INSTRUCTIONAL EQUIPMENT REQUEST 2016-2017

RECEIVED
OCT 20 2016
VP ACADEMIC SERVICES
LAS POSITAS COLLEGE

Internal Use
IE #: Fall 43
Total $: 6,328.01

Requester Name: Scott Miner Division Name: CATSS

SECTION 1: SUMMARY INFORMATION

Brief Title of the Request:

Inverter Welding Power Supply #A

Equipment Location Building: 800 **Room:** 810

SECTION 2: EQUIPMENT DESCRIPTION

The equipment is: ☒ A Replacement ☒ An Upgrade ☐ New Equipment/Technology

Describe the specific equipment requested and how it will be used to replace, upgrade or provide new technology to LPC from what is currently in place:

Welding power supply that is used in a student welding workstation. Used for Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW). The new machine requested would replace an existing power supply that was purchased in the Mid 1990's. The existing machine is tired, outdated, and difficult to find replacement parts when needed.

If applicable, describe the legal requirement, mandate, or safety concern for purchase of this equipment, making specific reference to the legal requirement or regulation:

N/A

INSTRUCTIONAL EQUIPMENT (IE) REQUEST: 2016-2017

THE FOLLOWING INFORMATION WILL CONTRIBUTE TOWARD A QUALITY IE REQUEST

Consult the RAC Web Site for Deadlines for IERs

IE Definition

Allowable Items: Instructional equipment expenditures are eligible if the equipment, library material, or technology is for classroom instruction, student instruction or demonstration, or in the preparation of learning materials in an instructional program. There are five categories that will be used to classify instructional support. The following are examples but the list is not limited to what is shown.

1. Equipment and Furniture: instructional equipment and furniture for primary use by students in instructional programs:
   a. Classroom/Laboratory equipment, including whiteboard, screen, projector, etc.
   b. Instructional furniture, including desks, tables, podium, chairs, etc.
2. Information Technology: instructional information technology equipment for student use in classrooms and/or laboratories, including desktops, laptops, monitors, printers, servers, network/wireless infrastructure, AV/TV, multimedia.
3. Software: software licenses are allowed but only the initial year is permitted. Other software that are permitted are those that are used in excess of one year and software modifications that add capacity or efficiency to the software that defers obsolescence and results in an extension of the useful life of the software, including registration, counseling, student services, learning management systems for student use.
4. Adaptive Equipment: adaptive equipment for ADA/OCR students are allowed to assist them in a learning environment.
5. Library Material: databases, on-line subscriptions, books, periodicals, videos, etc.

Non-Allowable Items: Administrative or Non-Instructional Purposes including equipment being used for administrative or non-instructional purposes is not allowed including photocopiers, file cabinets, bookcases, computers, networking infrastructure, software licenses.

IE Rubric

RAC will evaluate each IE request based on the IE rubric. RAC stresses the importance of **quality** requests. RAC may choose not to rank **incomplete** IE requests.

Criteria	Strong Evidence	Adequate Evidence	Limited Evidence
Ranking scale	8-10	4-7	0-3
LPC Mission & Planning Priorities [Section 3] *(5 points)*	Clear & compelling evidence that equipment will fully support LPC Mission and Planning Priorities	Clear evidence that equipment intends to support LPC Mission and Planning Priorities	Limited or no evidence that equipment will support LPC Mission and Planning Priorities
Educational Items: Programmatic Impact and Institutional Support [Section 4] *(10 points)*	Clear and compelling evidence/data (as stated in program review) that this equipment will have substantial impact on program curriculum.	Clear evidence/data (as stated in program review) that this equipment should have substantial impact on program curriculum.	Limited evidence/data (as stated in program review) that this equipment will have an impact on program curriculum.
Teaching & Learning [Section 5] *(10 points)*	Clear and compelling evidence/data that equipment provides much needed or beneficial enhancement to instruction.	Equipment provides enhanced instruction that is not currently met through current means. Equipment will allow the program to operate on par with other institutions.	Equipment allows for little or no enhancement of current instructional opportunities and limited or no appeal to potential students.
Outcomes [Section 6] *(5 points)*	Evidence that equipment will support course and/or program outcomes above and beyond current capability.	Clear evidence/data that equipment meets stated course/program outcomes.	Equipment provides little or no impact on course and/or program outcomes above or beyond current capability.
Total Cost of Ownership (Financial & Sustainability) [Section 7] *(5 points)*	All items/issues in the Financial and Sustainability sections fully addressed.	Items/issues in the Financial and Sustainability sections are addressed.	Items/issues in the Financial and Sustainability sections minimally or not satisfactorily addressed.

IE Checklist

	Completed
Section 1: Summary Information	_____
Section 2: Equipment Description	_____
Section 3: Mission & Priorities	_____
Section 4: Educational Items	_____
Section 5: Teaching and Learning	_____
Section 6: Outcomes	_____
Section 7: Cost of Ownership	_____
Section 6: Outcomes	_____

	Completed
Section 7: Total Cost of Ownership	_____
Part A: Initial Start-up Costs	_____
Part B: On-Going Annual Operating Costs	_____
Part C: Incremental Labor Costs	_____
Quotation Attached, includes:	_____
☐ Tax (9.5%)	_____
☐ Shipping	_____
☐ Installation	_____
Requisition Attached (signed by Dean and VP)	_____

SECTION 3: LPC MISSION STATEMENT AND LPC PLANNING PRIORITIES

LPC MISSION STATEMENT:

LPC is an inclusive learning-centered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

LPC PLANNING PRIORITIES:

- **Establish regular and ongoing processes to implement best practices to meet ACCJC standards.**
- **Provide necessary institutional support for curriculum development and maintenance.**
- **Develop processes to facilitate ongoing meaningful assessment of SLOs and integrate assessment of SLOs into college processes.**
- **Expand tutoring services to meet demand and support student success in Basic Skills, CTE, and Transfer courses.**

Specify how the equipment supports *LPC's Mission Statement* and *Planning Priorities*:

Mission - Used to support students in the area of Career Technical Education, transfer, degree and retraining goals.

Priorities - Replacement of the existing equipment provides the necessary institutional support to maintain curriculum. Meaningful course and program level SLO's are completed with the existing machines. The SLO's are to complete an Industry Standard Welding Certification Test. Students use these machines to practice welding similar to a computer is to a coding class. The practice of the students in conjunction with coaching from others represents the CTE version of tutoring.

SECTION 4: EDUCATIONAL ITEMS – PROGRAM REVIEW

Specify the educational programs this equipment supports:

Welding Technology

If this equipment is included in your Program Review, please include the exact wording. If equipment is not included, explain why:

"World Class Welding Instruction - Continuous Improvement"
"Extensive use of Welding Procedure Specifications (WPS) and Standardizied Testing for Midterms and Finals in most courses"
"One area of constant concern and need is to make sure that the equipment we use in all of our CTE programs are safe to use and similar to that in our respective trade, so that students are prepared for the proper workplace environment"

SECTION 5: TEACHING AND LEARNING

Describe in detail the impact this equipment will have on <u>teaching</u>:

This machine will allow teaching of current equipment used in industry, along with advanced features, will help prepare the students for current and future careers. The controls on the new equipment is much simpler and easier to teach a student to operate. The machine has the ability to track welding data that is also impossible to do with the existing machine.

Describe in detail the impact this equipment will have on <u>learning</u>:

This machine will allow learning on current equipment used in industry.
The controls are much more logical and easier for the students to understand.
The new controls will match 16 other machines in the room so moving to different workstations now becomes easier for everyone in the lab space. Students can study the data that the machine collects.

Each academic year, this equipment will impact: 50+ **# of classes/sections** 500+ **# of students**

SECTION 6: OUTCOMES (SLOs)

Using your documented SLOs, specify how the equipment will enable student learning outcomes to be achieved?

This equipment is used to complete COURSE level SLO's in more than 75% of the welding courses. This equipment is used to complete one of our three PROGRAM level SLO's as well. Passing an Industry Standard Welding Certification Test

What are the consequences related to learning outcomes if request is not funded?

We will continue to use equipment in this workstation that is 20 years old and getting tired. Students will continue to attempt weld testing using the older equipment.

SECTION 7: TOTAL COST OF OWNERSHIP (FINANCIAL & SUSTAINABILITY

What is the potential life span of the requested equipment?

The existing equipment is more than 20 years old, it is a "durable good"

If new storage is needed, describe the storage, location, and costs: (Specific storage costs should be detailed in the "*Part A: Initial Start-up Costs*" section below.)

N/A

What will be required to maintain the equipment, such as regular servicing or upkeep? (Specific on-going costs should be detailed in the "*Part B: On-Going Annual Operating Costs*" sections below as applicable.)

Minor occasional maintenance , should operate trouble free for years

Explain how this equipment meets or exceeds basic sustainability efforts and/or provides renewable resources to the college:

The machine is made from materials that can be 100% recycled at the end of its usable lifespan. The old machine will be 100% recycled. All of the Steel, Aluminum and Stainless Steel that students use with this machine is recycled as well.
The new machine will draw about 15% less power than the existing due to the inverter technology.

Part C: Incremental Labor Costs

OPERATOR:

Indicate the key operator: Students & Instructors

Is this in their current scope of duties? Complete Educational Goals

Indicate cost to train key operator (include in Initial Start-up Costs above): 0

Indicate amount of time per month key operator will use equipment: 160+ Hours

MAINTENANCE & REPAIRS:

Indicate the person performing maintenance and repairs: Welding/Auto Department Technician

Is this in their current scope of duties? Yes

Indicate cost to train for maintenance and repairs: 0

Indicate amount of time per month maintenance will be required: less than 15 minutes

SECTION 8: APPROVALS

Funded requesters will be expected to respond to a brief RAC feedback survey by a requested deadline.

Requests for computer-related equipment and printers must be reviewed by the LPC IT Department.

Signatures:

Requester	**Date** 10/17/16
IT Department (if required)	**Date**
Dean/Manager	**Date** 10/20/16
Vice President	**Date** 10/24/16

Part A: Initial Start-up Costs

Item	Cost	Comments
Equipment or Materials	4,979.00	
Taxes (9.5%)	473.00	
Shipping or Delivery Charge	0.00	
Installation Costs *	0.00	Instructor & Technician installed
Miscellaneous Costs:		
Facilities Modifications		
Operator Training		
Maintenance & Repair Training		
Other: Torch Kit w/Foot Control	800.00	
Vendor Discount		
Grand Total:	6,252.00	

Part B: On-Going Annual Operating Costs

Item	Cost	Comments
Annual Service or Maintenance	0.00	
Estimated Parts Replacement Per Year	0.00	
Outside Standardization or Calibration Costs	0.00	
Storage Costs	0.00	
New Supply Costs	0.00	
Miscellaneous Costs:	20.00	
Maintenance & Repair Labor		
Other:		
Annual Operating Costs:	20.00	

Indicate the source of funding for on-going annual operating costs:

Department Supply Budget

QUOTE

ALLIANCE Atlas Welding Supplies

Tracking Number

Quote Date 10/14/2016

ALLIANCE/JANCO W/S
501 Auzerais Avenue
San Jose, CA 95126
408-271-3800
408-271-3813 (FAX)

ALLIANCE W/S
800 Greenville Road
Livermore, CA 94550
925-449-9353
925-449-9356 (FAX)

ALLIANCE/ATLAS W/S
1224 Sixth Street
Berkeley, CA 94710
510-524-5117
510-524-9098 (FAX)

ALLIANCE/CONTRA COSTA W/S
1135 Erickson Road
Concord, CA 94520
925-685-8921
925-685-8928 (FAX)

Ship To:

CHABOT LOS POSITAS

SCOTT MINER

Issued By: **LHUTTON**

Location: **LIVERMORE**

ITEM	QTY	PART #	DESCRIPTION	PRICE	EXTEND
~~1~~	~~1~~	~~LIN-K2675-2~~	~~POWERWAVE C300 BASE MODEL~~	~~$ 5,076.00~~	~~$ 5,076.00~~
~~2~~	~~1~~	~~LIN-K2774-2~~	~~POWERWAVE C300 STL READY PAK~~	~~$ 5,855.00~~	~~$ 5,855.00~~
3	1	MIL-907514003	DYNASTY 280 DX W/INSIGHT	$ 4,978.89	$ 4,978.89
4					
5					
6				$ -	$ -
7				$ -	$ -
8				$ -	$ -
9				$ -	$ -
10				$ -	$ -
11				$ -	$ -
12				$ -	$ -
13				$ -	$ -
14				$ -	$ -
15				$ -	$ -
16				$ -	$ -

SUB TOTAL	$ ~~15,887.89~~
DELIVERY CHARGE	$ -
SALES TAX	
TOTAL	$ ~~15,887.89~~

NOTES:

* This quotation is good for 30 days from the date shown above

Maxstar® 210/280 Series
DC TIG and Stick

See literature no. DC/32.1 (210) and DC/35.0 (280)

Dynasty® 210/280 Series
AC/DC TIG and Stick

See literature no. AD/4.81 (210) and AD/4.9 (280)

NEW!

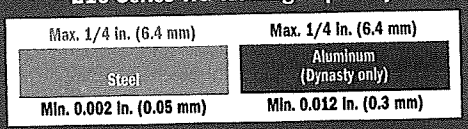
Maxstar and Dynasty 210 Series (Maxstar 210 shown).

Dynasty 280 DX

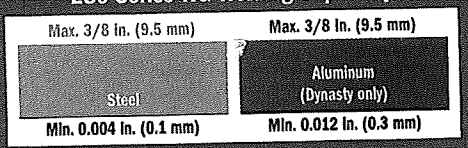
WIRELESS REMOTE COMPATIBLE

See page 113

210 Series TIG Welding Capability



280 Series TIG Welding Capability



Base and DX models available. Base model provides essential TIG and stick functions. DX model adds extended ranges to sequencer, full trigger options, and full preflow and pulser functions.

Note: See page 49 in the Stick section for Maxstar 210 STR.

AUTOLINE™ Power Management Technology Allows for any input voltage hook-up (210 models: 120–480 V, 280 models: 208–575 V) with no manual linking, providing convenience in any job setting. Ideal solution for dirty or unreliable power.

Blue Lightning™ high-frequency (HF) arc starter for non-contact arc initiation. Provides more consistent arc starts and greater reliability compared to traditional HF arc starters.

Lift-Arc™ provides AC or DC arc initiation without the use of high frequency.

Hot Start™ adaptive control provides positive arc starts without sticking.

Auto-postflow adjusts the length of postflow time based on the amperage setting, shielding your tungsten and eliminating the need to set the postflow time.

Pro-Set™ eliminates the guesswork when setting weld parameters. Use Pro-Set when you want the speed, convenience and confidence of preset controls. Simply select the feature and adjust until Pro-Set appears on the display.

Sleep timer conserves electricity. This programmable feature will power down the machine if it sits idle for a specified time.

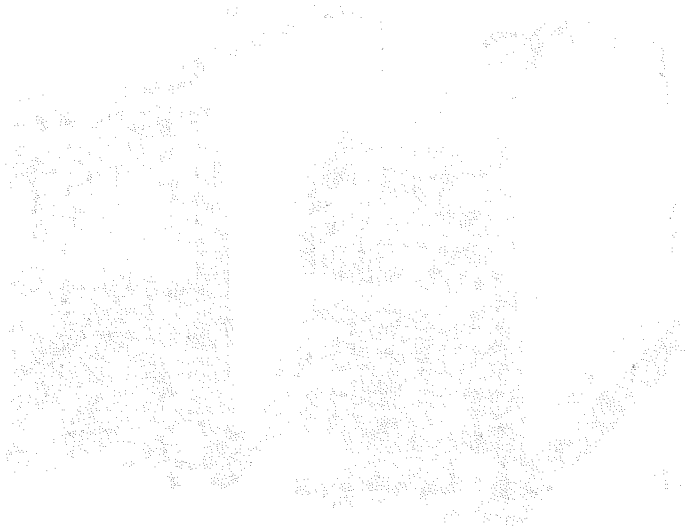
Update and expand. Front panel memory card data port provides the ability to easily update software and expand product features.

Optional cooler power supply (CPS) is an integrated 120-volt dedicated-use receptacle for the Coolmate™ 1.3. *Not available on Maxstar 210 Series.*

Optional Cooler-On-Demand™ feature operates the auxiliary cooling system only when needed, reducing noise, energy use, and airborne contaminants pulled through the cooler. *Only available on CPS models.*

**Refer to owner's manual for 208-volt output ratings and duty cycle.*
***Sense voltage for low OCV stick and Lift-Arc™ TIG.*

	Model/ Stock Number	Welding Process	Input Power	Welding Amp Range	Rated Output at 60% Duty Cycle	Amps Input at Rated Load Output, 50/60 Hz 120 V	208 V	230 V	240 V	400 V	460 V	480 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
DC Maxstar	**Maxstar 210 (#907 683) Maxstar 210 DX (#907 684)**	TIG	3-phase	1-210	210 A at 18.4 V	–	14	–	12	7	–	6	–	5.2	4.9	80 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 19.5 in. (495 mm)	38 lb. (17.2 kg)
			1-phase	1-210	210 A at 18.4 V	–	24	–	20	12	–	10	–	4.9	4.9			
			1-phase (120 V)	1-150	125 A at 15 V	22	–	–	–	–	–	–	–	2.6	2.6			
		Stick	3-phase	5-210	160 A at 26.4 V	–	15	–	13	8	–	6	–	5.5	5.2			
			1-phase	5-210	160 A at 26.4 V	–	26	–	22	13	–	11	–	5.3	5.3			
			1-phase (120 V)	5-100	90 A at 23.6 V	23	–	–	–	–	–	–	–	2.8	2.8			
	Maxstar 280 (#907 552) (#907 538) with CPS **Maxstar 280 DX (#907 553) (#907 539)** with CPS	TIG	3-phase	1-280	235 A at 19.4 V	–	17	15	–	9	7	–	6	6.2	6.0	60 VDC (11 VDC**)	H: 13.6 in. (346 mm) W: 8.6 in. (219 mm) D: 22.5 in. (569 mm)	47 lb. (21.3 kg) 50 lb. (22.7 kg) with CPS
			1-phase	1-280	235 A at 19.4 V*	–	28	26	–	15	13	–	10	6.0	6.0			
		Stick	3-phase	5-280	200 A at 28 V	–	20	18	–	10	9	–	7	7.2	7.0			
			1-phase	5-280	180 A at 27.2 V*	–	30	27	–	15	13	–	10	6.2	6.2			



LAS POSITAS COLLEGE Equipment, Apparatus and Service Requisition

#R

FOR REIMBURSEMENT: List payee name & ssn. | TAX ID#

SUGGESTED VENDOR: ALLIANCE WELDING SUPPLY

FOR OFFICE USE ONLY

NAME OF STAFF MEMBER	DATE WRITTEN	DATE REQUIRED	DIVISION/ DEPARTMENT	For inventory purposes include room # where equipment will reside:	RETURN COPY of REQUISITION TO:	Ext#:
S. MINER	F2016		WLDT / CATSS	810	S.MINER	

DESCRIPTION (PRODUCT, TYPE, SIZE, COLOR, STOCK NUMBER)	UNIT	QTY	UNIT PRICE	Air
				$ -
DYNASTY 280 DX W/INSIGHT				$ 4979 -
				$ 800 -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -
				$ -

Vendor Information/ Remit To:

ALLIANCE
800 GREENVILLE RD
LIVERMORE CA

Deliver To, include room # (optional):

S. MINER
810

Subtotal			$ 5779.00
Tax	9.5%	$ 549.00	$ ~~473~~ -
Shipping (if available):			~~0~~
TOTAL COST			$ ~~6252~~ -
			6328.01

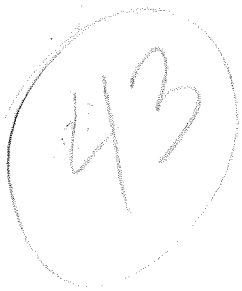
Comments:

BT#

Original invoices and receipts must be attached for payment. Include current taxes unless incorporated in price.

ACCOUNT # | FUND | ORG | ACCT | PROGRAM

Business Office


43