FOUNDRY FACILITIES FOR CASTING PRACTICE AT VOCATIONAL HIGH SCHOOLS

by Arianto Leman Soemowidagdo, Didik Nurhadiyanto, Tiwan, Mujiyono, Beni Tri Sasongko

ABSTRACT

Skill in casting is a part of competence that must be possessed by students who studying in machining department of vocational high school. SMKN 1 Klego received aid to facilitate the development of a center of excellence in the machining and construction sector, human and resources, and industrial compatibility. Its' machining department has collaborated with industry involved in foundry. Foundry facilities are needed to increase teachers' competence in casting process as one of the primary developments for teaching factory program. The foundry facilities were developed in three activities which are developing the crucible furnace, equipment for foundry, and training on casting process. The foundry facilities that had been successfully developed is consist of a gas-fueled crucible furnace, equipment to making sand mold, and equipment for pouring molten metal. The furnace inner wall that made of steel is replaceable. The large heating chamber size is possible to increase the crucible capacity. Those foundry facilities are feasible for casting practice. Teachers and toolman has practicing casting process using it. Their competencies in casting practice are improved and they are ready to transfer their skills to the students.

Kata Kunci: foundry facilities, casting practice, vocational high school