

Water Management Division

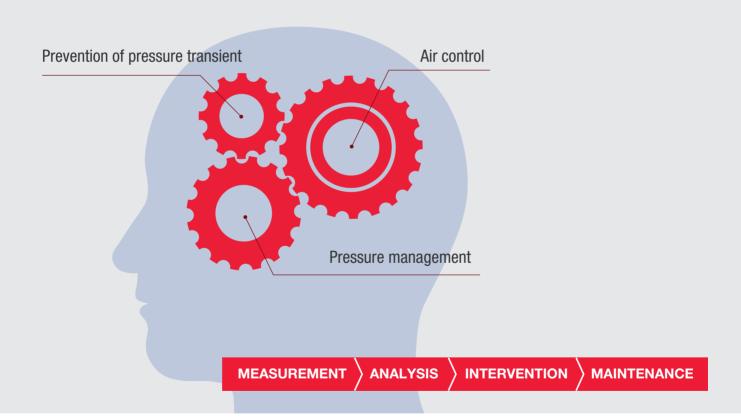


Water Management is the division of Hitachi Drives & Automation (Italy) srl dedicated to the preservation of water resources and energy saving.

Our mission is to provide a **complete service** for the efficiency of water distribution networks through the application of innovative and **customized solutions**. Our primary focus is the identification and elimination of the main causes of inefficiencies in water networks.

Through the integrated approach that considers both water loss control and the improvement of pumping systems to achieve energy saving, we are able to significantly increase network efficiency and assets duration with very competitive pay back periods.

Our methodology aims to significantly improve the water supply **network performance**. As an added value, we provide custom protocols for the **maintenance** and further improvement of the quality and efficiency achieved.



We approach to every network by addressing the **causes** that increase leakage frequency with the aim of **reducing water loss** permanently. To this purpose we focus on **pressure management**, **air control** and reduction of **pressure transients** with a particular attention to **energy efficiency**.

ENERGY EFFICIENCY Pumping station WATER LOSS CONTROL ENERGY SAVING PUMPING Energy Exchange Pressure STATIONS at motor shaft energy • Electric metering Hydraulic metering **Electric** Flow and Hydraulic ----- Plant efficiency **Power** pressure power • Operational analysis Air control **Kinetic** Water hammer analysis energy • Upgrading of Pumping Stations

NETWORK EFFICIENCY

Water supply networks





WATER SUPPLY NETWORKS

- Network Survey + GIS
- Hydraulic Metering
- Water Loss analysis
- Network Modeling
- District Metering
- Pressure Management
- Air Control
- Measurement of Pressure Transient
- Intervention Plan
- Network Management Software



LEAKAGE DETECTION

- Step test
- Electro-acoustic equipment
- Tracer gas

ECOLOGICAL SAVING

Year 2007

Year 2014 1.286 TOE*

*TOE = Tonne of oil equivalent



ECONOMIC SAVING



- Asset value
- Asset duration
- Management efficiency



- Electricity cost
- Operation and maintenance cost
- Litigations



WATER SAVING

- More water available
- Sustainable use of water
- Better adaptation to drought and climate change

