QUALITY MANAGEMENT, MAINTENANCE AND REHABILITATION OF SOFTROAD SURFACE BASED ON DEFLECTION CORRELATION

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SUMMARY

Measure the deflection of the road surface with two different experiments, which is the test of deflection by measuring the Benkelman (BKM) and the experiment of measuring the deflection of FWD (Falling Weight Deflectometer) according to the current standard in the temperature conditions, the in pavement is similar, select measurements with the same position in both experiments to consider the correlation. Analyzing measurement data and converting measurement data to the same unit, same measurement pressure conditions, using mathematical statistical methods, by using Minitab software to set up the equation relative to deflection, after has removed unexpected points. The paper presents the correlation between deflection measurements when measured with BKM and deflection at Sendo 0 measured by FWD in elastic module measurement in pavement maintenance and restoration. The paper established a new correlation equation, between deflection with BKM and FWD based on measurements on the Ho Chi Minh (HCM) highway, added to the area of the correlation equations established in Vietnam and the world.

Keywords: BKM, deflection correlation, FWD, maintenance, pavement, rehabilitation.

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