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EDITORIAL

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Jurnal Asiimetrik: Jurnal Ilmiah Rekayasa dan Inovasi is published regularly every **two times a year**, in **January** and **July**. This journal publishes research-based scientific articles, case studies, review articles, engineering and innovations that cover both theoretical and practical as well as their development. The topics of scientific articles published cover the fields of Architecture, Civil Engineering, Industrial Engineering, Informatics Engineering, Mechanical Engineering and Electrical Engineering.

SUMMARY. **Sukwadi et al.** investigate the influence of the COVID-19 pandemic on retail malls, utilizing text mining and emotion analysis of Google reviews to discern critical aspects impacting consumer experience, subsequently integrated into a consumer Journey Map for strategic enhancements in mall management. In the domain of energy and engine performance, **Dinata et al.** assess the application of a cetane number enhancer in biodiesel, revealing that a 1:100 ratio of additive to fuel maximizes thermal efficiency and fuel consumption in diesel engines. Meanwhile, **Pratama et al.** indicate that heating biodiesel to specific temperatures enhances engine power and efficiency, with 50°C and 70°C identified as optimal for varying performance objectives. **Rahman et al.** examine the financial viability of Transit-Oriented Development in Indonesia, concluding it is feasible if capital expenditures and income risks are meticulously handled, emphasizing the importance of robust public-private partnerships. **Mahdhudhu et al.** examine maritime connection by designing and validating a customized Platform Supply Vessel for offshore activities in the Natuna Islands, fulfilling performance and resistance standards. **Hermawati et al.** investigate the impact of driver weight and speed on the efficiency of electric go-karts, demonstrating notable reductions in efficiency at increased weights and speeds. **Kurniawan et al.** provide a micro-progressive punching technique for the fabrication of micro-plate implants, significantly decreasing production time and enhancing hardness in comparison to conventional EDM methods. **Rahmad et al.** enhance the Airbus A320's Environmental Control System by creating a predictive model for the primary heat exchanger, revealing that mass flow ratio is a critical parameter, and employing particle swarm optimization methods improves efficiency. **Purba et al.** demonstrate that cermet coatings on superalloys enhance erosion resistance at moderate velocities yet are less efficacious at elevated impact speeds. Concurrently, **Fatihuddin et al.** and **Armas et al.** establish that regulating the quenching medium—

utilizing either low-viscosity oil or high-salinity water—substantially increases steel hardness and corrosion resistance post-hardfacing. Wiediartini et al. associate personality variables with cognitive task performance, revealing that introverts and emotionally stable persons excel compared to others under certain mental demands. Herwanto et al. address energy supply for rural industries by demonstrating the technical viability of a PV-battery system for palm sugar production, which guarantees stable operation and a favorable energy balance. Meanwhile, Huri et al. illustrate that a solar-powered vacuum evaporator can effectively and autonomously process arenga sap, providing a sustainable solution for remote producers. Wardiman et al. authenticate a load-shedding and islanding strategy for power system stability in a hydroelectric facility, illustrating its feasibility for radial networks with constrained redundancy. Sukresno et al. improve tailgate frame designs for double trucks in automotive engineering, identifying Type B and Aluminum 7075-T6 as the optimal materials for weight, strength, and regulatory compliance. Agustina et al. evaluate the thermal safety and efficiency of brushed DC motors in compact generator sets, demonstrating that good efficiency is sustained despite increasing temperature under load. Maria et al. present a conceptual framework that integrates Building Information Modeling, Decision Support Systems, and IoT to enhance and optimize residential building development, addressing deficiencies in data management and multidisciplinary coordination. In aerodynamics, Wahyuni et al. ascertain that bio-inspired alterations to the NACA 4415 airfoil (modeled after dolphin snouts) do not surpass the baseline design at elevated angles of attack; however, specific modifications exhibit comparable performance at lower angles. Concurrently, Yudhananta et al. employ computational fluid dynamics (CFD) to demonstrate that bluff body geometry significantly influences drag, lift, and vortex shedding, with diamond configurations yielding the most substantial aerodynamic forces. Wahyuni et al. examine the thermal efficacy of serpentine channel cold plates for cooling lithium-ion batteries, concluding that a dual-curve serpentine configuration offers superior temperature uniformity and heat transmission, hence providing thermal safety for battery modules. These studies together provide significant insights and practical solutions for enhancing efficiency, safety, sustainability, and performance across many engineering applications, influencing industry best practices, technological upta.

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