Implementation of Optical-based Measuring Instrument for Overhead Contact Wire in Railway
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Abstract: We propose an optical-based measuring instrument of catenary system in electric railway. This system was made to utilize line scan camera as inspecting system to measure the staggering and height of overhead contact wire in railway and composed with optical type source and FPGA-based image acquisition system with PCI slot. Vision acquisition software has been used for the application to programming interface for image acquisition, display, and storage with a frequency of sampling. The proposed optical-based measuring instrument to measure the contact wire geometry shows promising on-field applications for online condition motoring. Also, this system can be applied to measure the hight and staggering or other geometry of different type of overhead catenary system.

Key Words: Overhead contact wire, Stagger, Height

참고 문헌