ANALISIS DAN RANCANG BANGUN *STAND* POMPA BAHAN BAKAR *TIPE IN-LINE*

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ABSTRAK

Stand pompa bahan bakar *type in-line* enam silinder dibuat sebagai media praktik untuk memudahkan pemahaman saat dilaksanakan praktik. Karena bentuk yang lebih sederhana dari bentuk aslinya. Disamping bentuk yang disederhanakan namun tetap memiliki fungsi dan cara kerja yang sama.

Untuk mengidentifikasi kerusakan sistem penyalur bahan bakar pada *fuel inection pump* dan *nozzle* dilakukan pembongkaran dan pengecekan komponen. Setelah selesai dilakukan pengukuran menggunakan alat *kalibrasi tast* dan *nozzle tester,* untuk mengetahui kerja dari *fuel inection pump* dan *nozzle.*

Fuel inection pump yang sudah diuji menggunakan alat *kalibrasi tast* dengan standar rpm 1.100, dan *volume* 11 cc – 14 cc. Begitu pula *nozzle* yang sudah di uji menggunakan *nozzle* tester dengan standar tekanan 22 MPa / 3.200 psi. Dan hasil pengukuran *fuel inection pump* dan *nozzle* dapat bekerja normal kembalistelah dilakukan perbaikan.

Kata Kunci : *Fuel injection pump,* langkah kerja, hasil analisa.

THE ANALYSIS AND DESIGN OF FUEL PUMP STAND TYPE IN-LINE

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ABSTRACT

A fuel pump stand type in-line with six cylinders has been designed as a practical media in order to improve understanding during practice. This design is simpler than the original one that it enhances the practicality. In spite of its simplicity, it still has the same function performance system.

To identify the damage of fuel channeling on the fuel injection pump and nozzle, disassembly and verification process towards the component was conducted. After that, the measurement using tast and nozzle tester calibrating tool was implemented in order to figure out the performance of fuel injection pump and nozzle.

The fuel injection pump was tested using tast calibrating tool with rpm standard of 1.100 and 11 cc – 14 cc volume. Nozzle was also tested using nozzle tester with 22 mpa / 3200 psi pressure standard. The fuel injection pump and nozzle are working normally after improvement was implemented.

Key Words: *Fuel Injection Pump, Procedures, Analysis Result*