



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: Tungsten Grinder

Request amount: \$1600

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

Description of the specific equipment or materials requested:

Grinder used for preparation of electrodes used in Gas Tungsten Arc Welding (GTAW) with spare grinding wheel. GTAW is a vital part of every welding student's experience in the welding lab.

Proper electrode preparation is critical to the success of the process.

This machine captures the tungsten dust (potential safety hazard) in a more complete and efficient manner than the current equipment that has lasted 30+ years. The current equipment was the standard of its day, so is this equipment with respect to current industrial standards.

What educational programs or institutional purposes does this equipment support? Is this in your Program Review? Yes, a Program Development form specifically notes Tungsten Preparation equipment 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? Yes

Upgrade? Yes

New technology? NO

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

The current equipment has lasted 30+ years. It does not contain the dust, and is not as safe as the item in this proposal. This equipment will increase student success with respect to course and program SLO's. The equipment requested meets current industrial standards, a requirement of all CTE programs.

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

This is a tool that plugs into the wall, so there is some ongoing electrical expense. Occasionally the wheel needs to be replaced on a 3-5 year basis, and as such we are purchasing a spare to put on the shelf.

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 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 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 preparing tungsten electrodes. 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. The older equipment does a poor job of collecting the dust from grinding.

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 and student use
b) c)**

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? Room 810 or CentralToolroom Bldg 800**
- 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? This runs intermittently on 110V power. \$50-100 over the lifespan of the equipment, \$300 every 3-5 years for a replacement grinding disc. Maintained by central toolroom/welding staff**

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 have to replace the older equipment that does exist. It will be the only equipment on campus that meets the current industrial standards for tungsten electrode preparation

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 <u><i>Scott A. Miner</i></u> SCOTT A. MINER	Dean/ Unit Head <u><i>[Signature]</i></u> 3-6-12	IT Department Signature _____	Vice President <u><i>[Signature]</i></u> 3/21/12
LPC VP Business/President _____	LPC Business Office Use (Account Number) _____		

TUNGSTEN GRINDER

Newbury Park, CA 91320

Phone: [\(805\) 498-3837](tel:(805)498-3837);

Fax: [\(805\) 498-9347](tel:(805)498-9347)

QUOTE

2/29/12

(Valid for 14 days)

Scott Miner
Las Positas College Bookstore
3000 Campus Hill Drive Bldg 1300
Livermore, CA 94551

Fax: (925)606-1716 Phone: [\(925\)424-1818](tel:(925)424-1818)

ITEM	QTY	PART #	DESCRIPTION	WHEEL GRIT	COLLETS		
1	1	DGP-PG3	Piranha III tungsten grinder <i>(vacuum port ready)</i>	150 grit	Universal (.040-3/16)	\$1,295.00	\$1,165.50
2	1	DGP-PG1423	Diamond Wheel	150 grit		\$299.00	\$269.10

*** ABOVE PRICING DOES NOT INCLUDE SHIPPING ***

Dear Scott,

Included is pricing available for our Piranha III tungsten grinder.
Listed below are features and recommended uses for this grinder.

- The Piranha III grinder is best suited for larger industrial usage. It can service multiple welders using .040-3/16 in diameter. Like the Piranha II, it is available with a 300 or 600 grit diamond grinding wheel that will grind, notch and flatten your tungsten electrodes. Vacuum port ready. This unit is fully enclosed and will contain approximately 90% of excess electrode tungsten dust.
Approximate weight: 51 pounds

All grinders are covered under our one year warrantee parts and labor (excluding consumables). This unit is in stock and ready for immediate delivery. If I may assist you with any additional questions, please feel free to contact me. I look forward to hearing from you soon.

Best regards,



THE PIRANHA™ III

Tungsten Electrode Grinder

Safe • Compact • Affordable



Made in the U.S.A.

Heavy Duty Dedicated Tungsten Grinder for Continuous Grinding of .040" to 3/16" (1.0mm-4.8mm)

Safety

Enclosed grinding area captures Tungsten dust for easy disposal.

Weld Quality

20 Ra surface finish improves Tungsten life, arc starting, arc stability and produces consistent weld penetration.

Productivity

Correctly and consistently Diamond grind your Tungsten Electrode longitudinally, in less than 30 seconds.

Value

The PIRANHA III Diamond grinds, flats and notches your Tungsten economically.



DIAMOND GROUND PRODUCTS, INC.

"The Tungsten Electrode Experts"

diamondground.com