

NMR PIPETECTOR Test Report (No.18) Anti-Corrosion Application, Water and Heat Distribution Company (Romania)

NMR Corporation

To stop corrosion and prolong useful life of water pipe

◆ Appearance of Building and Installation Place



Appearance of the building



On outlet of hot water supply pipe PT- 50DS

◆ Installation Results

It has been 20 years since this building was built, and has been used the iron pipes. Water examination was held at 4 points before the installation of NMR PIPETECTOR, (Places of sample water taken were 15~20m point, 20~30m point, 350~400m point, and 450~500m point from the installation place.)

Before the installation of NMR PIPETECTOR, Fe ion content in water was **0.5mg/l, 0.5mg/l, 2.5mg/l,** and **3.0mg/l** at each point. The results proved that heavy corrosion formed inside the pipe. So NMR PIPETECTOR was installed because it can stop corrosion by changing corrosion to magnetite without any outflow of corrosion.

3days after the installation of NMR PIPETECTOR, Fe ion content in water decreased to **0.1mg/l, 0.25mg/l, 1.0mg/l,** and **1.5mg/l** at each point. Moreover, 3 weeks after the installation, Fe ion content was **0.1mg/l, 0.1mg/l, 0.1mg/l,** and **0.25mg/l**. Corrosion colored water stopped completely by the effect of NMR PIPETECTOR.

◆ Installation Summary

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|---|---|
| Address | Water and Heart Distribution Company, Oradea, Romania |
| Building Summary | 20years after being built, 4-story building, Apartment and Kindergarten |
| Method of Water Supply | Hot water supply system |
| Installation Day | March 28,2003 |
| Place to install and Number of installed NMR PIPETECTOR | On outlet hot water pipe of hot water supply pump, (SGP 50A) PT- 50DS×1 unit |

◆Results of Water Analysis

| Place of water taken | Before the installation March 27,2003 | 3days after the installation March 31,2003 | 3weeks after the installation April 17,2003 | Regulation |
|----------------------|--|---|--|------------|
| Point 1 | 0.5 mg/l | 0.1 mg/l | 0.1 mg/l | 0.3 mg/l |
| Point 2 | 0.5 mg/l | 0.25 mg/l | 0.1 mg/l | 0.3 mg/l |
| Point 3 | 2.5 mg/l | 1.0 mg/l | 0.1 mg/l | 0.3 mg/l |
| Point 4 | 3.0 mg/l | 1.5 mg/l | 0.25 mg/l | 0.3 mg/l |

Fe ion content in water (mg/l)

Fe Ion Content in Water (mg/l)

