



CASE STUDY – PHARMACEUTICALS

DESCRIPTION OF BUSINESS

Leading biotechnology firm and manufacturer of pharmaceuticals

LOCATION

California, USA

CASE PARTNER

Confidential

SITUATION / PROBLEM

As the water crisis in California worsens, a leading manufacturer of pharmaceuticals for serious and life-threatening illnesses identified that they were experiencing rising water and sewage costs. This compelled them to explore new equipment and processes to increase efficiency levels within their operations.

In addition, the company's existing reverse osmosis system was producing high amounts of concentrate (waste) water. To meet California state requirements for sewage disposal and contamination limits, the customer was forced to blend the concentrate water with an estimated 30 million gallons of tap water a year in order to send it to the drain.

SOLUTION

To recover as much water as possible, **AXEON® engineered a single-pass, high-recovery Reverse Osmosis System with a capacity of 115 gallons per minute or 165,600 gallons per day.** The system featured automated PLC capabilities and was designed to communicate with the facility management systems. An industrial-size, clean-in-place system was also installed to process concentrate from the current RO system and repurpose the water to feed directly into the customer's cooling tower sumps.

EQUIPMENT INSTALLED

AXEON X1-7680 with PLC and CIP-160



X1-7680 with PLC

RESULT / CUSTOMER BENEFITS

The installation reduced an estimated 30 million gallons of water and sewage flow for an annual savings of \$132,000. The equipment also saved the company money by recovering concentrated waste water for reuse and reducing the amount of required municipal water to produce its products.



CIP-160

