

ARUBA PROMISES THE BEST WATER



Aruba is a Caribbean Island located eighteen miles off the coast of Venezuela. The Island is extremely arid, with no natural fresh water source available.

The Island is dependent on seawater desalination to meet its entire potable water requirements. An Island population of approximately 80,000 and a thriving tourist industry of over 100,000 visitors annually, demand a reliable supply of potable water.

The Problem

Existing Aqua-Chem ICD Multi-Stage Flash (MSF) units were producing nearly five million gallons of fresh water daily. The growing population and rapid 20-25% yearly increase in tourism required additional capacity. Technologies, other than MSF, had failed them in the past. They also needed the quickest delivery and installation possible for this turnkey project.

The Solution

In only fourteen months from date of sale, the fourth Aqua-Chem ICD MSF plant was delivered, erected, brought on line, performance tested and producing an additional 1.6 mgd of fresh water. A fifth identical plant was installed in 1991, followed by a sixth plant in 1992, under the same accelerated program. The Aqua-Chem ICD Aruba facility now produces nearly ten million gallons per day of fresh water.

The Aruba MSF plants use sulfuric acid to neutralize scale-forming elements in the seawater, which would otherwise scale the heat transfer surface due to the temperature at which the plants are operated. No post-distillate treatment is required. In fact, Aruba required the distillate water to be chlorine free. The high temperature operation of the Aqua-Chem ICD MSF plant produces a near sterile product water without the use of distillate post treatment.

The Results

Without question, the Island of Aruba has maintained its reputation for the best quality drinking water in all the Caribbean. Often referred to as the "champagne of waters" the excellent taste and reliable source provides security to Island tourists and residents alike.

Aqua-Chem ICD's rapid response and fast delivery has allowed Aruba to meet the increasing growth in both fresh water demand and power requirements. The 10 MGD Aruban installation is one of the largest in the Caribbean and guarantees quality water production for all the Island's needs. As evidence of the successful performance record of Aqua-Chem ICD with our customers, Aruba installed yet 2 additional Aqua-Chem ICD desalination plants in one 1995 and one in 1998.

PROJECT PROFILE SERIES #12

Flow Diagram

