Title	Analysis for element of Water Hammer
Sub Title	
Author	倉橋, 隆郎(Kurahashi, Ryuro)
Publisher	慶応義塾大学藤原記念工学部
Publication year	1967
Jtitle	Proceedings of the Fujihara Memorial Faculty of Engineering Keio University (慶応義塾大学藤原記念工学部研究報告). Vol.20, No.81 (1967.) ,p.189(13)- 189(13)
JaLC DOI	
Abstract	
Notes	Summaries of Doctor and Master Theses
Genre	Departmental Bulletin Paper
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=KO50001004-00200081-0013

Analysis for Element of Water Hammer

Riuro KURAHASI*

A pipe is filled with the moving water. If the velocity of water is changed, rapid pressure changes occur inside the pipe. Such pressure changes are referred to Water Hammer. On practical case, we now consider the large pump discharge line.

If the power supply to the pump motor is suddenly cut off, large pressure rise occurs, so pipe line would be destroyed. "Water Hammer" has been studied since old times. Prof. Menabre produced the equation for the compressibility of water hammer in 1858 and many people gave many equations. But Allievi, Schyder and Bergeran's equation is now used as the basic equation. In this problem this graphical equation is used and applied to individual pipe lines with branch connections. Besides the model of those individual pipe lines are simplified. All parameters of the model such as the length of conduit, the ratio of flow, the friction loss of conduit, pipe line constant were changed, and the character of the graphical equation is obtained. Therefore, an ideal model of the individual pipe lines with branch connections is determined.

*倉 橋 隆 郎