

# Oregon OSHA Worksite Redesign Grant Final Quarterly and Project Report

Company: **PED Manufacturing, Ltd.**

Contract Number: **#99/01-22**

Project Name: **Casting Saw**

Date: 12/7/01

## *Project accomplishments and effectiveness:*

The original objectives of this project, as outlined in the grant application, were to:

- a. Improved safety for the employee in the sawing process.
- b. Improved dust extraction and dust control.
- c. Reduced physical force required by the employee to do their job.
- d. Attempt to reduce noise levels.
- e. Productivity that matches, or is improved, over the existing process.

The final ergonomic and hygienist reports indicate that all of the above objectives have been accomplished. The cutting process now operates in a complete enclosure that isolated the operator from the cutting forces, fumes, dust and noise. Furthermore, aside from one minor reach issue, there have been no additional operator strains or other undesirable conditions created as a result of this project. The reach issue (loading parts into the machine) would be corrected in the next generation of machine which PED may develop with their own funds. It should be noted that this is a task performed every 8 minutes and is not a serious issue. The workforce and management at PED are extremely pleased with the results.

It should also be noted that all grant responsibilities and project steps as outlined in contact #99/01-22 have been completed.

## *Project evaluation data:*

The post ergonomic and hygienist report has been provided as part of the dissemination package and illustrates that all targeted conditions have been either improved or eliminated.

## *A synopsis of the project evaluation:*

A one-page "executive overview" of the project has been included with the dissemination package.

## *A plan to continue evaluating the project:*

Dave Howell, Engineering Manager at PED, will continue to provide internal assistance to his company and staff for this new machine. As of this writing, the machine has been functioning well and there are plans to build an additional machine which would incorporate further improvements.

*How have other employers been informed of the results of the project?*

A dissemination article was written and submitted for publication in the “Foundry Management and Technology” and “Modern Casting”.

*List of deliverables supplied for posting to the Oregon OSHA website:*

The list agreed to in project close meetings has been supplied below. This has been supplied in electronic format, and includes:

1. VRML Solid Model.  
As the CAD format supplied by the designer was not readily convertible to a VRML format, digital photos are being supplied instead.
2. Solid Model CAD File:
  - A. Original CAD File Format from creation (AutoCAD).
  - B. AutoCAD part and schematic drawings with BOM information.
3. One page executive overview with digital photo of device.  
Microsoft Word
4. Vendor list with cross ref. code.  
Excel
5. Bill of material with vendor cross ref. code and estimated costs.  
Excel
6. Published article.  
Microsoft Word
7. Ergonomic Original and Final reports.  
Microsoft Word

Additionally, a VHS Video of the device has been supplied as outlined in the contract.

*Cost of project:*

The Or-OSHA dollars spent on this project total \$150,000, the budgeted amount. It was expected that all funds would be expended as PED planned on contributing additional cash which, as noted below, they have done.

*Customer match overview:*

PED provided in-kind labor and material in the amount of \$69,494 (\$15,130 labor and \$54,364 cash) against a required amount of \$15,000.

Additional notes:

The completed Exhibit C Quarterly Report Expenditure Worksheet has been included with this report which outlines the use of the budget. The request for the final \$15,000 on this project was included in the 2<sup>nd</sup> quarter report which has not been received (isn't expect until final report submitted). There is one category adjustment requested. Originally \$62,366 was requested in Category 1 funds but \$71,354 was spent (\$8,988 over). It is proposed to reduce Category 3 funds (to \$78,646, was \$77,634) by this amount to make up for the adjustment.

Please note that these amounts replace the original request made in the 2<sup>nd</sup> qtr report.

An additional financial form has been included from Barb Forni, OMEP's Financial Manager, which shows where all fees were expended. Please note that OMEP billed this grant for \$3875 for all the various consultative services that we outlined in the original application process except those completed by PED. This is within the grant application budget.

Overall, the project was considered highly successful and PED was highly cooperative in the management of this project. They are also highly appreciative of the opportunity to put these funds to a good use. On their and my behalf, we would like to thank Oregon-OSHA for their cooperation as well.

Mark Biederbeck  
OMEP Manufacturing Consultant  
and Project Manager for PED Manufacturing, Ltd.