

ABSTRAK

Pada tahun 2019 terdapat keluhan ergonomi pada Area *Checking* Plant XX pada Industri Ban Mobil. Kasus keluhan ergonomi tersebut sebanyak 4 orang atau 2% dari populasi karyawan *Checking* yang mempengaruhi produktifitas perusahaan. Aktivitas pada area *Checking* dilakukan analisa penilaian ergonomi berdasarkan metode REBA (*Rapid Body Entire Assessment*) dengan pendekatan antropometri. Hasil penilaian aktivitas *Checking* terdiri dari 3 sub-aktivitas pada sub-aktivitas mengambil *tire* dari *conveyor input* awal memiliki kategori rendah atau level 1, sub-aktivitas *checking appearance tire* memiliki kategori rendah atau level 1 dan sub-aktivitas *transfer tire* ke *conveyor output* dari awalnya kategori tinggi dengan level 3. Usulan perbaikan dengan pengendalian risiko rekayasa *engineering* merancang dan memodifikasi *conveyor* didapatkan hasil lebar *conveyor* sebesar 77 cm, lebar meja inspeksi *tire* sebesar 43 cm, tinggi meja inspeksi *tire* sebesar 108 cm, ukuran panjang *conveyor* sebesar 174 cm, dan tinggi *support conveyor* sebesar 58 cm. Kesimpulan yang didapatkan pengendalian risiko rekayasa *engineering* sangat efektif dan efisien diterapkan dengan usulan desain *conveyor* menurunkan risiko ergonomi sub-aktivitas *transfer tire* dari kategori tinggi atau level 3 menjadi kategori diabaikan atau level 0.

Kata Kunci : Keluhan Ergonomi, REBA, Antropometri, Rekayasa *Engineering*.

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ABSTRACT

In 2019 there were ergonomic illness at the Checking Plant Area XX in the Industri Ban Mobil. The ergonomic illness cases were 4 people or 2% of the Checking employee population which affected the company's productivity. For activities in the Checking area, an ergonomic assessment analysis was carried out based on the REBA (Rapid Body Entire Assessment) method with an anthropometric approach. The results of the Checking activity assessment consist of 3 sub-activities in the sub-activity of taking tire from the initial input conveyor which has a low category or level 1, the checking appearance tire sub-activity has a low category or level 1 and the sub-activity of tire transfer to the conveyor output from initially high category with level 3. The proposed improvement with engineering risk control in designing and modifying the conveyor results in 77 cm of conveyor width, 43 cm of tire inspection table width, 108 cm of tire inspection table height, 174 cm of conveyor length, and 58 cm of conveyor support height. The conclusion obtained is that engineering risk control is very effective and efficient and it is applied with the proposed conveyor design reducing the ergonomic risk of the tire transfer sub-activity from the high category or level 3 to the neglected category or level 0.

Keywords: *Ergonomic Illness, REBA, Anthropometry, Engineering Control.*

