## **Assessment: Course Four Column**



## Courses (CTE) - Welding

## WELD 135 Nichols: Welding for the Maintenance Technician I

Course Outcomes	Assessment Measures	Results	Actions
High alloy extractor electrodes - Demonstrate the use of high alloy extractor electrodes. Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/11/2017	Evaluation - Practical evaluation Student were given two ¾" -10 fasteners, they were asked to weld one fastener to a plate and one to the broken stud using high alloy extractor rod. Criterion: It was determined that this lab exercise was effective. Visual examination of the exercise.	Reporting Period: 2016-2017 Criterion Met: Yes Out of 36 students 33 students were able to extract a stud from a bolt hole effectively. Yes, 91% successful. (11/09/2017)	Action: The only change would be the use of more anti spatter in and around bolt hole the only reason the 3 students did not achieve this task was because they ended up getting spatter inside the fastener. (11/09/2017)
Interpret (OSHA), (MSHA) requirements regarding Hand Railing - Interpret (OSHA), (MSHA) requirements regarding Hand Railing Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/11/2017	<b>Exam</b> - Written Examination Students were asked to draw a print to specific requirements of a typical handrail used in the mining industry. <b>Criterion:</b> Standard set forth by OSHA, MSHA. federal regulations	Reporting Period: 2016-2017 Criterion Met: Yes and No Not all students have a ruler to draw straight lines this took time out of the class. Also not all students can read a tape measure effectively to produce an accurate print to work off. (11/09/2017)	Action: Need to add ruler to tool list and review of a fractional inch rule. (11/09/2017)
Proper layout and fit-up hand rail - Proper layout and fit-up hand rail Course Outcome Status: Active Next Assessment: 2021-2022 Start Date: 09/11/2017	<b>Evaluation</b> - Practical Evaluation Students were given all materials needed to properly layout and fit-up hand rail <b>Criterion:</b> Standard set forth by the AWS D1.1 section 5 of a fabricated part. Section 6 of a visual examination	Reporting Period: 2016-2017 Criterion Met: Yes Students worked in groups of 3 to accomplish this task. Each student was asked to fit, tac and weld the handrail. Not all students were proficient at welding small diameter pipe. A lot of rework was involved, this tasked seemed challenging at times. Yes all welds were judged for soundness as set forth by the AWS (11/09/2017)	Action: The need for more practice in small diameter pipe welding leading up to the final project of the handrail needs to be added to the list of labs. This would include the substitution of a plate lab for pipe. (11/09/2017)