





## Case Study

## Keeping an efficient water flow in the mines, Portugal

In the mine in Portugal, a pipeline passes that conducts the material residue after the lead has been extracted in a liquid form. The line itself undergoes weekly rinsing with clean water. The material in its liquid state flows without problems in the line, when the material dries it looks like cement and actually hardens and creates sediments (lumps) that clog the systems.

The water flow is inefficient because the air valves that fitted to the mines (model A.R.I. D-26 in diameter 3", made of stainless steel) and the taps on the line are blocked by the sediment.

The concrete also crystallized on the gaskets and caused the valve to leak.



Aquestia's engineers believed that cleaning the line components from sediment and creating air pockets inside the valve to prevent the liquid from entering the sealing area by turning the air valves installed in the system into vacuum vents by changing the mechanism of the installed valve.

After a period of system operation, there was a considerable improvement in the function of the valves and no complaints were received about blockages and leaks.

The system's designers recommend continuing to implement the change in the field and maintain a routine maintenance regime.