

C A S E S T U D Y

Hotel Melia Las Dunas ★★★★★ Cayo Santa Maria, Cuba



OVERVIEW

The Hotel **Melia Las Dunas** has 925 rooms and suites. Fresh water arrives at the Hotel in a DN 200 steel pipe (8"). Water consumption daily average is 936 m³ (almost 250,000 US Gallons per day) with peak rates up to 190 m³/h (833 gpm).

WATER SYSTEM CHALLENGES

The domestic hot water for the site is produced by two sets of three boilers feeding four heat exchangers. Four solar hot water tank heaters are in the loop with plate heat exchangers and have an average recirculation flow of 8 m³/hr (35 gpm) in each loop.

Water is distributed on site by 2 large delivery loops.

SOLUTION

To deal with the main cold water supply and protect the large pipes, pumps and heat exchangers, a 4" **ION ScaleBuster® SB100** has been installed in each loop. To ensure a constant efficiency treatment regardless of the flow, the **ScaleBuster®** has been implemented in a specifically engineered system. All of the loops of domestic hot water are also equipped with **ScaleBuster®** conditioners, offering a permanent treatment for every part of the water system to prevent limestone deposits and corrosion of materials.

RESULTS

Upon installation, the rust in the main loop dissolved and the water supplied to the rooms was visibly clear (no rust, red or brown water). The hotel maintenance personnel got less complaints about scale problems (as clogged hot water taps). The hotel engineering manager had categorized the **ION ScaleBuster®** solution as a "big success".

ABOUT THE TECHNOLOGY

The patented **ScaleBuster®** technology completely replaces traditional chemical treatment; providing control of scale and corrosion in various water process systems to create an exceptionally clean system. This dramatically reduces energy and water consumption, while reducing or, in certain cases, eliminating toxic water discharge to the environment.