

Project Deliverables

ArcWorld IV-6200XHD System

Qty. Description

- 2 **Motoman EA1900N Robots**
 - Specifically designed for arc welding applications
 - Welding torch cable is routed through the arm
 - Six axes of control
 - 3-kg (6.6-lb) payload capacity
 - Maximum (p-point) reach of 1,904 mm (75")
 - Relative positioning accuracy of ±0.06 mm (±0.002")
 - 5-meter (16.4') manipulator cable
 - Please see attached data



- 1 **NX100 DRC Robot Controller**
 - One robot controller to operate two robots with one programming pendant
 - Windows CE programming pendant with 165 mm (6.5") full-color touch-screen
 - INFORM III, icon driven programming language
 - Standard Ethernet on board
 - Step-down isolation transformer kit mounts on NX100 and converts 240/480/575 VAC (+5% to -10%), 3-Phase, 60-Hz Delta primary to 208 VAC, 3-Phase, 60-Hz Wye secondary voltage
 - Four levels of password protection for up to 100 users
 - Memory capacity for 60,000 steps, and 10,000 instructions
 - Robot programs backward-compatible with XRC controller
 - Collision Detect software for safeguarding manipulator
 - Meets ANSI/RIA R15.06 1999 safety standards
 - Please see attached data



- 2 **Robot Base Risers**
 - Fabricated steel riser for robot mounting
 - Includes drilled and tapped holes for mounting

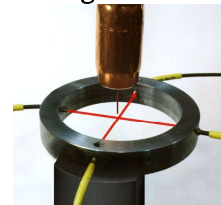
- 2 **Miller Auto Axxess Weld Packages**
 - Auto Axxess 450 Power Source

Output Rating	..	Input Rating
Welding Amps:	450	Line Voltage: ..
Volts:	38VDC	Line Amps:.....
Duty Cycle:	100%	Input power: ...
Hertz:	60	3- Phase, 23.8kVA
 - Miller interface to NX100 controller
 - Miller dual-robot ComArc seam tracking and 80V touch-sense
 - Four-roll wire feeder and feed rolls
 - Interconnecting cables
 - See attached data

Project Deliverables (continued)

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<u>Qty.</u>	<u>Description</u>
2	Motoman Tough Gun® Torch Packages <ul style="list-style-type: none">▪ Specific to EA-series robots▪ 450-amp water-cooled GMAW torch▪ Safety clutch and start-up kit▪ See attached data
2	Water Circulators <ul style="list-style-type: none">▪ 3-gallon stainless steel tank▪ Heavy-duty, gear-type pump▪ Fan-cooled heat exchanger▪ Water flow sensor▪ Includes one gallon of Dynaflux coolant
2	Tregaskiss Reamer/Sprayer Nozzle Cleaning Stations <ul style="list-style-type: none">▪ Stand-alone device▪ Pneumatic motor-driven reamer cleans the torch nozzle▪ Includes a sprayer for anti-spatter compound
2	Motoman Pneumatic Wire Cutters <ul style="list-style-type: none">▪ Uses a robot output signal to automatically cut welding wire to a desired length▪ Can cut up to 1.6 mm (0.062") diameter solid wire▪ Working pressure is 85-140 psi
2	ToolSight™ Comprehensive Torch Alignment Packages <ul style="list-style-type: none">▪ ToolSight gauge assembly▪ Torch alignment pin▪ Motoman PMT and Relative Job software▪ Tool Update software▪ Instruction manual▪ Please see the attached data
2	Deluxe Accessory Stands <ul style="list-style-type: none">▪ 36" floor pedestal stand▪ Mounting hardware for torch nozzle cleaner and wire cutter▪ Junction box for wire termination▪ Filter regulator unit▪ Common cable to NX100 controller



Project Deliverables (continued)

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<u>Qty.</u>	<u>Description</u>
1	MRM2-1200M3X Three-motor Positioner <ul style="list-style-type: none">▪ AC servo-driven, coordinated 3-motor dual-headstock/tailstock ferris-wheel positioner▪ 3-motor design has a faster sweep speed and can orient the fixture while sweeping; all three axes rotate simultaneously during the sweep motion, resulting in the tools being in the desired position at the end of the sweep motion▪ 1,200-kg (2,645.5-lb) capacity per side▪ One 4.5 kW motor and two 2.2 kW motors▪ 3.5-second sweep time▪ 0-16.9 rpm tooling index time▪ 15' distance between headstock and tailstock▪ 1,300 mm (51.2") maximum part diameter▪ Common mounting spanners for robot structure and positioner▪ Side-mount external axis kit▪ See attached data
1	Operator Station <ul style="list-style-type: none">▪ Mounted in NEMA enclosure on stand-alone pedestal with base and 25-ft cable.▪ Functions: Job Start, Emergency Stop, Hold, Alarm Reset, and Servo Power-up▪ Palm button for cycle-start activation▪ Ready signal light and alarm indication light▪ Positioner auto/manual switch▪ Manual positioner-jog joystick▪ Two 2-digit thumbwheel selectors per station
1	Cell Guarding Package <ul style="list-style-type: none">▪ 2.5-meter (8') woven wire perimeter safety fence with one access gate and positive break safety switch▪ Arc flash protection curtains▪ Light curtains at operator load/unload station▪ Three-color status beacon light
1	Common Mounting Platform <ul style="list-style-type: none">▪ For robots and positioner▪ Forklift compatible▪ Two-piece fabrication (bolts together) for ease of transporting
1	Common Equipment Base <ul style="list-style-type: none">▪ For NX100s, water circulators, and welding power supplies▪ Forklift compatible