

Mining Industry

The mining industry includes exploration, planning, extraction of raw minerals through open pit or underground mining techniques, processing and beneficiation. Mineral processing: The process of crushing, grinding, smelting, or refining minerals into final products for distribution.

The mining industry affects fresh water through water pollution through large amounts of water used in ore processing, mine wastewater discharges, and leaks from tailings and waste rock impoundments. Mining by its very nature consumes, diverts and severely pollutes water resources.

The NAWT quantum products can reuse water resources many times and reduce the discharge of industrial wastewater.



CASE STUDY



Coal Mining Company

Pain Points:

The water hardness of the production water in the gas drainage station is relatively high, and the pipelines and equipment are easily scaled, which affects the safe operation of the vacuum pump, pressure pump and ancillary facilities of the gas drainage station. Severe scaling and clogging of heat exchanger tubes often occur, making cleaning very difficult.



The blocked tube holes must be drilled through with a drill bit, soaked in chemicals, and then rinsed repeatedly using mechanical methods combined with high-pressure water guns. can be removed gradually. The cycle of clearing equipment is long and the labor intensity of workers is high.

Installation

Total installed 7 quantum collars

The usage location

Quantum collars:

4 vacuum pumps and 3 pressure pumps

Installed 1 quantum collar at each of the

7 pumps inlets



Effect of Use:

After nearly one year of operation, the cooling circulation system and water injection circulation system of the dilute oil station have achieved good results. The circulating water system can work normally under high hardness water conditions.

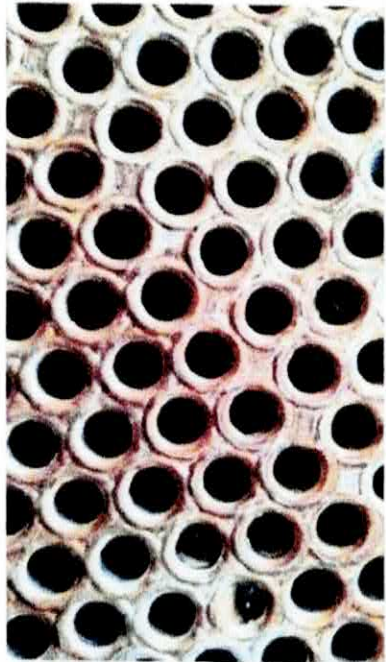
By comparing the scaling conditions before and after installing the quantum collar in the cooler of the dilute oil station and the operation of the water - injection motor, it can be seen that the quantum collars descaling, and anti-scaling effect is extremely obvious and its performance is excellent. It not only reduces energy consumption, reduces drainage and protects the environment, but also reduces the workload of manual cleaning and greatly extends the service life of the equipment.

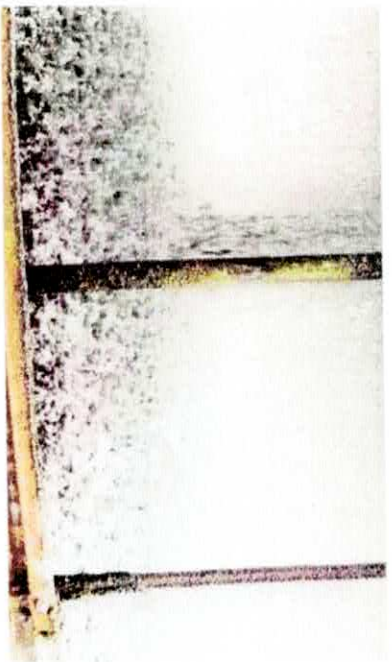
Before



After







Summarize

The NAWT quantum collar increases the concentration ratio of circulating water, allowing the equipment to operate normally in high hardness environments. The direct effect of descaling is to increase heat exchange efficiency and save energy. Reduce emissions, save water resources, and protect the environment.