



## **Development and Evaluation of Welding Positioner Trainer for Shielded Metal Arc Welding (SMAW)**

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### **Abstract**

The universal need for steel fabrication in the construction industry is one of the major concentrations of any technological institution. This study aimed to develop and evaluate welding positioner trainers for Shielded Metal Arc welding (SMAW). The evaluation covered the quality of the welding positioner trainer made which was evaluated on its level of acceptability in terms of its functionality, instructional applicability, aesthetic value, durability, and essential features and learning competencies that can be performed using the welding positioner trainer. The innovative technology was evaluated by Forty (40) participants composed of ten (10) specialized teachers in SMAW, ten (10) industrial welders, ten (10) welding fabricators, and ten (10) welding practitioners or students. This study used a researcher-adopted questionnaire to collect data and employed a development and descriptive evaluative research procedure. Descriptive statistical tools such as frequency count, percentage mean, standard deviation, and mean were used to describe and interpret the gathered data. Findings show that the degree of acceptability of the developed welding trainer in terms of functionality, instructional applicability, durability, and aesthetic value ability is highly acceptable. It was the group of industrial welders who posted the highest rating including those welding fabricators gave, while SMAW practitioners or students rated the welding positioner trainer at an average level. It was the SMAW Trainers/teachers who posted the least score. Findings further show that all the 12 unit of learning competencies adopted by the researcher was validated to have their full applicability to the trainer as perceived by the respondents.

*Keywords: Trainer, steel fabrication, developmental studies, welding, and fabrication*