

Q&A

31Q3: I want to know “Air scouring method” for cleaning the old distribution main and household pipe. (Mr. K.S. Thailand)

A1: I have never implemented air scouring for cleaning old pipe but I have experience of cleaning pipes by scraper or high pressure water. These methods are implemented before pipe rehabilitation works.

I found a theory of air scouring method through Inter net, which as follows.

“When water is not moving in a household pipe, the tap holds static water pressure. However, compressed air is put into the household pipe, pressure energy is accumulated in the pipe. Once closed taps are opened, this energy is changed to speed energy. This high pressure becomes pressure wave in the pipe and then air bubbles move with very high speed in the pipe .At the moment, the high frequency is generated and slime, scale and so on which adhered to the inside of pipe are peeled. Then finally these substances are discharged with water. This method can cover wide cleaning range by one time implementation and also remove oil substances without adhering of oil on the surface of the pipe.”

Q & A for Cleaning household pipe (Source: web site of Nisshou Industry Co., Ltd.)

1) Does this method damage the pipe?

a-1) This method gives no damage to the pipe because of less than 5 kg/cm² of compressed air pressure. And it is very safe compared to polishing and chemical cleaning.

2) How much does it cost?

a-2) This method is cheaper than pipe replacement. The price has been set depending on water meter size, number of taps, and floor level as following table;

Meter size	# of Taps (Less than)	Floor level (Up to)	Standard Price
13mm	5	First floor	¥30,000
20mm	10	Second floor	¥40,000
25mm	20	Second floor	¥50,000

(USD 1= approximately ¥83, 2011)

(Answered by Mr. IDE Mashuji, Yokohama City Water Works Bureau,2011)

A2: In our company, we are offering cleaning pipes of *buildings* and houses. it is possible to remove slime and so on by putting air with ozone water into the pipe. For removing rust, we implement pretreatment by a sandblast and a scraper brush, then clearing and lining the pipe. In this case, water pressure put into the pipe will be controlled less than 0.4 Mpa, and also compressed air will be controlled depending on pipe materials and old pipe condition because this method works like a cleaning by water hammer. Approximately 1.0PPM ozone water will be used for the effective sterilization, odor removal and slime elimination. For more information, please contact our company.

(Answerer: Mr. Eiji NAKASHIMA , Nakami Japan Co.,Ltd., 2011)

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