


























ANNEX A: Technical Specifications










RFQ-HCR-SYR-2024-68

FOR THE SUPPLY AND DELIVERY (DDP) OF VOCATIONAL TRAINING TOOLS AND EQUIPMENT TO UNHCR OPERATION IN TARTOUS GOVERNORATE – SYRIA.

No	Profession/Use	المهنة / الاستخدام	Item Description	المادة	Technical Specification	UoM	Qty	Pictorial
1	Welding & Metal Manufacturing	مهنة اللحام و تشكيل المعادن	Electrode welder	ماكينة لحام كهربياء	Input voltage: 220-240V 3PH. Absorbed power: kVA 25,3 KW 25,3. No load voltage: 85. Welding current: 40-500. Duty cycle: MMA 500A-100%. Electrodes (mm): 1,6 - 8	Each	3	
2			Metal Coating Machines Manual Paint Spraying Room	غرفة بخ حراري	Made of galvanized steel, powder coated on the surface. Power: 5.5kw. Power Supply: 220V/380V, 50-60Hz. Control System: PLC. Outer Size: 2400/2800(L)*1670(W)*2805(H)mm. Inner Size:2400/2800(L)*1150(W)*1700(H)mm. Production Capacity: 75 sets per month at least.	Each	1	
3			Hydraulic Press Brake	ماكينة ثني صاج هيدروليكية	Dimensions: 6100×2000×2600. Main Power: 11Kw. Max. Height: 440 mm. Stroke / times: 180/6. Throat Depth: 320 mm at least. Distance of column: >2500 mm. Length of Worktable: 3200 mm. Pressure: 1600 kn.	Each	1	
4			Swing Beam Shearing Machine	مقص صاج هيدروليكي	Maximum width of cut 4000mm. Stroke number13 Control System, NC/CNC. Shear angle:1.5°. Strength of plate: 450N/mm.	Each	1	
5			Hydraulic Rolling Machine with 4 Rollers	درفيل صاج هيدروليكي 4 رول	CNC control, digital display for the position of each roller. 4 hardening rollers (HRC 58). The working roller is the main driving roller. The bottom roller and both side roller are hydraulically driven. The computer controls the lifting. The rolls can be a coating for rolling stainless steel. It does not damage the stainless-steel surface. The rear part of the upper roller is equipped with a balance mechanism, which can easily unload the rolled workpiece. The movable control panel unit with an emergency stop switch. The programmable CNC control system can store automatic rolling data for more than hundreds of different workpieces. It enables one-click choosing and one-button startup. Automatic workpiece rolling without manual operation. The system has the function of interlocking and interconnection protection measures to prevent misoperation. The operating system has the function of EPS electronic automatic leveling system, which can automatically adjust the parallelism of the rollers to ensure product quality. The material setting, pre-bending, and rolling steps can be completed in the rolling process. The remaining straight edge length for pre-bending is ≤1.5 times the thickness of the plate. High precision rolling can meet the requirements of automatic welding. The optional hydraulic crane and hydraulic lateral support can effectively control the workpiece deformation in the rolling due to the workpiece self-weight. The optional cone-rolling device can meet customer needs to roll conical shape. It is not only for a cylinder rolling but also for arc shape, square shape, triangle shape, oblate shape, and oval shape. This model not only satisfies the circular cylindrical shape rolling process but also can satisfy the automatic rolling of arc, square, triangle, oblate, elliptical and other shape workpieces. High accuracy and precision circle. Maximum sheet thickness 2.5 cm. Rolling speed 4 meters per minute. Maximum width 2.5 meters	Each	1	
6			Cutting machine	آلة قص جدران البلاك " من أجل التمديدات"	Powered by a robust 1500-watt electric motor. AR 180. Ensures a hassle-free operation. Crafted with sturdy steel material and polished finish. With a size of 22 inches at least, this machine offers ample space for cutting tapes with precision. Its 2 HP power and 220 voltage provide ample strength for seamless cutting. With a remarkable speed of 150 cuts per minute	Each	2	
7			Wire roller	لفافة يدوية	The wire roller is adjustable for various reel sizes. Max. load 1.500kg. Weight, 40.00 kg at least.	Each	2	

8	Electrical technologies	مهنة التقنيات الكهربائية	Tool Bag For Electricians	حقائب عدة للكهرباء	Dust-tight, waterproof and temperature-resistant. Gas pressure absorber in the hinge. Pneumatically cushioned lid. Document compartment; tool boards made from dirt-repelling twin-wall PP sheet with tool pockets and tool straps. With a total of 147 inserting options.	Each	7	
9			SDS drill	منقب رجاح sds .	VOLTAGE, 220-240V – 50-60Hz; POWER, 850W; NO LOAD SPEED, 0 - 2.700 rpm / min; IMPACT RATE, 0 - 43.200 bpm / min; DRILLING CAPACITY, 13mm. Weight; 1.6 kg at least.	Each	2	
10			Oscilloscopes with templates	رسم إشارة ديجيتال مع قوالب	200 MHz, 100 MHz bandwidth models. 4-channel models. Up to 2 GS/s sample rate on all channels. 2.5k point record length on all channels. Advanced triggers including pulse width trigger and line-selectable video trigger	Each	2	
11			Digital Torque Screwdriver	مفتاح شد الكروني	KROST Digital Torque Screwdriver 0.3-6 Nm, (2.66-53.1 in-lbs) Adjustable Screwdriver Torque Wrench Set with Buzzer/LED Indicator Notification for Bike Repairing, Tools, Maintenance. The torque screwdriver has a digital display with an accuracy of ±2%, and provides four measurement modes: kg-cm, Nm, in-lb, and ft-lb. Can be used in electronic devices, machinery manufacturing, computer equipment and precision instruments. The torque screwdriver set provides 6 groups of preset modes, and the common torque value can be set in advance in each group of modes. In PEAK mode and can store up to 500 sets of data.	Each	5	
12			SRS SMD Rework System	كروي هواء	Peak power 700W. Selectable temperature 150 to 450 °C / 300 to 840 °F. Air flow regulation 5 to 50 SLPM. Vacuum 30% / 228 mmHg / 9 inHg. Profiles 25 (up to 10 steps for each), 1 preset profile. Type K TC connector 1 for Control & Protection. ESD safe Meet ANSI / ESD S20.20-2021. Equipotential bonding Connection to EPA. USB-A Firmware update Graphics and profiles. USB-B PC communications	Each	4	
13			Power supply , 10 A 60 V	بور سيلاي 10 أمبير 60 فولت	Input Voltage: 220V AC (+/- 10%), Output Voltage Range: DC 0-60V. Output Power: 600W. Frequency: 50Hz/60Hz. Output Type: dual. Display: 3 digits. Display Accuracy: ≤ ±0.1%+2d. Voltage Display Resolution: 100mV. Current Display Resolution: 10mA. Efficiency: >65%	Each	2	
14			High Speed Digital Duplicator.	آلة نسخ تصويري	General Features: Type: Black & White (Monochrome) Multifunction Printer (MFP). Functions: Printing, Copying, Scanning, Faxing (optional). Technology: Laser Printing. Print Specifications: Print Speed: 44 pages per minute (ppm) for A4 size. First Print Time: Approx. 2.9 seconds. Resolution: Up to 1,200 x 1,200 dpi (high-quality output). Maximum Monthly Duty Cycle: 150,000 pages. Paper Handling: Paper Sizes Supported: A6, A5, A4, A3, B5, B6, Legal, Executive, and custom sizes. Standard Paper Input Capacity: 2 x 550-sheet paper trays. 100-sheet bypass tray for special media. Maximum Paper Capacity: 4,700 sheets with optional additional trays. Paper Output Capacity: 1,625 sheets. Paper Weight Supported: 52 gsm to 300 gsm. Scanning Specifications: Scan Speed: Up to 80 images per minute (simplex), 160 images per minute (duplex). Resolution: Up to 600 dpi. File Formats Supported: PDF, JPEG, TIFF. Scan Destinations: Email, Folder (SMB/FTP), USB Drive, Network (TWAIN). Copy Specifications: Copy Speed: Same as print speed – 44 copies per minute. First Copy Out Time: 3.5 seconds. Zoom: 25% to 400% in 1% increments. Copy Resolution: 600 dpi. Display & Control: User Interface: 10.1-inch color touchscreen control panel with customizable home screen for easy navigation. Connectivity: Standard Interfaces: USB 2.0, Gigabit Ethernet (10/100/1000BASE-T). Optional: Wi-Fi, Bluetooth, USB Host Interface for printing/scanning directly from USB drives. Mobile Printing: Compatible with AirPrint, Google Cloud Print, and Ricoh Smart Device Print & Scan app. Memory & Storage: Memory: 2 GB RAM (standard). Hard Disk Drive: 320 GB HDD for document storage and processing	Each	1	

15	Electronic technologies	مهندسة التقنيات الإلكترونية	USB maintenance magnifying camera	كاميرا مكبرة للصيانة USB	Main Specifications: Image Sensor: 0.3M HD CMOS Sensor. Photo resolution: 2560 x 1920. Video Capture Resolution: 640 x 480. Focus Range: Manual Focus from 15~44m. Frame Rate: Max. 30f/. Magnification: 1600X. Video Format: AVI	Each	2	
16			Electric tension drill	مفتاح شد كهربائي	VOLTAGE, 220-240V – 50-60Hz; POWER, 850W; NO LOAD SPEED, 0 - 2.700 rpm / min; IMPACT RATE, 0 - 43.200 bpm / min; DRILLING CAPACITY, 13mm	Each	3	
17			Mini CNC Router for PCB	ماكينة رانتر صغيرة CNC	Single side working size: 350mm X 450mm. Double workbenches in and out at the same time: 700mm X 450mm. X-Y AC Servo speed: 0-1000mm/sec. Z AC Servo speed: 0-800mm/sec. X-Y repetition accuracy: ±0.01mm. Cutting accuracy: ±0.02mm. CCD camera calibration accuracy: ±0.01. Plate stress value: 300ue below. NSK spindle speed: Max.60,000rpm. Tool diameter: 0.8-2.3mm. PCB board cutting thickness: 0.2mm-6.0mm. Dust collector power: 3HP (option 5HP). Dust collection cabinet size: 640mm×785mm×1760mm(D×W×H). Machine size: 1220mm×1430mm×1520mm(D×W×H). Weight of main engine + dust collector: 900 KG	Each	2	
18			Tin Soldering Iron	كلوي 120 وات	With a power of 120 W, features Advanced Sensor Technology, enabling a very short heat-up time and doubling the efficiency compared to traditional soldering irons. This model is compatible with the soldering stations WD 1M, WD 3M, and WR 2 and is excellent for large and demanding soldering connections, such as RF shielding boards or solar panels. The soldering iron comes with an XT B soldering tip and is suitable for the XT series of soldering tips, ensuring optimal lifecycle costs. The package includes the WP 120 soldering iron, the XT B soldering tip, and the WDH 10T safety holder with Stop+Go function	Each	10	
19	Mechanical and electrical for vehicles	مهندسة ميكانيك و كهرباء المركبات	Lubrication machine	آلة تشحيم	Type: Professional Air Grease Machine.Output pressure: 2800-5600 PSI. Air Inlet: 1/4" NPT Stand Grease Cartridges 400ml. Rubberized handle, comfortable grip, durable. Mainly used for oil addition of automobiles, trains, aircraft, mines and other construction machinery. Size Chart: Length: 430 mm, Shaft Length: 300mm. Package includes: 1 x Air Grease Machine	Each	2	
20			Tire pressure gauge	جهاز ضغط لفتح الاطارات	High Precision Tire Inflator with Pressure Gauge, Universal Air Pressure Gauge with Inflation Gun, with the precision of a mechanical gauge is ±3 psi (21 kPa). Higher precision gauges with ±1 psi (6.9 kPa) uncertainty can also be obtained.	Each	2	
21			Car tire repair equipment/tire changer semi	ماكينة تبديل الدواليب	Max. wheel diameter: 980 mm. Working pressure: 8~10 bar. Bead braking cylinder force: 2500 kg. Working voltage:110/220/380 v. Working power: 1.1/0.75 kw. Noise: <70dB. Net weight: at least 300 kg. Gross weight: at least 345 kg. Packing dimension: 1110 * 900 *920 mm.	Each	1	
22			Small hydraulic lift for towing vehicles	رافعة سيارات هيدروليكية	The Beta 3030H / 2T car lift allows you to operate on vehicles with high ground clearance and large shock absorber travel. Features: Controlled descent speed. Quick approach pedal. Nylon wheels.	Each	2	
23			hydraulic press	مكبس هيدروليك	Hydraulic Shop Press , 20 Tons Capacity. Frame construction: Steel. Dimensions: 24 in. L x 27-1/2 in. W x 57 in. H. Working range: 0 to 37-13/32 in. Frame width: 3-1/2 in. Stroke length: 5-11/16 in. Compress: bend or straighten metals.	Each	1	
24			Gasoline Engine Fault Detector	جهاز كشف اعطال محرك البنزين	Composition. 1; Electrical Control Gasoline Engine Assembly, Auto Fault. 2; Automatic Transmission Assembly. 3; Electrical and electronic devices such as, ECM, TCM, AFS, CKP, CMP, O.Sensor, WTS, Control Relay and etc. 4; Injector, Fuel Filter, Fuel Tank, Fuel Pump, Fuel Equipment, DC 12V/60A Battery for Vehicles, Generator. 5; Ignition coil, Spark Plug, High Voltage Cables etc. 6; Cooling System such as Radiator, Overflow Tank, Relay, Electric Pan. 7; Exhaust System such as Catalytic Converter, Emission, Silencer. 8; Ignition Switch (Key S/W) Anti-vibration dampers and a urethane wheels. 8; Control box, fuel tank (removable), accelerator lever. 9; Stainless molding type safety guard is installed. 10; Radiator-only stand and laser processing protection panel. 11; Automatic transmission oil pressure gauge for each singular *6 (1.5MPa *3, 2.5Mpa *4). 12; Vacuum pressure gauge *1 (0.1Mpa). 13; Fuel pressure gauge *1 (1Mpa). 14; Battery voltage gauge *1 (30V). 15; Drawer type storage space 1ea. Size: Approx. 1,500 X 1,400 X 1,300 mm. Weight : Approx. 400 kg	Each	2	
25			Cylinder Leak Down Tester Kit	جهاز اختبار ضغط المحرك	Dual 2-1/2-inch gauges have chrome bezels and rugged protective outer boots. Compression gauge reads 0-140psi and 0-10 bar. Leakage gauge reads 0-100 percent. Pressure regulated manifold, with quick couplers, 24-inch long 14mm flex hose. Also includes 10mm, 12mm, 14mm and 18mm thread adapters for most gas engine applications. Rugged, blow molded storage case with removable lid keeps components organized.	Each	2	

26			Hexagon bits set	طقم مفاتيح سدس	Set of 46 pieces with hexagonal sockets- zinc finish. Square measure 1/4". Profile Hexagonal. Finish Cincado/Zinc Finish. Material CrV. Weight 1,40Kg. Dimensions (LxWxH) 260x60x170mm.	Each	2	
27			Socket wrench set	طقم مفاتيح شق	This 12-piece Socket Wrench Set made of Chrom and includes nine 1/2-Inch drive socket wrenches. Includes 7/16-Inch, 1/2-Inch, 9/16-Inch, 5/8-Inch, 11/16-Inch, 3/4-Inch, 13/16-Inch, 7/8-Inch and 15/16-Inch 12-point sockets plus a 5/8-Inch spark plug socket, one ratchet and a 5-Inch extension.	Each	4	
28			Ring key set	طقم مفاتيح حلقي	Package Contains Hex Key Size: 1/16,5/64, 3/32,7/64,1/8,9/64, 5/32, 3/16, 7/32,1/4,5/16, 3/8 Ball tips. Manufactured from S2 Steel, Spherical Head Allows for 25degree working angle, ANSI certified; Mechanically operated. Made using chrome vanadium steel so will resist corrosion. Anti-corrosion treatment, Hand powered; Item torque	Each	4	
29			Screw dismantling and installing device	جهاز فك و تركيب براغي	Rated voltage: 220V. Rated frequency: 50HZ. Rated input power: 1050W. No-load speed: 1400r/min. Rated impact frequency: 1500/min. Scope of application: M24-M30mm. Square tenon nominal size: 25.4*25.4mm. Maximum torque: 400-950Nm. Net weight: 10KG. Features: High torque, long service life, comfortable grip, suitable for automotive maintenance and fastening of roads and bridges.P1B-FF-32.	Each	2	
30			High Power Hydraulic Mini Battery Powered Crimping Tool	مكبس صوليات " رويس كيل " هيدروليكي	PA-300 High Power Hydraulic Mini Battery Powered Crimping Tool. Crimping range: 10-300mm2. Rated power: 1100W. Load power: 2200W. Plastic Carry Case, Battery Charger, Spare Battery,	Each	2	
31	Mechatronics	مهنة الميكاترونيكس	3D Printer	طابعة ثلاثية الابعاد	General Features: Printing Technology: Fused Deposition Modeling (FDM). Build Volume: 300 x 300 x 400 mm (11.8 x 11.8 x 15.7 in.). Layer Thickness: 0.1 – 0.4 mm. Nozzle Diameter: Standard 0.4 mm (replaceable). Printing Speed: 80–100 mm/s (maximum recommended for best quality). Supported Filament Types: PLA, ABS, PETG, TPU, Wood, and more. Mechanical & Structural Design: Frame Material: Aluminum alloy frame with dual Z-axis for better stability. Auto-Leveling: Integrated BL-Touch for automatic bed leveling. Build Surface: PEI Spring Steel Magnetic Sheet for easy removal of printed models. Extruder Type: Direct Drive Extruder, ideal for flexible filaments. Filament Sensor: Run-out sensor for detecting when filament is low.Resume Printing Function: Automatically resumes printing after power loss. Extruder and Hotend: Nozzle Temperature: Max 300°C (572°F). Hot Bed Temperature: Max 100°C (212°F). Extruder Type: All-metal hotend, compatible with a wide range of filaments. Touch Screen & Control: Display: 4.3-inch Full-color touch screen. UI: Easy-to-use interface with intelligent control options. Control: Wi-Fi, Bluetooth, and Ethernet enabled for remote control via the Creality Cloud App. Connectivity: USB: USB port for offline printing via USB drive. Wi-Fi: Integrated for wireless control and monitoring. Ethernet: Direct connection to LAN for stable connectivity. Cloud Printing: Compatible with Creality Cloud for remote monitoring and control. Precision & Resolution: Positioning Accuracy: X/Y: 0.1 mm; Z: 0.2 mm. Layer Resolution: 0.1 mm to 0.4 mm. Print Accuracy: ±0.1 mm Power Supply: Power Supply: 24V/350W, supports input voltage of 100V-240V, 50/60Hz. Power Loss Recovery: Yes, the printer resumes from the last layer after a power outage. Additional Features: LED Light Strip: Built-in lighting for better visibility of the print area. Camera: Integrated 1080p HD camera for real-time monitoring via app. Auto Shut-off: The printer powers down automatically after printing is complete. Dimensions and Weight: Printer Dimensions: 578 x 522 x 648 mm (22.7 x 20.6 x 25.5 in.). Net Weight: 13.6 kg (29.9 lbs) Included Software: Slicer Software: Creality Slicer, Cura, Simplify3D (compatible). File Formats Supported: STL, OBJ, AMF	Each	1	
32			SDS Vertica	مكثب SDS بطارية	SDS-Plus Rotary Hammer Drill Machine with Accessories. Input power: 950W. NO-Load speed: 0 - 1050RPM. Impact rate: 0 - 4670BPM. Impact energy: 2.5J. Max Drilling capacity.	Each	3	
33			CNC Laser Cutter	جهاز قص بالليزر CNC	"Working area 90*140 cm Laser tube power 150 watts / laser co2 Number of working hours 4000-4500 hours. Cooling system capable of continuous operation / air cooling. Contains storage memory. Motor type leadshine motor. Motor speed 500 Electricity 220 volts. Supporting programs for working on the machine: autocad, Artcam, Corel Draw, Photo shop.	Each	1	
34			Refrigerant Gas Recovery Machine	آلة استرداد غاز التبريد	Compressor: 1 HP. Suitable for Cat: III, IV, V Refrigerants. Includes: R-22, R-134A, R 410A, R-32, etc. Light Weight, Portable Machines. Dimensions: 446mm X 226mm X 346mm 7. Weight: 16.5 Kg.	Each	2	

35	Air conditioning & cooling	مهنة التكييف و التبريد	Pipe Bending Tool	آلة ثني مواسير الحار	Tubing bender has a 1/4-inch, 5/16-inch and 3/8-inch capacity and a 1.01-inch, 0.98-inch and 0.95-inch bend radius 180 degree	Each	2	
36			Micro-Flow Freon Flow meter	عداد غاز الكتروني	Max. Working Pressure:150 psig (10 bar) @ 70 F (21 C), Max. Fluid Temperature:200 F (93 C) @ 0 PSI. Full scale accuracy: +/- 6%. Input Power requirement: 9 – 28 VDC. Optional AC/DC transformers available. Sensor type: Infra-red-light beam. Sensor only output:5V DC digital square wave (3-wire). Sensor output cable: 3-wire shielded cable, 6ft. Enclosure: NEMA type 4X, (IP56). Approximate shipping wt:1 lb. (.45 kg)	Each	2	
37			Copper Pipe Expander	موسع (قشاعة) مواسير	Scope of Application: Air conditioning maintenance, pipeline maintenance. Material: Carbon Steel. Stored in a durable metal case, it includes a set of 3/8 ", 1/2", 5/8 ", 3/4", 7/8 "and 3/16" diameter pipe inserts and a grading tool.	Each	2	
38			Single Stage HVAC Vacuum Pump and Manifold Gauge Set	مضخة تفريغ HVAC أحادية المرحلة ومجموعة مقاييس متعددة	110V 1/4 HP 3.5CFM Single Stage Rotary Vane Air Vacuum Pump and AC Manifold Gauge Set Kit with Thermometer for R134a R12 R22 R502 R410a HVAC Air Conditioning Refrigeration Recharging	Each	2	
39			Gas cylinder	اسطوانة غاز	Domestic gas cylinder, empty weight 8 kg minimum, weight with gas 22 kg at least.	Each	2	
40	Multi-purpose	متعددة الاستخدام	Laser Welding Machine	ماكينة لحام ليزرية	500w-4000w Power, Pulsed/Continuous Laser Can Be Customized, Voltage, 220-240V – 50-60Hz. High electro-optic conversion efficiency>45%, greatly reduce production costs. Short wavelength, metal has a higher absorption rate for short-wavelength lasers. Can accommodate welding, cladding and surface heat treatment at the same time. High lifetime, high safety and reliability. Can be personalized customization	Each	2	