



INSTRUCTIONAL EQUIPMENT REQUEST

Due in Dean/Unit Head's Office on September 9, 2011 (FALL) and March 1, 2012 (SPRING)

Name of requestor: Scott Miner

Division/Unit: BCATSS - Welding Technology **Building location:** 800/810

Brief title of request: Machine Repair - Welding Power Source

Request amount \$2500

Copy of quote(s)/estimate(s) attached: Yes

Description of the specific equipment or materials requested:

Repair of welding power source damaged by student improper use/abuse.

Machine is less than 5 years old and replacement cost \$6000-7000.

Student did something they were specifically instructed not to do, thus impacting the learning of all that followed.

What educational programs or institutional purposes does this equipment support? Is this in your Program Review?

Yes, a Program Development form specifically notes periodic equipment repair as a program need. Furthermore, the program review speaks specifically to the need to create a safe environment for students that meets current industrial standards.

Is it a replacement? REPAIR **Upgrade?** REPAIR **New technology?** NO

How does the equipment replace, upgrade or provide new technology to the college? What do you currently have in place?

Repair of welding power source damaged by student improper use/abuse.

Machine is less than 5 years old and replacement cost \$6000-7000. Lifespan 20+ years

Student did something they were specifically instructed not to do, thus impacting the learning of all that followed.

What are the estimated ongoing costs and are there potential savings?

This is a one time expense to repair this machine, and to this point the machine had been trouble free and needed little maintenance

For evaluation criteria, please see corresponding Instructional Equipment Rubric.

Instructional and Service Impact

How will this item have a positive impact on instruction and/or teaching and learning at the College?



This request will repair equipment that serve a diverse student body. This will not by itself bring more students into the class environment. It will however impact most greatly those that already have found their way to the program by having more reliability and, in the short term, more capacity to deliver student success.

Impact on Enrollment

Will the equipment impact enrollment capacity, increasing the number of students participating in a course or program?

This equipment will replace aging equipment and serve a diverse student body. This will not by itself bring more students into the class environment. It will increase success with respect to course and program SLO's.

Access

How does this item promote the principles of universal design which provides students with diverse learning styles, multiple and flexible means of: acquiring information and knowledge; demonstrating what they know; and engaging, challenging and motivating students to learn?

How does this provide opportunities for under-represented populations?

This equipment is capable of being used by every student in every class including ones that have disabilities and language barriers. This equipment exemplifies the "learn by doing" concept. This equipment helps simplify a difficult student learning outcomes, passing industry standard certification tests. (Course & Program SLO)

Outcomes

How will equipment enable student learning outcomes to be achieved? What are the consequences related to learning outcomes if request is not funded?

This equipment enhances student learning outcomes.

This equipment does a great job helping student meet their course and program goals. The student will increase their chance for success, as well as completing course and program SLO's. If not funded, we will continue to use what we have to the best of our ability. We have other means to teach similar concepts on existing 30 year old equipment.

Sustainability

What is the lifespan of requested equipment? Will it need to be replaced in 5 years? 10 years? 20 years?

20+ years or more based on current equipment usage

Facility Accommodation/Maintenance

- 1) Is there sufficient current/planned space available for the storage and use of this equipment? If so, where will it be housed? If not, is there a proposed location and are there any costs associated with installation or modifications to the space? **REPAIR OF EXISTING EQUIPMENT**
- 2) What will be required to maintain the equipment, such as regular servicing or upkeep? Who will perform maintenance, are what will the estimated costs be? **MAINTAINED BY CENTRAL TOOLROOM STAFF AND WELDING FACULTY**

Visibility/Profile within Community

Is this a "flagship" item that will bring recognition/notoriety to the College or raise the stature of the program? Will it attract students and/or enhance the image of the College in the community because of its rare, one-of-a-kind status?

While it clearly is not a "flagship" item, it would be a nice item to have repaired



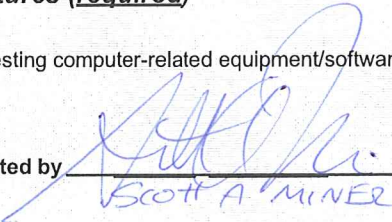
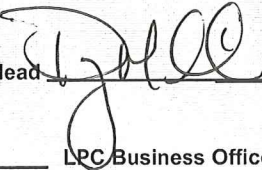
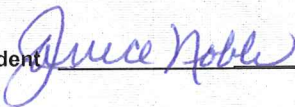
Leadership in Energy Efficient Design (LEED)

Does this equipment exceed basic sustainability goals and provide renewable resources to the College?
Is the design/operation of this item in keeping with the College's commitment to sustainable practices?

Yes, It runs on electricity. It emits no Carbon Dioxide - zero carbon footprint. It is made from metal and can be completely recycled at the end of its usable life span. It increases the lifespan of student materials, thus decreasing the amount of waste generated within the department/campus. It is a durable good and is expected to last more than 20 years.

Signatures (required)

(If requesting computer-related equipment/software, LPC IT Department Review is **required**.)

Requested by  Dean/ Unit Head  3-6-12 IT Department Signature _____
 Vice President 
 LPC VP Business/President _____ LPC Business Office Use (Account Number) _____

MACHINE REPAIR

CASSIMUS

COMPANY

FAX TRANSMITTAL

Date: 2/29/12

Number of pages incl. cover sheet 1

To:	From:
Company: <u>Las Positas College</u>	<u>Mark Cassimus</u>
Attention: <u>James Wespor</u>	Phone #: <u>510-352-6700</u>
Fax #: <u>(925) 424-1802</u>	Fax #: <u>510-352-1103</u>

REMARKS:

Urgent

For your review

Reply ASAP

Please comment

Diagnosis on L.H. series Miller Dynasty 350 as you stated the machine shuts down as soon as a load is applied to the output terminals. Checked and tested the interface (display board) the T2 control transformer, the input rectifier. The unit displays H.F.H.P.24 for a fraction of a second before there is a fault on the control circuit. The two remaining possible problems are P.L.B. auxiliary power board on the main control board with both IGBT's also being replaced. Repair involving aux power board approx 975.⁰⁰
Repair involving the control board & IGBT's approx 2250.⁰⁰
Will perform final tests tomorrow!