

**Penerapan Metode Six Sigma untuk Perbaikan Kinerja Proses Pengeringan
Teh Hijau di PT. Candi Loka Ngawi.** (*Application of Six Sigma Method to
Improve the Performance of Green Tea Drying Process at PT. Candi Loka*).

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ABSTRACT

The drying process is a process carried out to reduce the moisture content of green tea leaves, and to reduce the presence of microbial growth and enzyme activity. Final drying uses a Ball Tea machine at PT. Candi Loka. The purpose of research is decide the value of the sigma level in the green tea drying process, determine the factors can affect defects in the green tea drying process at PT. Candi Loka, and identify ways to reduce or minimize the event of defects in the green tea drying process at PT Candi Loka. This research make use Six Sigma and FMEA methods with DMAIC (Define, Measure, Analyze, Improve, Control) stages used to improve the grade of the green tea drying process at PT Candi Loka to minimize defects that occur. The output of the count of DPMO and the sigma value obtained are the overall process 54400 DPMO value of 3.1 sigma value. The analysis based on fishbone diagram, the factors that affect defects are human factors, machine factors, and material factors. The analysis based on FMEA method identify that topless RPN value on failure mode is 48, and failure mode of performance decreases by 32.

Key words: DPMO, FMEA, drying, six sigma, green tea