

NMR PIPETECTOR Scientific Report (No.5)

Anti-Corrosion Application, Apartment HIROO Garden Hills (Most expensive & high-class apartment in Tokyo)

NMR Corporation

◆ Appearance of Building



◆ Building Summary

It has been 12 years since the buildings were built, and vinyl lining pipes (VLP) have been used. Since the joint parts were rusted, they considered replacing with Stainless Steel Pipes to solve the corrosion blockage problem. However, the estimated sum was very expensive (It is about one million yen per one building. Totally there are 14 buildings). Therefore **NMR PIPETECTOR** was installed because its cost is less than 1/20 compared to replacing pipes with stainless steel ones.


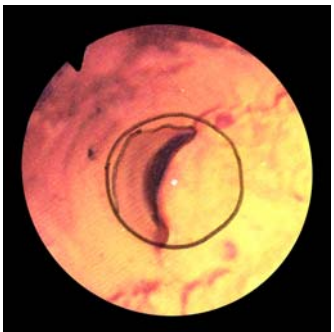

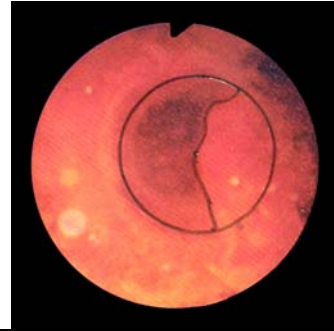
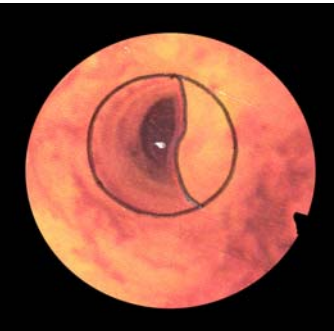
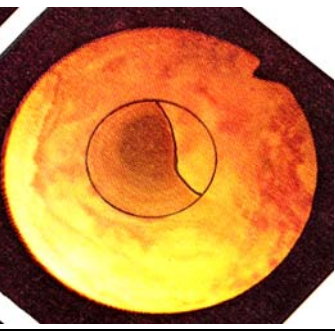
◆ Installation Results

Before the installation of **NMR PIPETECTOR**, there were 77.5 % and 37.3 % blockage by corrosion at the first joints at the kitchens in 2 different rooms. **12 months after the installation**, corrosion blockage decreased to 60 % and 31 %. The ratio of decreased corrosion blockage is 22.5 % and 16.9 %. **27 months after the installation**, corrosion blockage decreased to 58.5 % and 23.3 %. The ratio of decreased corrosion blockage is 24.5 % and 37.5 %. The results prove the corrosion blockages were shrunken and corrosion was reduced to magnetite by the effect of **NMR PIPETECTOR**.

◆ Installation Summary

Name of Building Address	Hiroo Garden Hills Hiroo Shibuya Ward, Tokyo
Building Summary	Reinforced 15-story buildings 12 years after being built
Method of Water Supply	Presser pump water supply system
Installation Day	August 27, 1997
Installation Place Number of Installed NMR PIPETECTOR	<ul style="list-style-type: none"> ● On outlet pipe of water meter (VLP100A) PT- 100DS× 2 units ● On outlet of presser pump water supply pipe (VLP 65A) PT- 75DS× 5 units

◆ Fiber Scope (FS) Picture of Inside Pipes

FS picture Before the installation	FS picture 12 months after the installation	FS picture 27 months after the installation	Ratio of decreased blockage
			24.5%
77.5%	60%	58.5%	
			37.5%
37.3%	31%	23.3%	