



## INTISARI

Perkerasan jalan sering mengalami kerusakan sebelum umur rencana masih terjadi pada jalan provinsi di wilayah Provinsi Jawa Tengah, salah satunya disebabkan oleh mutu material lapis pondasi rendah dan kepadatan lapis pondasi tidak tercapai. Instruksi Kerja (IK) yang mengacu pada spesifikasi umum disusun sebagai panduan dalam pengawasan pelaksanaan pekerjaan konstruksi jalan sangat diperlukan agar pekerjaan perkerasan berbutir dapat dilaksanakan sesuai metode kerja yang benar. Tujuan penelitian untuk menyusun pemetaan tingkat kepentingan dan tingkat penerapan, mengetahui besarnya kontribusi yang berpengaruh, dan untuk mengetahui capaian kinerja mutu, terhadap pelaksanaan perkerasan berbutir.

Data dianalisis tingkat kepentingan dan tingkat penerapan pelaksanaan pekerjaan perkerasan berbutir berdasarkan jawaban responden. Responden terdiri dari pihak yang terlibat langsung dalam pelaksanaan pekerjaan konstruksi jalan provinsi di Provinsi Jawa Tengah. Metode analisis menggunakan IPA dan SEM.

Hasil pemetaan dengan tingkat penerapan rendah untuk pekerjaan, lapis pondasi agregat, perkerasan berbutir tanpa penutup aspal, pembuatan rumusan campuran rencana LPST, percobaan lapangan LPST, LPST, pengendalian mutu LPST, percobaan lapangan LPAS, dan LPAS, sejumlah 14, 11, 11, 34, 19, 30, 22, dan 20 indikator. Kontribusi pengaruh pekerjaan lapis pondasi agregat sub komponen persiapan, pelaksanaan, pemadatan, dan perbaikan pemadatan sebesar 70,5%, 50,6%, 76,0% dan 94,7%; perkerasan berbutir tanpa penutup aspal sub komponen persiapan, dan pelaksanaan sebesar 98,1% dan 98,4%, pembuatan rumusan campuran rencana LPST sub komponen persiapan, pemeriksaan, pengujian UCS, dan pengujian CBR sebesar 75,1%; 65,2%; 87,8% dan 59,0%, percobaan lapangan LPST sub komponen persiapan, penghamparan, penggemburan, pemadatan pengujian, dan evaluasi sebesar 94,3%; 95,0%; 73,1%; 70,0%; 80,1%; dan 51,9%, LPST sub komponen persiapan, penghamparan, pemadatan, dan penebaran sebesar 70,2%; 79,6%; 78,1%; dan 91,9%, pengendalian mutu LPST sub komponen persiapan, pengendalian tanah, pengendalian kadar air, pengendalian pemadatan, pengendalian kekuatan, dan pemantauan sebesar 79,7%; 75,0%; 59,6%; 92,2%; 81,1%; 92,4%, percobaan lapangan LPAS sub komponen persiapan, penghamparan, pencampuran, pemadatan, dan pemeriksaan sebesar 58,3%; 72,9%; 60,7%; 88,2% dan 70,0%, dan LPAS sub komponen persiapan, penghamparan, pemadatan, dan perbaikan sebesar 73,0%; 87,4%; 83,7%; dan 83,3%. Penilaian capaian kinerja mutu untuk pekerjaan lapis pondasi agregat 82,49%, perkerasan berbutir tanpa penutup aspal 80,29%, pembuatan rumusan campuran rencana lapis pondasi semen tanah 74,50%, percobaan lapangan lapis pondasi semen tanah 76,97%, lapis pondasi semen tanah 75,44% , pengendalian mutu lapis pondasi semen tanah 80,18%, percobaan lapangan LPAS 74,71%, dan LPAS 77,38% .

**Kata kunci:** perkerasan berbutir, sistem manajemen mutu, IPA dan SEM.



## ABSTRACT

Road pavement is often damaged before the design life still occurs on provincial road in Central Java Province, one of them is caused by low grade of material quality and the density of road base is not achieved. Working Instruction (IK), which refers to the general specification prepared as a guide in supervising the implementation of road construction is necessary for the work of granular pavement can be implemented in accordance with the correct method of work. The objective of the research is to develop the mapping of importance and implementation level, to know the magnitude of influential contribution, and to know the achievement of quality performance, on the implementation of the granular pavement.

Data is analyzed the importance and implementation level of granular pavement construction work based on respondent's answer. Respondents consist of parties directly involved in the implementation of provincial road construction works in Central Java Province. Analytical methods is conducted using IPA and SEM.

The mapping results with low level of implementation for work, aggregate base layer, granular pavement without asphalt cover, mixed formulation of LPST plan, LPST field trials, LPST, LPST quality control, LPAS field trials, and LPAS, as much as 14, 11, 11, 34, 19, 30, 22, and 20 indicators. The contribution of aggregate base layer work influence of preparation, implementation, compaction, and compaction improvement component by 70.5%, 50.6%, 76.0% and 94.7%; granular pavement without asphalt cover of sub component of preparation, and implementation of 98,1% and 98,4%, preparation of mixed formula LPST sub component of preparation, examination, UCS testing, and CBR testing equal to 75,1%; 65.2%; 87.8% and 59.0%, field trials of LPST sub component preparation, spreading, pulverizing, compaction testing, and evaluation of 94.3%; 95.0%; 73.1%; 70.0%; 80.1%; and 51.9%, LPST of preparation, overlay, compaction, and spreading sub-components by 70.2%; 79.6%; 78.1%; and 91.9%, quality control LPST sub component preparation, soil control, moisture control, compaction control, strength control, and monitoring of 79.7%; 75.0%; 59.6%; 92.2%; 81.1%; 92.4%, field trials LPAS sub component preparation, spreading, mixing, compaction, and inspection of 58.3%; 72.9%; 60.7%; 88.2% and 70.0%, and LPAS of the preparation, overlay, compaction, and repair sub-components by 73.0%; 87.4%; 83.7%; and 83.3%. Assessment of quality performance achievement for aggregate base layer work 82,49%, granular pavement without asphalt cover 80,29%, making of mixed formula of soil-cement base layer 74,50%, soil-cement base layer experiment 76,97%, soil-cement base layer 75,44%, soil-cement base layer quality control 80,18%, field trial LPAS 74,71%, and LPAS 77,38%.

**Keywords:** granular pavement, quality management system, IPA and SEM.