

## ABSTRAK

PT. Indospring, Tbk. merupakan perusahaan manufaktur yang bergerak dalam bidang pembuatan *leaf spring* dan *coil spring automotive*. *Spring* merupakan komponen penting untuk menunjang kenyamanan pengendara sepeda motor maupun mobil. Pada proses pembuatan *leaf spring* terbagi atas tiga divisi proses produksi yaitu proses *shearing*, *heating*, dan *assembling*. Dimana proses pemotongan dan pembentukan awal *spring* dilakukan di divisi proses produksi *shearing*. Setelah itu dilakukan proses pemanasan awal untuk pembentukan lengkungan dan pemansan akhir untuk membentuk karakteristik *leaf* di divisi *heating*. Proses selanjutnya adalah kegiatan pengecatan dan *finishing* di divisi *assembling*. Pada bulan januari sampai desember tahun 2018 terdapat 25 kejadian kecelakaan kerja yang terjadi pada perusahaan.

Penelitian ini menganalisis risiko menggunakan metode *hazard identification risk assessment and risk control* (HIRARC). Dari hasil identifikasi bahaya, risiko pada bahaya yang teridentifikasi akan dilakukan penilaian *severity* dan *likelihood* untuk menentukan *risk level*. Dari penilaian risiko yang telah dilakukan, potensi bahaya diklasifikasikan menjadi 3 level yaitu *low risk*, *moderate risk*, dan *high risk*. Hasil penelitian menunjukkan pada proses *heating furnace* terdapat potensi bahaya yang paling dominan yaitu dengan level *moderate risk* dengan nilai risiko 6 material panas dan *walking beam*. Hasil pada proses *press quenching* terdapat potensi bahaya yang berpengaruh dengan kategori level *high risk* dengan nilai risiko 16 yaitu kabel terkelupas. Dan hasil pada proses *tempering furnace* terdapat potensi bahaya yang paling berpengaruh dengan kategori level *high risk* dengan nilai risiko 16 yaitu *conveyor tempering*. Pengendalian risiko menggunakan acuan OHSAS 18001.

Kata kunci : **K3, HIRARC, Penilaian risiko, Pengendalian risiko.**

## **ABSTRACT**

*PT. Indospring, Tbk. is a manufacturing company engaged in the manufacture of leaf spring and coil spring automotive. Spring is an important component to support the comfort of motorbike and car riders. The process of making leaf spring is divided into three divisions of the production process, namely the process of shearing, heating, and assembling. Where the process of cutting and initial formation of spring is carried out in the production process division of shearing. After that the initial heating process was carried out for the formation of curvature and final heating to form leaf characteristics in the heating division. The next process is painting and finishing activities in the assembling division. In January to December 2018 there were 25 workplace accidents that occurred at the company.*

*This research analyzes risk using the hazard identification risk assessment and risk control (HIRARC) method. From the results of identification of hazards, the risks to the identified hazards will be assessed for severity and likelihood to determine the risk level. From the risk assessment that has been done, the potential danger is classified into 3 levels, namely low risk, moderate risk, and high risk. The results showed that the heating furnace process had the most dominant hazard potential, namely with a moderate risk level with a risk value of 6 heat material and a walking beam. The results of the press quenching process there are potential dangers that affect the category of high risk level with a risk value of 16, ie the cable is chipped. And the results of the tempering furnace process have the most influential hazard potential with the category of high risk level with a risk value of 16 namely conveying tempering. Risk control uses the OHSAS 18001 reference.*

**Keywords: K3, HIRARC, Risk assessment, Risk control.**