Heavy Equipment Management as a Topics Course

In the construction industry it has been said that no project is the same. That each project awarded to a contractor will have new and unique details that were not faced in the previous projects. However, all the management skills acquired by the project team will be used to complete the current project. One of those skills that seems to be underutilized and does not receive enough emphasis, is the management of heavy equipment. The purpose of this paper will be to highlight details of heavy equipment management that need to be emphasized in the Cal Poly construction management curriculum, and the level of interest student have in heavy equipment management. The research conducted for this paper stresses the need for a topics course with an emphasis on heavy equipment management. Research was collected by surveying all the construction management students with the major. The survey was included 10 question on heavy equipment management. Second a project, planned and built by four Cal Poly construction management students, and extensive literature research. The heavy civil project completed by the four construction management student was an asphalt replace that took place in Templeton California. The project test their knowledge of construction management.

Key Words: Heavy equipment, Equipment Management, Performance Standards For Heavy Equipment, Cycle time For Equipment, Equipment Safety

Sub-topics of interest
- Hands on Operating Experience
- Proper coordination of heavy equipment while on site
- Cycle times of Heavy equipment
- Determining Operator efficiency
- Heavy Equipment Safety

Frequency of Equipment on a Jobsite
- 63%
- 12%
- 11%
- 25%
- 19%

Types of internships
- 80%
- Commercial
- 60%
- Heavy Civil
- 40%
- Residential
- 0%
- None

Saw Cutters are necessary when replacing asphalt

Cat Skid-Steer used on a asphalt replace project in Templeton, CA. The project was planned and executed by 4, Cal Poly Construction management students.

Comfortability levels of Cal Poly Construction Management student when asked to identify Heavy Equipment.

Confidence level of Cal Poly construction management student when asked to estimate what heavy equipment will be needed for a project.