

ABSTRAK

Pada perusahaan pembuatan ban yang ada di Indonesia, terdapat proses produksi ban terdapat 4 proses utama yaitu *Material*, *Building*, *Curing* dan *Final Inspection*. Proses *curing* merupakan proses vulkanisasi ban yang berlangsung di dalam ruang *chamber* dengan temperatur dan tekanan yang terkontrol untuk mendapatkan sifat produk ban sesuai spesifikasi. Pada mesin *curing press* BOM 48 terdapat baut *mounting cylinder pneumatic* yang berfungsi untuk menahan gaya *cylinder pneumatic* saat bekerja. Baut *mounting cylinder pneumatic* sering mengalami kerusakan karena *cylinder pneumatic* yang bekerja secara terus-menerus. Berdasarkan studi lapangan yang telah dilakukan, faktor penyebab dari kerusakan baut dikarenakan baut mengalami patah *fatigue* yang disebabkan antara lubang *mounting stand cylinder pneumatic* dan baut terdapat *gap* atau celah, sehingga baut mengalami slip pada saat *cylinder pneumatic* beroperasi mendorong dan menarik *cylinder hydraulic squeeze*. Berdasarkan permasalahan yang terjadi, penulis perlu menganalisis dan mencari solusi yang tepat untuk menangani kerusakan baut *mounting cylinder pneumatic* pada mesin *curing* BOM 48.

Kata Kunci : Mesin *curing*, *mounting cylinder pneumatic*, kerusakan baut, analisis.

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***ANALYSIS OF DAMAGE TO PNEUMATIC CYLINDER MOUNTING BOLT
ON BOM 48 CURING PRESS MACHINE***

ABSTRACT

In tire manufacturing companies in Indonesia, there are 4 main processes in tire production: Material, Building, Curing and Final Inspection. The curing process is a tire vulcanization process that takes place in a chamber with controlled temperature and pressure to obtain tire product properties according to specifications. On the 48 BOM press curing machine there is a pneumatic cylinder mounting bolt that functions to withstand the force of the pneumatic cylinder while working. Pneumatic cylinder mounting bolts are often damaged because the pneumatic cylinder works continuously. Based on field studies that have been conducted, the causal factor of bolt damage is due to fatigue fractures caused between the mounting holes of the pneumatic cylinder stand and the bolt there is a gap or gap, so that the bolt slips when the pneumatic cylinder operates to push and pull the hydraulic squeeze cylinder. Based on the problems that occur, the authors need to analyze and find the right solution to deal with damage to the pneumatic cylinder mounting bolts on the BOM 48 curing machine.

Keywords : *Curing machine, pneumatic cylinder mounting, bolt damage, analysis.*