

A STUDY ON COST BENEFIT ANALYSIS OF PROCESS IMPROVEMENTS IN
HANON SYSTEMS PRIVATE LIMITED

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ABSTRACT

This study focuses on the Cost-Benefit Analysis (CBA) of process improvements implemented at Hanon Systems Private Limited, Chennai. The primary objective is to evaluate the technical and financial impact of decoupling the heating process from the Evaporator Bio-Coating machine. Previously, an integrated system caused excessive thermal stress, leading to frequent failures of Flexer belts and internal coils, requiring replacements every six months. By installing a standalone external heater, the company aimed to reduce maintenance costs and production downtime. The analysis utilizes financial tools such as Return on Investment (ROI), Payback Period, and Cost-Benefit Ratio (CBR). Findings indicate a significant improvement in machine uptime from 85% to 98% and an annual maintenance saving of approximately ₹2.35 Lakhs per machine. With a CBR of 1.56 and a payback period of approximately 7.5 months, the project demonstrates high financial viability and operational efficiency.

KEYWORDS

Cost-Benefit Analysis¹, Hanon Systems², Process Improvement³, Decoupling⁴, ROI⁵, Operational Efficiency⁶, Maintenance Cost Reduction