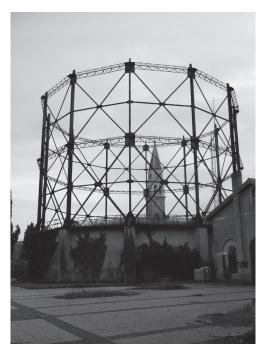
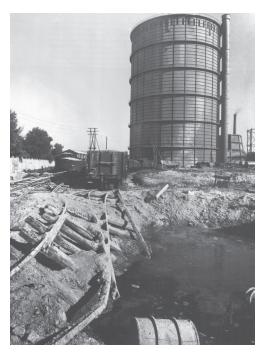
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Gasholder VI from the gasworks at San Francesco della Vigna, Venice, ITA (BB 2008)



Guide frame of gasholder V (BB 2008).



Gasholder of Marghera (Barizza, 2004, p. 40)

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## The Venetian Gasholders. Symbol of progress or decay?

Gasholders are buildings that were used in the nineteenth century for storage of locally produced coal gas. At that time the illumination of the cities by gas light was a technical innovation that had important urbanistic and infrastructural implications and thus a strong socio-cultural influence. These rising structures shaped the cityscape with a new kind of industrial architecture and improved the economic standard: not only the public gas illumination, but also the domestic use. Today many historic gasholders are no longer used, are inaccessible and have often been demolished.

The gasholder's function determined its structure. Initially the gasholders were built with a water seal system composed of a water basin, a guiding frame and so-called bells (vessels/lifts). There were two different types of a water seal system:

- the 'simple' or 'bell gasholder' (one single lift)
- the 'telescopic gasholder' (several lifts, with a linear or spiral guiding system).

At the beginning of the twentieth century a new building technique was invented: the cylindrical, closed 'piston gasholder' with a larger storage capacity. It was built without a water basin and thus had a dry seal, so that it is also known as a 'waterless' or 'dry' gasholder.

Due to its form, function, development and structural history the gasholder is considered to be a building type of its own. It belongs to the group of technical buildings.

Gas Lighting was first introduced to Italy in the city of Torino in 1837 with the founding of Compagnia di Illuminazione a Gas per la Città di Torino.

Other cities followed on, of note Venice, where a gasworks was built to supply the gas in the area of San Francesco della Vigna, culminating in the illumination of St Mark's Square, "luce argentea" in 1843. As the gasworks grew, they became more than an industrial plant to provide lighting, but a dominant part of the cityscape in their own right, where by 1893, five gasholders rose.

Further growth in gas demand led to more production, enabled by the development of a second site in the region of Santa Marta.

However, with the dawn of natural gas, city gas was dealt a great blow, leading to the demise of many of the industrial structures and sights associated, with the Venetian gasworks finally putting out of service in 1971.

Today, just two of the gasholders remain as relics of the age of gas lighting in San Francesco della Vigna, both water sealed, built in 1882 and 1928, a witness to an important innovation of Venice.

This research is part of a phd-project and aims to underline the significance, shape and structure of the gasholders as a part of the engineering and industrial heritage and also the importance of preserving them for the future.



Guide frame of gasholder V with view to the Campanile of St. Mark's Square (Casarin, 2009).

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