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ECONOMICAL FLOW VELOCITY IN  
WATER DISTRIBUTION SYSTEM

Ariamalar Solvakumar

Z 3412

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## ABSTRACT

The purpose of this study is to find the economical flow velocity in a water distribution system. The economical flow velocity in the pipe line depends on the roughness coefficient, energy cost, construction cost and present worth factor. A theoretical study was done to study the influence of above factors on economical flow velocity. When the system consists of a single pipe and a pump the economical flow velocity does bear a definite relation to the diameter for a given set of costs. But in a distribution system, economical flow velocity depends on the hydraulics of the network also.

Statistical analysis was done to study the distribution of economical flow velocity for each diameter and Kolmogorov - Smirnov test was used to test the goodness of fit.

## TABLE OF CONTENTS

CHAPTER	TITLE	PAGE
	Title page	i
	Acknowledgement	ii
	Abstract	iii
	Table of contents	iv
1	INTRODUCTION	1
	1.1 General	1
	1.2 Objective and scope of the study	1
2	LITERATURE REVIEW	3
3	FUNDAMENTALS	5
	3.1 Design Principles	5
	3.1.1 The Hydraulic Formulas	5
	3.1.2 The Design Criteria	5
	3.2 Linear Optimisation Model	6
	3.3 Statistical Analysis	8
	3.4 Cost Functions	10
	3.4.1 Present worth Factor	10
	3.4.2 Present Cost of Water Distribution System Element	11
	3.4.2.1 Pumping Station Investment Cost	11
	3.4.2.2 Cost of Pipe Network	12
	3.4.3 Operation Cost	12
	3.5 Computational Procedures	13
4	THEORETICAL STUDY	14
5	STATISTICAL ANALYSIS	16
	5.1 Description of the System	16
	5.1.1 Artificial Network	16
	5.1.2 Thonburi/Bangkok Network	16
	5.1.3 Pattaya Network	16
	5.1.4 German Network	16
	5.2 Description of the Study	17

6	DISCUSSION OF THE RESULTS	22
	6.1 Theoretical Study	22
	6.1.1 Different Roughness Coefficients	22
	6.1.2 Changing of Energy Cost	22
	6.1.3 Changing of Construction Cost	22
	6.1.4 Changing of Present Worth Factor	27
	6.2 Statistical Analysis of Linear Optimisation Model	27
	6.2.1 The Linear Optimisation Model	27
	6.2.2 Statistical Analysis	28
7	CONCLUSIONS AND RECOMMENDATIONS	41
	7.1 Conclusions	41
	7.2 Recommendations for Further Study	42
	REFERENCES	43
	APPENDIX A	