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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. The design and development of the CC-201 Type GE U18C locomotive were undertaken by **Yulianto et al.** using the utilization of computational fluid dynamics (CFD) modeling. This approach was employed to facilitate cost reduction in research and development endeavors. **Munir et al.** undertook a study on the advancement of seawater desalination equipment with thermal energy storage technology, aiming to generate potable water suitable for various everyday applications. **Wibowo et al.** conducted an analysis on the impact of automobile tank design shape, specifically with a capacity of 5000 liters, on surface pressure using the Ansys software simulation approach. The study done by **Saifudin and Sukanta** was motivated by the probable possibility of work accidents inside the department at PT. XYZ. Consequently, it became imperative to determine the safety hazards faced by workers to devise appropriate solutions for preventing such incidents. **Tan et al.** employed the computational fluid dynamics (CFD) method to analyze and optimize the duct design in the air flow system of the ducting cloud kitchen. **Ledya et al.** conducted research to address several issues inside the organization, specifically focusing on optimizing the functionality of the raw material warehouse at PT. XYZ. This research led to the development of ideas for improving the layout of the warehouse, aiming to enhance its overall efficiency and effectiveness. To achieve optimal machine performance, it is imperative to develop a robust frame component. This task was undertaken by **Pratama and Agusman**, who conducted an analysis of the frame machine press batako's power utilizing the finite element method. **Julian et al**. did a study investigating the impact of micro-scale geometry with shape variation as a means of passive flow management in NACA 4415. Additionally, they also explored the application of bio flaps on NACA 4415 using the Numerical Method. **Santoso** implemented a cooling and air conditioning system within the production machine space at PT. X to ensure optimal performance and longevity of the

engine components. **Inayah et al.** conducted a quality analysis of toolbox products at PT. KSKB using the Seven Tools Method, as the company faced challenges with a significant number of defective product outputs. To facilitate the development of a tiny island located on the northern coast of Papua Province, **Numberi et al.** undertook comprehensive research to assess the feasibility of utilizing sea wind as a renewable energy resource for the purpose of powering local power plants. **Syaripuddin et al.** conducted a study investigating the impact of the number of Shielded Metal Arc Welding (SMAW) layers on many factors, including distortion, increased thickness, microstructure, hardness, and corrosion. Another notable example is the work by **Fikri et al.,** who have utilized a biodegradable material derived from shell skin as a composite disc brake material for motor vehicles. In the interim, **Febriansyah** developed the Arduino microcontroller, which is characterized by its affordability and utilization of an open-source framework. The shape of the prototype electric car chassis constructed from hollow aluminum 6061 was examined by **Bahasyim et al.**, using the Inventor 2016 program to assess the suitability of the profiles and materials employed for the chassis. **Zariatain et al.** undertook the construction of a data collecting system on an Arduino-based pull test machine for composite materials with the aim of enhancing its use to produce precise data. **Sihombing et al.** did a reliability analysis of micro hydropower plants in the Orya-Genyem region of Papua. The study focused on optimizing these plants by assessing the load loss probability. **Samosir et al.** conducted a Landgem modeling study to assess the possibility for utilizing alternative energy sources, specifically methane gas, in the Koya Koso TPA of Jayapura city. Furthermore, in order to further progress the development of Papua, **Evenly et al.**, devised a 26 kW pelton turbine for implementation at the micro-hydro power plant located in Kampung Nehibe. In a similar vein, **Lefaan et al.,** conducted an analysis on power usage in the province of Papua, examining its relationship with investment, regional spending, the human development index, and population. **Iswandi et al.,** conducted a study on the utilization of bamboo fiber andong in combination with glass fiber reinforcement for the development of composite materials suitable for body speed boats. Similarly, Zariatin et al. also investigated the properties and applications of bamboo material in their research.

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