

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh penerapan *quality control* terhadap kualitas struktur pekerjaan kolom pada proyek pembangunan Gedung Laboratorium Kesehatan Masyarakat di Kota Cimahi. Metode penelitian yang digunakan adalah *mixed method*, yaitu kombinasi pendekatan kuantitatif dan kualitatif. Data kuantitatif diperoleh melalui kuesioner dengan skala Likert yang dianalisis menggunakan regresi linier berganda, sedangkan data kualitatif diperoleh melalui observasi lapangan, wawancara, dan studi dokumentasi.

Hasil penelitian menunjukkan bahwa secara simultan variabel penerapan *quality control*, mutu material, proses pelaksanaan, dan peran pengawas berpengaruh signifikan terhadap kualitas struktur kolom dengan nilai koefisien determinasi sebesar 68,7%. Namun secara parsial, seluruh variabel belum menunjukkan pengaruh yang signifikan terhadap kualitas struktur kolom. Variabel proses pelaksanaan menjadi faktor paling dominan dalam mempengaruhi kualitas struktur kolom.

Penerapan *quality control* pada proyek telah dilakukan secara sistematis pada setiap tahapan pekerjaan, meliputi pembesian, bekisting, pengecoran, dan perawatan beton. Hasil pengujian menunjukkan bahwa mutu beton memenuhi standar, dengan nilai slump sebesar 120 mm dan kuat tekan beton umur 7 hari mencapai 73,7% dari kuat tekan rencana. Secara keseluruhan, kualitas struktur kolom tergolong sangat baik, ditunjukkan oleh kesesuaian terhadap spesifikasi teknis, dimensi, serta minimnya cacat struktur.

Penelitian ini menyimpulkan bahwa penerapan *quality control* yang konsisten mampu mendukung tercapainya kualitas struktur kolom yang baik, meskipun masih diperlukan peningkatan pada aspek pelaksanaan dan pengawasan untuk memperoleh hasil yang lebih optimal.

Kata kunci: quality control, struktur kolom, mutu beton, konstruksi, regresi linier berganda.

ABSTRACT

This study aims to analyze the effect of quality control implementation on the structural quality of column work in the construction project of the Public Health Laboratory Building in Cimahi City. The research method used is a mixed-method approach, combining quantitative and qualitative methods. Quantitative data were obtained through questionnaires using a Likert scale and analyzed using multiple linear regression, while qualitative data were collected through field observations, interviews, and documentation studies.

The results show that simultaneously, the variables of quality control implementation, material quality, execution process, and supervisory role have a significant effect on the quality of column structures, with a coefficient of determination of 68.7%. However, partially, all variables do not show a significant effect on the column structural quality. The execution process variable is identified as the most dominant factor influencing the quality of column structures.

The implementation of quality control in the project has been carried out systematically at every stage of the work, including reinforcement, formwork, concrete casting, and curing. Test results indicate that the concrete quality meets the required standards, with a slump value of 120 mm and 7-day compressive strength reaching 73.7% of the design strength. Overall, the quality of the column structure is categorized as very good, as indicated by compliance with technical specifications, dimensional accuracy, and minimal structural defects.

This study concludes that consistent implementation of quality control contributes to achieving good column structural quality, although improvements in execution and supervision aspects are still necessary to obtain more optimal results.

Keywords: quality control, column structure, concrete quality, construction, multiple linear regression.