

ABSTRAK

PT. INKA Multi Solusi adalah perusahaan yang bergerak dibidang manufaktur berfokus pada produk kereta dimana salah satu produknya yaitu kereta UGL 50 ft yang terdiri dari dua bagian utama yaitu satu *minor assy center sill* dan dua *minor assy headstock arrangement*. Berdasarkan data hasil *progress* produksi menunjukkan pada *minor assy headstock arrangement* jumlah *minor assy* yang dihasilkan tidak sesuai rencana. Hal tersebut disebabkan karena jumlah *part/minor assy* penyusunnya yang tersedia belum sesuai dengan kebutuhan produksi. Tanggal produksi 23 Januari 2023 hingga 10 Maret 2023 jumlah produksi yaitu sebanyak 140 *minor assy headstock arrangement* namun *minor assy/part* penyusun yang tersedia belum memenuhi kebutuhan. Tujuan dari penelitian ini yaitu merancang sistem kanban untuk proses produksi *minor assy headstock arrangement* di PT. INKA Multi Solusi untuk mengetahui kebutuhan *part* atau *minor assy* dari masing-masing *workstation* sehingga dapat diproduksi sesuai dengan kebutuhan dan proses produksi. Hasil dari penelitian ini diperoleh rancangan sistem kanban pada proses produksi *minor assy headstock arrangement* untuk mengendalikan persediaan *minor assy/part* di lantai produksi dan memberikan standar dan frekuensi pengambilan *minor assy/part*. Rancangan sistem kanban yang diperoleh meliputi aliran sistem kanban dari proses *steel work* hingga *assembly minor assy headstock arrangement*, jumlah kanban penarikan dan perintah produksi yang ditentukan berdasarkan kebutuhan/hari dan kapasitas pengiriman, perancangan kartu kanban sebagai media informasi antar *workstation*, perancangan pos kanban, dan operasional kanban penarikan dan perintah produksi dimasing-masing *workstation* sebagai acuan untuk pelaksanaan sistem kanban yang ada di lantai produksi.

Kata Kunci: *headstock arrangement*, kanban

ABSTRACT

PT. INKA Multi Solusi is a company engaged in manufacturing focusing on train products where one of the products is a 50 ft UGL train consisting of two main parts, namely one minor assy center sill and two minor assy headstock arrangements. Based on the data from the production progress results show that in the minor assy headstock arrangement, the number of minor assy produced is not as planned. This is because the number of parts / minor assy available is not in accordance with production needs. Production date January 23, 2023 to March 10, 2023 the total production is 140 minor assy headstock arrangements but the available minor assy / constituent parts have not met the needs. The purpose of this study is to design a kanban system for the production process of minor assy headstock arrangement at PT. INKA Multi Solusi to find out the needs of parts or minor assy of each workstation so that it can be produced according to the needs and production process. The results of this study obtained the design of a kanban system in the production process of minor assy headstock arrangement to control the inventory of minor assy / part on the production floor and provide standards and frequency of picking minor assy / part. The design of the kanban system obtained includes the flow of the kanban system from the steel work process to the assembly minor assy headstock arrangement, the number of withdrawal kanbans and production orders determined based on needs / days and delivery capacity, the design of kanban cards as a medium of information between workstations, the design of kanban posts, and the operation of kanban withdrawals and production orders at each workstation as a reference for the implementation of the kanban system on the floor production.

Keywords: headstock arrangement, kanban