ABSTRAK

ANALISIS PENGENDALIAN MUTU BETON PADA PROYEK RUMAH SUSUN PIK PULO GADUNG DENGAN METODE *STATISTICAL QUALITY CONTROL*

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Pengendalian mutu beton pada proyek Rumah Susun PIK Pulo Gadung dilakukan dengan penentuan nilai kuat tekan beton yang berpengaruh pada mutu beton yang dihasilkan. Penelitian ini adalah mengenai cara pengendalian mutu beton dengan melakukan pengujian kekuatan tekan beton. Data-data hasil pengujian dianalisis dengan metode *statistical quality control* (SQC). Hasil analisis berupa *control chart* yang terdiri dari garis rata-rata/target sasaran, *upper control limit* (UCL)/batas atas, dan *lower control limit* (LCL)/batas bawah.

Dari hasil analisa diperoleh hasil bahwa mutu beton dari pelat, balok dan kolom lantai 8 sampai 16 telah memenuhi mutu rencana. Berdasarkan *X-chart* untuk fc' 30 MPa memenuhi target 11,11%-44,44%, dibawah target 11,11%-55,56%, keluar UCL 33,33%-55,56%, keluar LCL 20%-60%. Untuk fc' 40 MPa memenuhi target 50%-75%, dibawah target 25%-75%, keluar UCL 25%. Berdasarkan *R-chart* untuk fc' 30 MPa memenuhi target 22,22%-60%, dibawah target 40%-66,67%, keluar UCL 11,11%. Untuk fc' 40 MPa memenuhi target 50%, dibawah target 50%.

Kata Kunci: Mutu Beton, Pengendalian Mutu, *SQC*

ABSTRACT

ANALYSIS OF CONCRETE QUALITY CONTROL IN PIK PULO GADUNG FLATS PROJECT USING STATISTICAL QUALITY CONTROL METHOD

By

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Concrete quality control in the PIK Pulo Gadung Flats project is carried out by determining the concrete compression strength which affects the quality of the concrete produced. This research is about how to control the quality of concrete by testing the compressive strength of concrete. The test results data were analyzed using statistical quality control (SQC) method. The results of the analysis are in the form of a control chart consisting of the average/target line, upper control limit (UCL), and lower control limit (LCL).

From the results of the analysis was found that the quality of the concrete from the slabs, beams and columns of floors 8 to 16 was in accordance with the quality of the plan. Based on the X-chart for fc' 30 MPa on target 11.11%-44.44%, below target 11.11%-55.56%, out UCL 33.33%-55.56%, out LCL 20%-60%. For fc' 40 MPa on target 50% -75%, below the target 25%-75%, out UCL 25%. Based on the R-chart for fc' 30 MPa on target 22.22% -60%, below the target of 40%-66.67%, out UCL 11.11%. For fc' 40 MPa on target 50%, below the target 50%.

Keywords: Concrete Quality, Quality Control, SQC