

# Optimal Production Run For Processes With Constant And Random Drifts

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## Summary

In this paper, we consider a production process with a continuous drift in the mean of a quality characteristic of the product. We develop models for this problem in which we consider the drift to be either known in advance and constant, or occurs in a random fashion. We analyse the developed models and discuss the shape of the resulting cost function for one of the models which helps in obtaining a global solution of the problem. We suggest several schemes for solving the resulting models which give policies for optimal tool replacement. We also present some numerical examples. (C) 1998 Elsevier Science B.V. All rights reserved.

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