

ABSTRAK

Valve air tank adalah salah satu system pengereman pada truk yang berfungsi sebagai penyaring udara. Pada perancangan *Valve air tank* belum terdapat *Work Instruction* dikarenakan baru mengalami masa transisi dari *Euro 2* ke *Euro 4* beberapa bulan. Penelitian ini dilakukan di PT. Isuzu Astra Motor Indonesia pada area *Sub assy air tank* yaitu *Valve air dryer*. Populasi yang digunakan dalam penelitian ini diambil dari operator PT Isuzu Astra Motor Indonesia sebanyak 33 orang dan 5 orang sebagai sampel. Jenis penelitian yang digunakan adalah deskriptif dan penelitian ini berfokus pada risiko cedera pada proses perakitan *Valve Air Dryer* menggunakan metodologi *Diagram Fishbone*, Penilaian Risiko (*Risk Assesment*) dan HOR (*House Of Risk*). Hasil penelitian ini pada proses perakitan *Valve air dryer* terdapat 9 proses, dimulai dari pemasangan *connector* pada *air dryer ASM tank*, pengencangan *connector Air dryer*, pemasangan *hose air dryer* dengan *clamp*, lalu pasang *valve air dryer* pada *bracket*, pasang dan kencangkan *connector* pada *valve air dryer*, pasang *dryer assy* pada *bracket*. Risiko Pada proses perakitan *Valve air dryer* terdapat 10 *risk event* dan 22 *risk agent* yang teridentifikasi. *Work Instruction* yang dibuat adalah urutan-urutan proses kerja pada perakitan *Valve Air Dryer* dari awal hingga akhir, karena pada *EURO 4* ini *Valve Air Dryer* yang digunakan berbeda dengan *EURO 2*.

Kata Kunci: HOR (*house of risk*), penilaian risiko (*risk assesment*), dan *valve air dryer*.



KARAWANG

ABSTRACT

The air tank valve is one of the braking systems in trucks that function as an air filter. In the design of the air tank valve, there is currently no Work Instruction due to the recent transition from EURO 2 to EURO 4 a few months ago. This research was conducted at PT. Isuzu Astra Motor Indonesia in the Sub Assy air tank area, specifically focusing on the air dryer valve. The population used in this research consisted of 33 operators from PT Isuzu Astra Motor Indonesia, with five individuals selected as samples. The research design used was descriptive, and the study focused on the risk of injury in the assembly process of the Air Dryer Valve using the Fishbone Diagram methodology, Risk Assessment, and House of Risk (HOR). The results of this research identified nine assembly processes for the Air Dryer Valve, starting from installing the connector on the air dryer ASM tank, tightening the Air Dryer connector, attaching the air dryer hose with a clamp, then installing the air dryer valve on the bracket, attaching and tightening the connector on the air dryer valve, and finally installing the dryer assembly on the bracket. In the assembly process of the Air Dryer Valve, 10 risk events and 22 risk agents were identified. The created Work Instruction consists of the sequence of work processes in assembling the Air Dryer Valve from start to finish, as the Air Dryer Valve used in EURO 4 is different from EURO 2.

Keywords: HOR (house of risk), risk assessment, and valve air dryer



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