

ABSTRAK

Penelitian ini bertujuan untuk menganalisis kondisi lingkungan kerja fisik pada area proses *finishing* bubut di CV. SP Alumunium serta merumuskan usulan perbaikan melalui penerapan pendekatan 5S dan pengendalian kebisingan. Latar belakang penelitian berangkat dari temuan permasalahan berupa tata alat kerja kurang rapi, kebersihan yang tidak terjaga, penumpukan *scrap*, serta tingkat kebisingan yang melebihi ambang batas 85 dB. Kondisi tersebut berdampak pada ketidaknyamanan kerja, terganggunya konsentrasi karyawan, dan penurunan produktivitas yang ditunjukkan oleh penurunan *output* produksi dari 71.500 unit pada Juni 2025 menjadi 48.100 unit pada Juli 2025.

Metode penelitian meliputi observasi langsung, pengukuran tingkat kebisingan sebanyak 60 data menggunakan *Sound Level Meter*, penyebaran kuesioner kepada 15 responden, serta analisis penyebab masalah menggunakan diagram *fishbone*. Berdasarkan hasil analisis, faktor penyebab utama mencakup kelemahan pada metode kerja, kondisi lingkungan, perawatan mesin, dan kedisiplinan karyawan terkait penggunaan APD. Usulan perbaikan disusun melalui penerapan 5S yang meliputi pemilahan, penataan, pembersihan, standarisasi, dan pembiasaan. Selanjutnya pengendalian kebisingan melalui penggunaan *earplug*, pembuatan SOP perawatan mesin, perancangan atau desain alat sekat peredam, pemasangan poster 5S, dan poster bahaya kebisingan.

Penerapan usulan perbaikan menunjukkan perbaikan signifikan pada kerapian, kebersihan, dan peningkatan kedisiplinan karyawan dalam menerapkan 5S. Pengendalian kebisingan juga membantu mengurangi risiko paparan bising bagi karyawan dan meningkatkan kenyamanan kerja. Hasil evaluasi menunjukkan bahwa perbaikan lingkungan kerja fisik berdampak positif terhadap peningkatan produktivitas kerja. Dengan demikian, penerapan 5S dan pengendalian kebisingan di area *finishing* bubut mampu menciptakan kondisi kerja yang rapi, bersih, dan tingkat kebisingan rendah pada area *finishing* bubut.

Kata kunci: Lingkungan kerja fisik, 5S, kebisingan, produktivitas kerja.

ABSTRACT

This study aims to analyze the physical work environment conditions in the finishing lathe area at CV. SP Alumunium and to formulate improvement proposals through the implementation of the 5S approach and noise control. The background of this research arises from several identified issues, including poorly organized work tools, inadequate cleanliness, the accumulation of scrap materials, and noise levels that exceed the threshold limit of 85 dB. These conditions lead to work discomfort, reduced employee concentration, and a decline in productivity, as indicated by the decrease in production output from 71,500 units in June 2025 to 48,100 units in July 2025.

The research methods include direct observation, noise level measurements consisting of 60 data points using a Sound Level Meter, the distribution of questionnaires to 15 respondents, and root-cause analysis using a fishbone diagram. Based on the analysis, the main contributing factors include weaknesses in work methods, environmental conditions, machine maintenance, and employee discipline related to the use of personal protective equipment (PPE). Improvement proposals were formulated through the implementation of the 5S approach, which consists of sorting, setting in order, cleaning, standardizing, and sustaining. Furthermore, noise control was carried out through the use of earplugs, the development of machine maintenance Standard Operating Procedures (SOPs), the design of noise-reducing partition equipment, and the installation of 5S posters and noise hazard warning posters.

The implementation of the proposed improvements demonstrated significant enhancements in the orderliness, cleanliness, and employee discipline in applying the 5S principles. Noise control also helped reduce the risk of noise exposure for employees and improved overall work comfort. The evaluation results indicate that improvements to the physical work environment have a positive impact on increasing work productivity. Thus, the implementation of 5S and noise control in the finishing lathe area is capable of creating a neat, clean, and low-noise working environment in the finishing process area.

Keywords: *Physical work environment, 5S, noise, work productivity.*