

ABSTRACT

IMPLEMENTASI KONSEP SIX SIGMA UNTUK MENINGKATKAN KEMAMPUAN PROSES PRODUKSI PRESS KILN

Maintaining the quality of the product in the range of output specifications are the target of the production process to meet customer needs. A customer in this case consists of two major groups ie the internal customers and external customers. Its products are in the range of the upper and lower specification limits can be known through calculation of process capability analysis of process capability ratio (C_p), the upper limit process capability index (C_{pu}), under limit process capability index (C_{pl}) and process capability index (C_{pk}) . The four indicators showed the ability to process the production process can be accepted or not.

This research was conducted at a ceramics factory, especially the Press-Kiln station where one of CTQ's (Critical to Quality) is the size of the ceramic kiln exit where the measurement data obtained by C_p and C_{pk} is less than one or a production process can not be accepted by Quality level of only 55.84%.

Analysis of repairs carried out by using Six Sigma methods, ie, DMAIC (define, measure, analyze, improvement and control). The results obtained showed the existence of quality control materials that are not adapted to the specification of input material (powder shrinkage) of the mold cavity size as a ceramic mold in a press machine unit.

Improvements setting mold cavity size is adjusted with the powder as material shrinkage, whereby the input of other parameters in setting fixed, the obtained value of C_p and C_{pk} improved as well as quality level rise to 75.8%.

Key Word : Six Sigma, DMAIC, Process capability.