THE INFLUENCE OF NOISE, AGE, YEARS OF SERVICE, DURATION OF EXPOSURE AND USE OF APT

(The Study on Production Section in PT. Indowire Prima Industrindo 2020)

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ABSTRACT.

PT. Indowire Prima Industrindo in its operational process requires a machine to produce copper automotive cables that cause noise during the production process. Based on preliminary surveys during the production process at several stages (RBD, MWD, Bunching, Extruder, Tubular, PPIC, Crusher, VT/COT) workes are exposed to noise by 79-103 dBA and interviews with workers show that workers show that workers do not use APT, more than 40 years old and have worked more than 10 years and workers are exposed to noise for 8 hours every day. The purpose of this study was to analyze the effect of noise, age, years of service, duration of exposure and use of APT in the production section of PT. Indowire Prima Industrindo.

This study uses an *observational* research design using *cross sectional* methods with an description study approach. A sample of 62 people was selected by simple *random sampling* technique from a population of 72 people. Furthermore, data is collected through interviews, observations, measurements and study literature.

The results of research at PT. Indowire shows that only 21% of the workplaces that meet the requirements are eligible and the rest are not qualified. Most workers in the production section are> 40 years old at 6.5% and the rest are aged ≤ 40 years. The working period of workers in the production department mostly has a working period> 10 years of 22.6%. The duration of exposure of workers in production for 7 hours is 100%. Workers in the production section who do not use APT are 21% and the rest do not use APT. From the literature study data it can be concluded that the hearing threshold of workers is influenced by noise, age, years of service, duration of exposure and the use of APT.

It is recommended for companies to carry out technical controls, implement a work rotation system provide training on ear protection equipment, as well as provide strict supervision and policy for workers who do not use APT in noisy workplaces.

Keywords: noise, worker characteristics

PENGARUH KEBISINGAN, UMUR, MASA KERJA, LAMA PAPARAN DAN PENGGUNAAN APT

(Studi di Bagian Produksi PT. Indowire Prima Industrindo Tahun 2020)

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ABSTRAK

PT. Indowire Prima Industrindo dalam proses operasionalnya memerlukan mesin untuk memproduksi kabel otomotif tembaga yang menimbulkan kebisingan saat proses produksi. Survei pendahuluan selama proses produksi pada beberapa tahap (*RBD, MWD, Bunching, Extruder, Tubular, PPIC, Crusher, VT/COT*) tenaga kerja terpapar suara bising sebesar 79-103 dBA dan hasil wawancara dengan pekerja diperoleh hasil bahwa pekerja tidak menggunakan APT, berumur lebih dari 40 tahun dan telah bekerja lebih dari 10 tahun serta para pekerja terpapar bising selama 8 jam setiap harinya. Penelitian ini bertujuan untuk menganalisis pengaruh kebisingan, umur, masa kerja, lama paparan dan penggunaan APT di bagian produksi PT. Indowire Prima Industrindo.

Penelitian ini menggunakan desain penelitian observasional dengan menggunakan metode *cross sectional* dengan pendekatan studi deskriptif. Sampel sebanyak 62 orang dipilih dengan teknik *simple random sampling* dari populasi sebesar 72 orang. Data dikumpulkan melalui kegiatan wawancara, observasi, pengukuran dan studi kepustakaan.

Hasil penelitian di PT. Indowire menunjukkan bahwa kebisingan tempat kerja yang memenuhi syarat hanya 21% dan sisanya tidak mamanuhi syarat. Sebagian besar pekerja di bagian produksi berumur > 40 tahun sebanyak 6.5% dan sisanya berumur ≤ 40 tahun. Masa kerja pekerja di bagian produksi sebagian besar memiliki masa kerja > 10 tahun sebanyak 22.6%. Lama paparan pekerja di bagian produksi selama 7 jam sebesar 100%. Pekerja di bagian produksi yang tidak memakai APT sebanyak 21% dan sisanya tidak memakai APT. Dari data studi literatur dapat disimpulkan bahwa ambang pendengaran pekerja dipengaruhi oleh kebisingan, umur, masa kerja, lama paparan dan penggunaan APT.

Saran bagi perusahaan untuk melakukan pengendalian teknis, menerapkan sistem rotasi kerja memberikan pelatihan tentang alat pelindung telinga, serta memberikan pengawasan dan kebijakan yang ketat pada pekerja yang tidak menggunakan APT di tempat kerja yang bising.

Kata Kunci: Kebisingan, Karakteristik Pekerja