to the given sizes in mm based on these sizes , it won't be a professional embroidery machine because it might be small</u> <u>Question 3 , Machine Size: 444 x 248 x 300; We would like to know if these size are in cm or mm.</u> -	Amendment Question 1 (Number of Heads): This is a Single-Head (1-Head) machine. The 6 needles belong to this single head, allowing it to hold 6 different thread colors at once and automatically switch between them during operation. Question 2 (Embroidery Area & Professional Classification): You are correct that the 300 x 200 mm (30 x 20 cm) area makes this a compact unit. It is classified as a "professional" machine because it utilizes a commercial-grade cylindrical arm, automatic color changing, and industrial tension systems meant for continuous

	<u>These clarifications will help us to identify weather machine is small or big as the names explains it as a professional one</u> -	commercial use. It is intended for professional desktop/boutique personalization rather than massive factory mass-production. Question 3 (Machine Dimensions): Thank you for catching this error. The numbers provided contained a typographical mistake in the original document. The correct approximate physical dimensions for this class of 6-needle professional machine are 600 x 600 x 800 mm (60 x 60 x 80 cm). Updated specs: Number of Needles: min. 6; with 1 embroidery head (single-head) Connections: Wi-Fi or Ethernetor USB; Display: LCD Touchscreen Color, on screen editing; Embroidery Frame Patterns: Approx.156 stitch types; Embroidery Area: Approx. 300 x 200 mm (30 x 20 cm); Max Embroidery Speed: up to 1000 Stitches/min; Voltage: 220 - 240V; Machine Size: Approx. 60 x 60x 80 cm;
General Confirmation/clarification – Equivalent Commercially Available Equipment		
Finally, we kindly request confirmation that, where the Technical Specifications establish functional, performance and minimum requirements, bidders may propose equivalent or superior commercially available equipment, provided that: • The required functionality is achieved; • The minimum performance requirements are met or exceeded; • Safety and compatibility requirements are satisfied; • Mandatory accessories are included; and • Any dimensional variations remain within the interpretation provided by the tender's provision concerning approximate dimensions.	Yes	