



## ***The Details Are Spotty***

### ***Situation***

A Specialty Metals Manufacturer was experiencing product rejects due to dissolved solids in the cooling/cleaning water sprayed on the metal during the manufacturing process. The high level of dissolved minerals in the feed water left deposits on the metal causing it to no longer meet the strict specifications required of their finished product. Because this was one of the final steps in the manufacturing process, there was a significant cost incurred when the product was rejected.

### ***Action***

AWS analyzed the feed water and identified the specific contaminants causing the deposits. Deionizer Exchange tanks were used to provide a temporary pilot system and confirm that removing the dissolved minerals from the water would eliminate the deposits. Once the theory was proven, water samples were run on RO System Analysis software to confirm that treatment with reverse osmosis would meet the water quality requirements. A Reverse Osmosis system complete with pretreatment was then designed to replace the deionizer exchange tanks. Special consideration was required to fit the equipment within the available space. Controls were added to allow the customer's equipment to control the operation of the water treatment system. Point-of-use quality monitors were added to allow operators to confirm the treated water met the required specifications.

### ***Resolve***

By treating the cooling/cleaning water with reverse osmosis, deposits on the finished product have been eliminated resulting in no rejects and increased profits. Overall production has been increased and downtime eliminated. Positive feedback and increased orders from the customer's end users has increased as well.

Visit us at [www.allwatersystems.com](http://www.allwatersystems.com).