

ABSTRAK

Industri ada dua macam yaitu industri jasa dan manufaktur. Industri manufaktur dalam beberapa dekade terakhir mengalami perkembangan yang sangat pesat. Untuk dapat bersaing di pasaran, produk yang dihasilkan harus berkualitas dan selalu ada saat dibutuhkan oleh konsumen dengan harga yang murah. Perusahaan dituntut memperhatikan quality, cost dan availability, sehingga perusahaan harus berkomitmen terhadap proses produksi sejak awal sampai akhir, untuk mengetahui seberapa efektifkah perusahaan itu. Maka akan di usulkan pada perusahaan PT. ISPAT PANCA PUTRA GRESIK, perusahaan ini memproduksi besi beton yang dikirim ke lokal maupun manca negara, di perusahaan ini proses produksinya menggunakan mesin yang disusun secara seri dari furnis, catliver stand 1 sampai 20, shear 1 sampai 3, flaying shear TMT proses dan Counting. Di perusahaan ini sering terjadi kecacatan produk hingga mencapai 10%, sehingga akan di hitung tingkat ke efektifitasnya, loss yang mempengaruhinya dan mengusulkan perbaikan. Tingkat efektifitas proses produksi dapat dilihat berdasarkan pencapaian nilai kinerja OEE yang akan di rinci dengan nilai Availability (90,69%), Performansi (94,77%), Quality (89,70) dan nilai OEE (76,74%). Loss yang mempengaruhi di tiap kinerja adalah nilai Breakdown Loss 45097,8 menit/tahun, Idle & minor setoppages loss 29040 menit/tahun, reduced yield loss 8629,27 ton/tahun, dan penyebab terjadinya los- los serbuk potong terlalu banyak, potongan end cutting terlalu panjang, banyaknya scrap setelah proses produksi, billet terjepit pada stand, bar menabrak roll stand 20, arus lemah pada motor transfer, bar tidak bisa masuk roll guide, bar tidak bisa melanjutkan ke TMT proses, motor transfer mati mendadak. Saran kedepanya perusahaan secepatnya mengganti komponen – komponen yang sudah tak layak pakai tanpa harus menunggu rusak. Hal ini akan membantu peningkatan efektifitas perusahaan.

Kata kunci : Failure mode and effect analysis (FMEA), Overall Equipment Effectiveness (OEE), Proses Produksi, Six Big Loss

ABSTRACT

There were two kinds of industry, namely service industries and manufacture. The manufacture industry in recent decades had developed very rapidly. To be competitive in the market, the products must be qualified and always there when needed by consumers at a cheap price. Companies were required attention to quality, cost and availability, so the company must be committed to the production process from the beginning to the end, to find out how effective the company. To know the real it would be proposed at the company PT. ISPAT PANCA SON Gresik, the companies manufactured rebar which send to local and foreign. This often happened in the company product defects up to 10%, so it would count to the level of effectiveness, influencing loss and suggest improvements. The effectiveness of the production process could be seen based on the achievement of performance OEE values that would be detailed with Availability value (90.69%), Performance (94.77%), Quality (89.70) and the value of OEE (76.74%). Loss that affects at each performance was the value Breakdown Loss 45097, 80 minutes, Idle and minor stoppages loss 29040, 00 minutes, reduced yield loss 8629, 27 ton, and the cause of los powder too many pieces, the pieces end cutting too long, many scrap after the production process, billet jammed in a stand, bar rammed roll stand 20, a weak current to the motor transfer, bar couldn't enter guide roll, the bar couldn't continue to TMT process, transfer of motor suddenly stop. Suggestions for the companies, in future to rapidly replace components that have been unfit for use without having to wait damaged. This would help increase the effectiveness of the company.

Keywords: Failure mode and effect analysis (FMEA), Overall Equipment Effectiveness (OEE), Production Process, Six Big Loss