

ABSTRAK

Judul : Analisis Pengaruh Kondisi CCD (*Curent Collector Device/ Shoe*) Pada Sarana Terhadap Perjalanan LRT Jakarta Nama : Bayu Wicaksono Hardi, NIM : 41119110182, Dosen Pembimbing : Sylvia Indriany, S.T., M.T., Tahun : 2022.

Light Rail Transit (LRT) Jakarta merupakan kereta pertama di Jakarta dan Jawa yang menggunakan system *third rail* atau dengan system rel ketiga sehingga tidak ada kebel-kebel di atas yang menjuntai. Kereta LRT Jakarta mempunyai lebar sepur 1.435 mm yang biasa di sebut *standard gauge* dalam dunia perkeretaapian. Kereta LRT Jakarta beroperasi sepanjang 5,8 kilometer dari Velodrome Rawamangun hingga Stasiun Pegangsaan Dua dan mampu mengangkut 270 penumpang dalam satu rangkaian. Agar dapat menunjang operasional LRT (*Light Rail Transit*) Jakarta, adanya suatu alat yang berfungsi alat pengumpul arus listrik yang terhubung dengan *third rail* di prasarana. Alat tersebut berfungsi sebagai pendukung pengoperasian mulai dari sistem pencahayaan, sistem komunikasi serta sistem propulsi dan pendukung. *CCD (Curent Collector Device) (Shoe)* sebagai alat untuk pengoperasian LRT sangat berpengaruh terhadap perjalanan yang menentukan pelayanan kepada pengguna sehingga perlu dilakukan analisa kehandalan CCD.

Kata kunci: *Light Rail Transit* (LRT) Jakarta, Perawatan *CCD (Curent Collector Device) (Shoe)*, Kehandalan *CCD (Curent Collector Device) (Shoe)*.

ABSTRACT

Title : Analysis of the Effect of CCD (Curent Collector Device/ Shoe) Conditions on Facilities on the Jakarta LRT Trip Name : Bayu Wicaksono Hardi, NIM : 41119110182, Supervisor : Sylvia Indriany, S.T., M.T., Year : 2022.

Light Rail Transit (LRT) Jakarta is the first train in Jakarta and Java that uses the third rail system or with the third rail system so that there is no backwards on top that dangle. Jakarta LRT car has a width of 1,435 mm which is commonly called standard gauge in the world of railways. Jakarta LRT trains operate along 5.8 kilometers from Rawamangun Velodrome to Pegangsaan Dua Station and are capable of carrying 270 passengers in a series. In order to support the operation of LRT (Light Rail Transit) Jakarta, there is a tool that functions an electric current collection device connected to the third rail in infrastructure. The tool serves as an operating support ranging from lighting systems, communication systems and propulsion and support systems. CCD (Curent Collector Device) (Shoe) as a tool for LRT operation is very influential on the journey that determines services to users so that it is necessary to analyze the reliability of CCD.

Keywords: *Light Rail Transit (LRT) Jakarta, CCD Maintenance (Curent Collector Device) (Shoe), CCD Reliability (Curent Collector Device) (Shoe).*