

NRW REDUCTION PRODUCTS



FUJI NRW REDUCTION PRODUCTS

1. Flow & Pressure Monitoring

Measuring the extent of total inflow in a District Metered Area (DMA).



● Portable ultrasonic flow-meter UFP-20
Pressure & flow data logger DLS-HS



2. Site Investigation

Pipe & valve locating.



● Pipeline & cable locator PL-G



● Metal locator F-90M
(for valve)



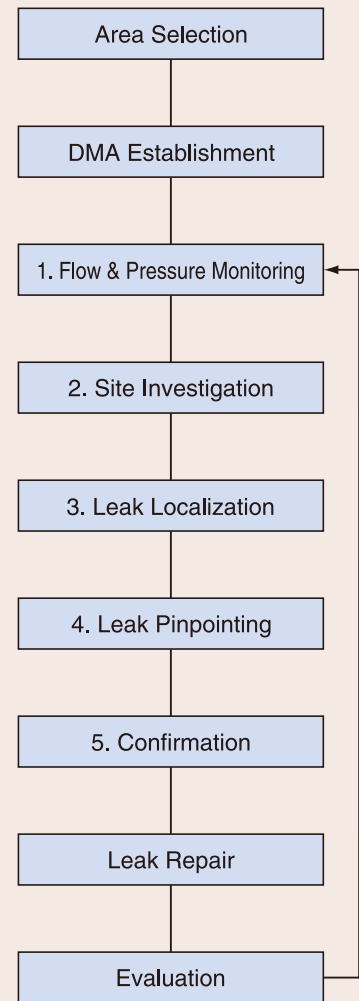
● Magnetic locator
GA-3S (for valve)



● Non-metallic pipe locator NPL-100

NRW Reduction Activity

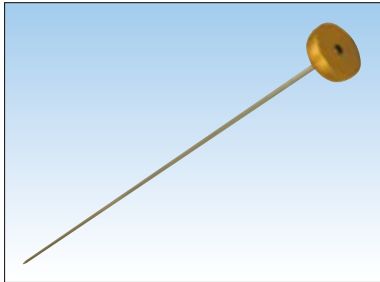
Basic Steps



After leaks repaired, the DMA should be monitored continuously.

3. Leak Localization

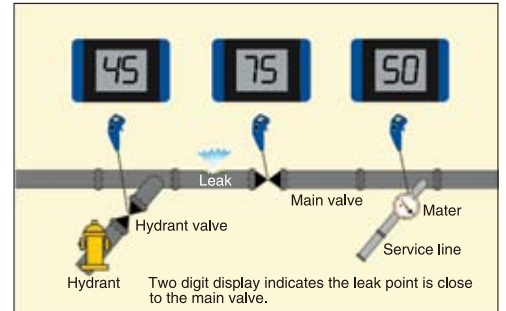
3-1 Listening sticks are used to detect the presence of leak noise at house meters and/or valves.



• Listening stick LSP-1.5



• Digital sound detector FSB-8D & Noise level analyzer FSJ-1

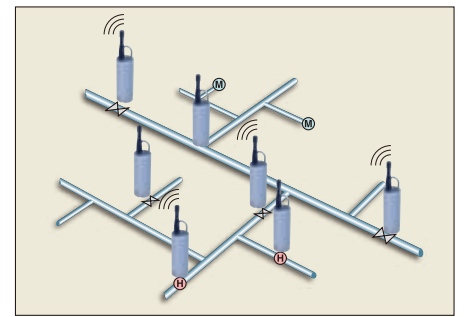


Two digit display indicates the leak point is close to the main valve.

3-2 Leak noise loggers are effective for localizing areas where there is possibility of water leakage and for continuous monitoring of leak noise.



• Leak noise logger system LNL-1 (Leak nets)

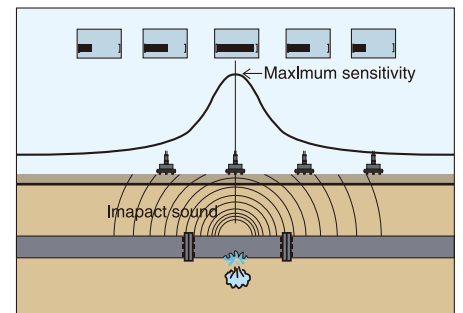


4. Leak Pinpointing

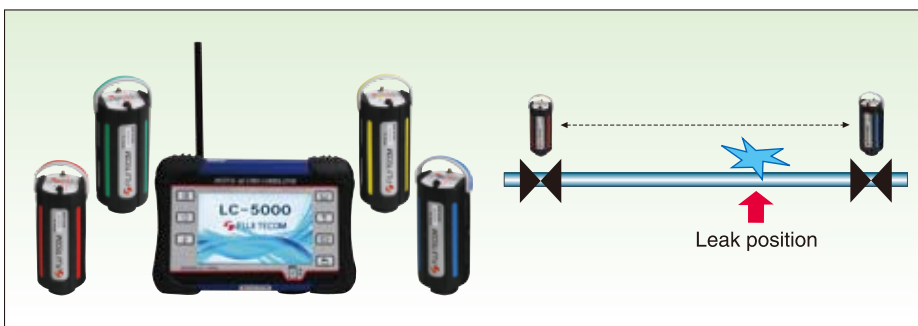
4-1 Advanced ground microphones pinpoint water leaks in pipes under asphalt or concrete with the base plate attached to the sensor.



• Digital noise reduction water leak detector DNR-18



4-2 Leak noise correlator pinpoints water leaks with a correlation method.



• Digital quatro correlator LC-5000



• Advanced digital leak detection system Zcorr

5. Confirmation

Confirm presence leakage by drilling, boring bar and listening stick prior to excavation.

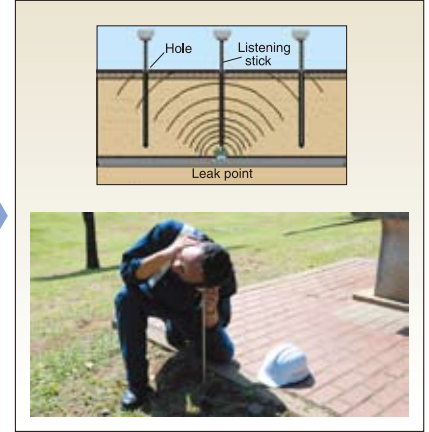
5-1 Drilling



5-2 Boring



5-3 Insert listening stick



Recommended standard equipment for NRW reduction team (2 Persons)

No.	Products	Q'ty	Purpose of the work
1	Portable ultrasonic flowmeter UFP-20	1 unit	Flow & pressure monitoring
2	Pressure & flow data logger DLS-HS	1 unit	Flow & pressure monitoring
3	Pipeline & cable locator PL-G	1 unit	Site investigation (Pipe location)
4	Non-metallic pipe locator NPL-100	1 set	Site investigation (Pipe location)
5	Metal locator F-90M	1 set	Site investigation (Valve location)
6	Magnetic locator GA-3S	1 set	Site investigation (Valve location)
7	Listening stick LSP-1.5m	3 sets	Leak localization
8	Digital sound detector FSB-8D & Noise level analyzer FSJ-1	2 sets	Leak localization
9	Leak noise logger system LNL-1 (Leak nets)	1 set	Localization & monitoring
10	Digital noise reduction water leak detector DNR-18	2 sets	Leak pinpointing
11	Digital quatro correlator LC-5000	1 set	Leak pinpointing
12	Advanced digital leak detection system Zcorr	1 set	Leak pinpointing
13	Hammer drill	1 set	Confirmation
14	Generator (2.5kVA or more)	1 set	Confirmation
15	Drill bit hexagon 19×800	5 units	Confirmation
16	Boring bar 1.0m	2 sets	Confirmation

Other recommended measuring equipment

-	Leak amount measure FLQ-2	1 set	Measuring leak amount
-	Chlorine check	1 set	Chlorine check kit
-	Faucet attachable pressure gauge SC-60	1 set	Water pressure check
-	Guzzler hand pump	1 set	Dewater pits



• JICA project

Tonga, Mongol, Syria, Philippines, Jordan, Sri Lanka, Laos, Cambodia, India, Solomon Islands, Vietnam, Guinea, Egypt, Brazil, Timor-Leste, Sudan, El Salvador, Bangladesh, Kuwait, Guatemala, Kenya, Indonesia, and more.

Specifications are subject to change without previous notice.



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