

## ABSTRACT

Business competition in the global era requires companies to be able to achieve effectiveness and efficiency, as well as for Bentonite Company. High-Performance Bleaching Earth (HPBE) production has not been effective, indicated by several products below quality standards, presence products defect, and production decreased in 2021. One of the corrective steps being taken is through the implementation of 5S. However, audit data for the last three years 2019-2021 shows 5S implementation in several work areas has not reached the target. This study analyzes the effect of 5S implementation on BE production effectiveness from 100 respondents. Data collection through questionnaires, analyzed with multiple linear regression using Smart PLS Version 4.0. The results showed that t-statistic value for seiri (2.056), seiton (2.060), seiketsu (2.350), shitsuke (2.269). Four variabels > t-tabel (1.980), which are mean have significant effect on BE production effectiveness. While t-statistic for seiso (0.805) < t-tabel (1.980). It means seiso has no significant effect on BE production effectiveness. However, r-square test results showed t-statistic value for 5S (21.704) > t-tabel (1.980). It means 5S aspects together have significant effect on BE production effectiveness. The implementation of 5S at Cileungsi Bentonite Company has been proven able to increase HPBE production effectiveness. Therefore, implementation of all 5S aspects need to be improved, especially to evaluate implementation of seiso in the work area by developing Key Performance Indicator for each 5S's criteria.

Key words: Seiri, Seiton, Seiso, Shitsuke, Seiketsu, Production Effectiveness, Bleaching Earth

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Persaingan bisnis di era global menuntut perusahaan agar mampu mencapai efektifitas dan efisiensi, demikian pula untuk perusahaan Bentonit Cileungsi. Produksi *High Performance Bleaching Earth* (HPBE) belum efektif ditandai oleh beberapa produk di bawah standar kualitas, adanya produk cacat, serta jumlah produksi menurun di tahun 2021. Langkah perbaikan yang dilakukan salah satunya melalui penerapan 5S. Namun, dari data audit 5S tiga tahun terakhir 2019-2021 menunjukkan penerapan 5S di beberapa area kerja belum mencapai target. Penelitian ini menganalisa pengaruh 5S terhadap efektifitas produksi BE dengan sampel 100 responden. Pengumpulan data melalui kuesioner yang dianalisis dengan regresi linier berganda menggunakan Smart PLS Versi 4.0. Hasil penelitian menunjukkan nilai t-statistik  $> t$ -tabel 1,980 untuk seiri 2,056, seiton 2,060, seiketsu 2,350, shitsuke 2,269, artinya berpengaruh signifikan terhadap efektifitas produksi BE. Sedangkan t-statistik seiso sebesar  $0,805 < 1,980$ , artinya seiso tidak berpengaruh terhadap efektifitas produksi BE. Namun, dari uji r-square didapatkan nilai t-statistik 5S sebesar  $21,704 > 1,980$ , artinya aspek 5S secara bersama-sama berpengaruh signifikan terhadap efektifitas produksi. Implementasi 5S di perusahaan Bentonit Cileungsi terbukti mampu meningkatkan efektifitas produksi HPBE. Oleh karena itu, implementasi semua aspek 5S harus lebih diperhatikan terutama evaluasi implementasi seiso dengan mengembangkan *Key Performance Indicator* untuk kriteria pelaksanaan di area kerja.

Kata Kunci: *Seiri, Seiton, Seiso, Shitsuke, Seiketsu*, Efektifitas Produksi, *Bleaching Earth*

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