

IMPROVING THE QUALITY AND WORK PROCESS OF ENGINE CONSTRUCTION

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ABSTRACT

Pesawat UKM is a micro, small, and medium enterprise (MSME) that is engaged in mechanical engineering and appropriate technology. Located in Wates, Kulon Progo Regency, this UKM has grown rapidly since 2021, starting to collaborate with the Department of Mechanical Engineering Education (now the Department of Mechanical Engineering Education). The partnership that has been established is very sustainable so in 2023, the problem the partners want to solve is improving the quality of machine construction in terms of design, work processes that pay attention to Occupational Safety and Health (K3), and the quality of welded joint construction. The problem-solving offered by the UNY team includes training and assistance on machine construction design, training and assistance on K3-based work processes, and training and assistance on machine construction welding. This activity will be carried out from March – September 2023. The activity method is to conduct direct training for three days on the main material and continue with assistance during post-training implementation. The results of the progress and impact of activities on Pesawat SMEs are the increasing skills of participants in designing machine construction, implementing K3 when working in machine construction, and using appropriate welding techniques for machine construction. The output of PKM is that 3 students were involved in the PKM DLK program, the Implementation of Arrangement manuscript, and Submitted in the Scopus International Journal.

Kata Kunci: *design, applied technology, machine construction*