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Drinking Water Engineering and Science Discussions

## Interactive comment on "Leakages and pressure relations: an experimental research" by F. De Paola and M. Giugni

## **Anonymous Referee #1**

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The paper investigates leakage vs. pressure relations using experimental set up. As mentioned in other reviewer's comments, the fundamentals of leak simulation need to be reconsidered. From Figure 1, the test nozzles are located at the end of smaller diameter pipe (that are connected to experimental pipe), which is not simulating leaks of DI or Steel pipe. Below are specific comments.

1. Introduction needs to address how current paper is different from previous work in specific manner. 2. Clear objectives need to be elaborated 3. For 3.1.1 Static tests: what were Pressure and Q conditions? 4. Not clear why longer duration is done only for ductile iron pipe. 5. Need to justify/discuss why authors chose ductile iron and steel pipe; furthermore, what their results imply? Why their outcomes are different? 6. Figure 6: pressure axis missing? 7. More details on GA needed (e.g. which

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variables were optimized, etc.) 8. Detailed discussions on 'other literature's b values are significantly higher than 0.5; however, authors' values are very close to 0.5'.

Minor 1. Experiences ⇒ experiments?

Interactive comment on Drink. Water Eng. Sci. Discuss., 5, 403, 2012.