

Event Summary - Glovebox

Type	Invitation to Bid	Number	TAMU-ITB-2064
Stage Title	-	Organization	TAMU
Currency	US Dollar	Event Status	Awarded
Work Group	TAMU	Exported on	3/20/2020
Exported by	Sharon Parks	For Requisition	129458263
Created Document	130430343	Estimated Value	88,000.00 USD
Payment Terms	-		

Bid and Evaluation

Respond by Proxy	Allow	Use Panel Questionnaire	No
Sealed Bid	Yes	Auto Score	No
		Cost Analysis	No
Alternate Items	No		


Visibility and Communication

Visible to Public	Yes
Enter a short description for this public event	
Glovebox	

Commodity Codes

None Added

Event Dates

Time Zone	CDT/CST - Central Standard Time (US/Central)
Released	-
Open	2/26/2020 12:00 AM CST
Close	3/4/2020 2:00 PM CST
Sealed Until	3/4/2020 2:00 PM
	 Show Sealed Bid Open Date to Supplier
Q&A Close	3/3/2020 10:00 AM CST

Description

Glovebox

Stage Description

No description available.

Questions

★ Supplier Response Is Required

Page 1

Group 1

- | | | |
|------|---|---|
| 1.1 | Delivery Terms: Quote delivery time, upon receipt of each order
Text (Multi-Line) | ★ |
| 1.2 | Prepaid and Included in the unit cost. All equipment must be fully insured against loss and damage during shipping.
Yes/No | ★ |
| 1.3 | Please provide Export Classification under United States Export-Controlled Regulation. If items are Export Controlled please provide ECCN and HTS numbers. UML category for ITAR items.
Text (Multi-Line) | ★ |
| 1.4 | Custom Charges - If TAMU is responsible for any applicable US Custom Charges.
Dropdown List (Pick One)
Yes
No
Not Applicable | ★ |
| 1.5 | If Custom Charges apply, please list what are they?
Text (Multi-Line) | ★ |
| 1.6 | Additional Charges - Shall be outlined here in: any additional charges not specified in this invitation for bid shall become the responsibility of the vendor.
Text (Multi-Line) | ★ |
| 1.7 | Educational Discount: Provide any or all applicable discounts on the items listed.
Text (Multi-Line) | ★ |
| 1.8 | Vendor Contact Information:
Name, Phone and fax number and email address of the individual who will be servicing this account.
Text (Multi-Line) | ★ |
| 1.9 | If you are registered on the Central Master Bidders List, select your ethnicity and gender.
Multiple Choice (Pick One)
Asian - Male
Asian-Female
Black-Male
Black-Female
Hispanic-Male
Hispanic-Female
Women Owned
Disabled Veteran
Non-Hub
Native Indian-Male
Native Indian-Female | ★ |
| 1.10 | If vendors terms and conditions differ is the following language ok to use? Where TAMU terms and conditions differ from those of the vendor the vendors terms shall be enforceable only to the extent allowed by the laws of The State of Texas.
Yes/No | ★ |
| 1.11 | Please complete the W9 & Direct Deposit form located in the Buyers attachments. Once you have completed the entire form, you will need to upload the finished form.
File Upload | ★ |

Product Line Items

★ Required Product Line Items

Group P1

#	Item Name, Commodity Code, Description	Qty.	UOM	Target Price	Allow Alternates	Requested Delivery
P1.1	ANGO450 Base System (Advanced PC/PLCAutomation)System Frame and Enclosure ★	1	EA - Each	-		-
	41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / ANGO450 Base System (Advanced PC/PLC Automation) System Frame and Enclosure • Built on a powder-coated solid welded steel enclosure with a compact footprint • Access to the cabinet is provided through removable and swing-out panels Vacuum Chamber • 400mmW×400mmD×500mm H: SUS304 high vacuum box chamber • Glass bead blast finish on chamber surfaces • Hinged chamber front door for easy internal access • Large viewport offset to reduce material deposition • One set removable stainless steel debris shields Safety and Certifications • Field evaluated to meet CSA SPE-1000 certification • A detailed safety, alert and interlock system helps protect users as well as the equipment • The interlock system is a complete set of hardware interlocks managed with a separate safety circuit on a safety rated relay as well as a set of software interlocks • A 3-light beacon provides a visual indicator of system status					
P1.2	System Control with Aeres ★	1	EA - Each	-		-
	41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / System Control with Aeres • PC control station with Windows 10 Professional running on an industrial PLC • Angstrom Aires software for unified machine and deposition control built on .NET framework • Aeres provides you with complete control over each element of your deposition process • A single complete recipe that controls pressure, gas flows deposition source control and fixturing. • Aeres complete process integration improves process consistency from run to run and from user to user • Aeres will accelerate your process development through tight process control and consistency and ensure that an established process is well controlled • With Aeres you will be able to load your parts and materials and let the machine run the process • The system provides an auto-sequence mode and manual mode • Includes a robust user account system with various security and access levels • Remote connectivity available on all Aeres systems for training and diagnostic support • Efficient power management					
P1.3	Upgrade for Glovebox Integration ★	1	EA - Each	-		-
	41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Upgrade for Glovebox Integration • Adds sliding door for direct mounting to a glovebox • Hinged rear access door allows chamber access from the room side					
P1.4	Pator HPV-1300Z hybrid bearing turbopump ★	1	EA - Each	-		-

41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Pator HPV-1300Z hybrid bearing turbopump
 Inlet Flange:ISO 200 / CF 200
 Pumping Speed L/S (N):1,300
 Compression Ratio (N):> 10/9
 Compression Ratio (H):1 x 10/3
 Ultimate Pressure (mbar):10-9
 Startup Time (min):6
 Rotational Speed (rpm):24,000
 Orientation:Any
 Backing Pressure (mbar):1.5
 Outlet Flange:KF40
 Weight (lb):64
 Controller Input Voltage:220V

P1.5	Pator TRP-36 Rotary Vane 10 cfm Vacuum Pump	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Pator TRP-36 Rotary Vane 10 cfm Vacuum Pump 1.Excellent ultimate vacuum and pumping speed. 2.Low noise and vibration. 3.Displacement Speed: 540L/min 50Hz 640L/min 60Hz 4.Without gas ballast Patial pressure: 4×10-4Mbar 5.Inlet Port: 25/40KF						
P1.6	Water Cooled Resistive Thermal Evaporator	★	4	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Water Cooled Resistive Thermal Evaporator Useful for removing excessive heat during very high temperature and long duration depositions Priced per feed through (2 are required per source)						
P1.7	Power supply thermal evaporation	★	2	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Power supply thermal evaporation Phase-angle fired, SCR controller with soft-start 0–100% adjustable voltage/power output Over-current trip response within 10 ms of event Near 1 second ramp-up of SCR control signal reduces cold start surge Local and remote setpoint control Bar graph display on front panel shows level of control signal to SCR Optional RS-232 interface for remote PID control Output Power: 2kW Input Voltage: 120 VAC / 240 VAC Input Current: Up to 20 amps Output Current: Up to 20 amps						
P1.8	Source Shutter	★	4	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Source Shutter • Automatic process controlled pneumatics shutter • Uses a high quality magnetic fluid rotary feedthrough						
P1.9	Point Source Evaporator Deposition Sources for Organic Materials	★	4	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Point Source Evaporator Deposition Sources for Organic Materials LED-03 Evaporator Deposition Sources • Temperature PID Controller with control to ±0.1°C • 3cc crucible with a 1cc charge capacity • High purity alumina crucible included, liners sold separately • Temperature range 0-600°C • Control source via temperature or deposition rate						
P1.10	LTE Series Power supply	★	4	EA - Each	-	-

41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / LTE Series Power supply
 Type-K thermocouple input connectors standard (others available)
 Digital temperature and setpoint
 Phase-angle fired SCR output
 Integrated current transducer
 RS-232 interface for remote PID control
 Output Power:200W
 Input Voltage:120/240 VAC
 Output Voltage:12 V
 Input Current:2 amps @ 120 VAC/1 amp @ 240 VAC

P1.1 1	Thin Film Deposition	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Thin Film Deposition
 SQM-160 Thin Film Deposition Monitor
 Thickness and rate:± 0.37 Å
 Power:100-120/200-240 VAC, 50/60 Hz, 20 W
 The sensor is mounted to a rigid bracket to prevent loss of calibration if accidentally moved
 The sensor is water-cooled to improve reading accuracy

P1.1 2	Masking Capable Substrate Stage Assembly	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Masking Capable Substrate Stage Assembly
 • Precision dowel pins for substrate transfer and mask alignment
 • Suitable for 100mm x 100mm or Ø150mm or smaller pieces
 • Custom sample holders available upon request
 • Source to substrate distance varies with configuration
 • 0-50 RPM continuous rotation capability

P1.1 3	Split 2-Piece Substrate Shutter	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Split 2-Piece Substrate Shutter
 • Automatic process controlled pneumatic shutters
 • Uses high quality magnetic fluid rotary feedthroughs
 α-2400U Standard (2400-4port) Glovebox with gas purification
 Glove box
 All-welded 2400mm wide x 900mm high x 760mm deep-Type 304 Stainless Steel
 Two Å Equipped with 9 3/4" nitrile gloves, designed to seal around 9" aluminum alloy Å glove port
 Two adjustable shelves mounted on back walls
 Two 0.3 μm HEPA dust filters installed on purifier inlet and outlet
 Four standard feedthroughs on back wall sealed by blank KF-40 caps;
 One electrical feedthrough (3-4 outlets) included
 Casters for easy moving and fixed levelers to level and stabilize the glovebox
 Front panel with LED lighting for lighting
 leak rate:<0.05vol%/h

P1.1 4	Gas Purification	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Gas Purification
 1 H2O/O2 purifier column Å Attainable purity:H2O<1ppm ,O2<1ppm Designed to maintain2&H2O.Capacity of 20 liters of O2&2.6kg of moisture before regeneration.
 Lindy Molecular Sieve,and BASF R3-11 Copper Catalyst.
 Energy efficient on-demand auto-circulation; Impurity levels < 1 ppm Edwards RV12 Rotary Vane
 Mechanical vacuum pump; pump speed 10 cfm; oil mist filter included

Microprocessor Control System

Includes self diagnostics,self start up after power failure, pressure controls,automatic adjustable
 Regeneration control, circulation control, password protection, O2&H2O read out, integrate with
 freezer,vacuum ovens, vacuum chamber controls.L.C.D. display
 Automatic pressure control system +/- 15mbar inside the box

Circulation

0-60 CFM continuously variable blower, with vibration control.
 Pressure tested stainless steel enclosure.KF-40 Fittings.

Chamber

1 Vacuum chamber made of stainless steel Dia.360mm,
 Length=600mm¼OErigh side
 1 Minichamber Dia.100mm, length 300mm¼OErigh Å side

External Pressure Control

Foot Pedal available to control Gas and Vacuum

Caster/leveling System

All in one free spinning casters ,with Adjustable leveling feet.

P1.1 5	T Type Chamber	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / T Type Chamber
 1 T Type Vacuum chamber made of stainless steel
 Dia.360mm, Length=700mm
 1 T Type Minichamber Dia.100mm, length 300mm right
 side

P1.1 6	Upgrade for Solar Simulators Test Windows	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Upgrade for Solar Simulators Test
 Windows
 At the bottom of the Glovebox
 α-1200U Standard (1200-2port) Glovebox with gas
 purification
 Glove box
 All-welded 2400mm wide x 900mm high x 760mm deep-Type 304
 Stainless
 Steel
 Two Equipped with 9 3/4"butyl gloves,designed to seal aroune 9"
 aluminum
 alloy glove port
 Two adjustable shelves mounted on back walls
 Two 0.3 µm HEPA dust filters installed on purifier inlet and outlet
 Four standard feedthroughs on back wall sealed by blank KF-40 caps;
 One
 electrical feedthrough (3-4 outlets) included
 Casters for easy moving and fixed levelers to level and stablize the
 glovebox
 Front panel with LED lighting for Lighting
 leak rate:<0.05vol%/h

P1.1 7	Gas Purification	★	1	EA - Each	-	-
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41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Gas Purification
 1 H2O/O2 purifier column Attainable purity:H2O<1ppm ,O2<1ppm
 Designed to maintain 2% H2O. Capacity of 20 liters of O2 & 2.6kg of moisture before regeneration.
 Lindy Molecular Sieve, and BASF R3-11 Copper Catalyst.
 Energy efficient on-demand auto-circulation; Impurity levels < 1 ppm
 Edwards RV12 Rotary Vane Mechanical vacuum pump; pump speed 10 cfm; oil mist filter included

Microprocessor Control System
 Includes self diagnostics, self start up after power failure, pressure controls, automatic adjustable Regeneration control, circulation control, password protection, O2 & H2O read out, integrate with freezer, vacuum ovens, vacuum chamber controls. L.C.D. display
 Automatic pressure control system +/- 15mbar inside the box

Circulation
 0-60 CFM continuously variable blower, with vibration control.
 Pressure tested stainless steel enclosure. KF-40 Fittings.

Chamber
 1 Vacuum chamber made of stainless steel Dia. 360mm, Length=600mm □ right side
 1 Minichamber Dia. 100mm, length 300mm □ right side

External Pressure Control
 Foot Pedal available to control Gas and Vacuum

Caster/leveling System
 All in one free spinning casters ,with Adjustable leveling feet.

P1.1 8	Upgrade for Spin Coater Integration	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Upgrade for Spin Coater Integration At the bottom of the Glovebox Integration						
P1.1 9	Solvent Removal System	★	2	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Solvent Removal System The Glove Box shall have an activated carbon based solvent removal system. A minimum of five (5) kg carbon reagent capacity is required to ensure steady operation with minimum maintenance. The solvent removal system shall have an isolation valve, evacuation capabilities, and a vacuum gauge to allow for changing the solvent removal reagent without contaminating the glove box atmosphere.						
P1.2 0	OXY-XT-Z1000, Glovebox Zirconia, Trace PPM Oxygen Analyzer	★	2	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / OXY-XT-Z1000, Glovebox Zirconia, Trace PPM Oxygen Analyzer						
P1.2 1	Michell Instruments Easidew 34 Dew Point Transmitter	★	2	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Michell Instruments Easidew 34 Dew Point Transmitter Measures absolute content of water vapor within an inert environment. Displays in ppm, and dew point. PLC integrated (enables auto-circulation of the purifier)						
P1.2 2	Edwards vacuum RV12, Dual Stage High Capacity Vacuum Pump with Fittings, 110/220V, 50/60 Hz	★	2	EA - Each	-	-

41100000 - Laboratory and scientific equipment | 5751 <\$5k, 8422 / Edwardsvacuum RV12, Dual Stage High Capacity Vacuum Pump with Fittings, 110/220V, 50/60 Hz
21.0 cfm vacuum pump with exhaust oil mist filter.

P1.2 3	Box auto purging system	★	2	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Box auto purging system Unit for inerting (purging) of the workspace with inert gas Operation: via operation panel of the gas purifier Valves PLC-controlled Flow rate: max. 200 l/min; incl. manual regulation valve for reduction of the gas flow Functions: - Purging ON / OFF - Max. purging time programmable (0-999 min) The O2 and H2O concentrations are readable during purge (if sensors are installed).						
P1.2 4	Automatic antechamber control	★	3	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Automatic antechamber control Main antechambers, pressure controlled. Programable antechamber cycles: - Auto control of cycles - intermediate vacuum for refill - ultimate vacuum						
P1.2 5	EZ4 Spin Coater	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / EZ4 Spin Coater With its small footprint, the spin coater can be installed in a fume hood or a glove box. Max Spin Speed:10,000 RPM Speed Resolution:1 RPM Max Spin Time:3,000 S Time Resolution:1 S Chuck diameter:5 inches (according to customer's requirement) Power:100-120V,1 Phase,200W(110V)/200-230V,1 Phase,200W(220V)						
P1.2 6	On-site installation and training	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / On-site installation and training • Includes system start-up • 2-Day operation and maintenance training course						
P1.2 7	All Inclusive Warranty	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / All Inclusive Warranty • Any defects will be repaired or replaced at no cost including shipping to and from the customers site • The warranty period of 12 months from acceptance at site or15 months from the shipment • Lifetime telephone and online support is included • Telephone and email response times of less than 8 hours any day, every day						
P1.2 8	Shipping	★	1	EA - Each	-	-
41100000 - Laboratory and scientific equipment 5751 <\$5k, 8422 / Shipping						

Service Line Items

There are no Items added to this event.