

EMPOWERING JUNIOR HIGH SCHOOL STUDENTS WITH SHIELDED METAL ARC WELDING (SMAW)

by:

Florichel A. Segundo

Teacher II, Mariveles National High School – Poblacion

There are several essential benefits of teaching SMAW in junior high schools, and these benefits can have a big impact on both students and the educational system. Stick welding, also known as SMAW, is a common and adaptable welding technique that is a great fit for curricular inclusion. We can equip junior high school students with a practical skill set, develop their capacity for problem-solving, and introduce them to the wide range of career options available in the welding and metalworking industries by teaching them SMAW.

According to Callao and Tomarong (2021), the inclusion of SMAW in the curriculum results in measurable advantages for skill development. Students are given the chance to practice a vital trade skill and become experts in it. This hands-on experience using welding equipment, choosing materials, and using the SMAW process develops crucial skills including discipline, workmanship, and an uncompromising focus on detail. Students also develop their spatial awareness, coordination, and precision skills as they work with the welding electrode to produce reliable welds. These practical abilities extend beyond the welding bay and into their daily lives, where they can be used for independent initiatives and to open up new employment opportunities.

The junior high school level of SMAW instruction fosters critical thinking and problem-solving skills in addition to skill development. Students who use SMAW must be able to judge the state of the materials in the moment, comprehend the precise kind of joint needed, and skillfully modify their procedures. In the process, they learn how to handle unforeseen difficulties that could appear during welding, developing a natural

aptitude for problem-solving and making wise decisions. Additionally, students learn how to understand welding symbols, blueprints, and technical specifications – skills that are crucial for assuring precise and secure welding procedures. Students gain a well-rounded set of skills that they may use in a variety of spheres of their lives thanks to this blend of intellectual engagement and practical application.

Last but not least, the introduction of SMAW at the junior high school level presents students with a vast array of potential employment options. Early exposure to SMAW helps students to explore and understand the different career possibilities within welding and metalworking. The welding industry always seeks out competent individuals. Students can establish the framework for a bright future with a solid foundation in SMAW, securing worthwhile employment prospects and making a contribution to sectors where welding is an essential component. This training not only promotes individual achievement but also helps create a workforce that is more skilled and adaptable, which is good for society as a whole.

Indeed, junior high school SMAW instruction is a useful addition to the educational landscape. Students are given practical skills, their problem-solving skills are improved, and they are made aware of the attractive job opportunities in the welding and metalworking industries. Students who receive a SMAW education gain transferrable skills in addition to trade-specific ones, setting them for success in both their personal life and prospective future professions. A strong, competent workforce that can satisfy the demands of numerous businesses is also made possible by SMAW, which ultimately benefits both students and society as a whole.

References:

Callao, M. B., & Tomarong, G. L. Jr. (2021). Certifying SMAW Competency Among Senior High. *Ilkogretim Online - Elementary Education Online*, 20(4), 3410-3425.

Retrieved from <https://doi.org/10.17051/ilkonline.2021.04.382>