

CASE STUDY

Harrah's Casino, Summit View Lounge, Lake Tahoe, NV
Air Purification System - A.P.S.-1500



Circul-Aire's Filtration Technology Keeps Harrah's Casino Lounge Smoke Free



Harrah's Casino, Lake Tahoe

Major cities across the U.S. have banned cigarette smoking from bars and restaurants. To this effect, the owners of the restaurants concerned, have been forced to try to accommodate the smoking portion of their clientele. Nonsmokers are rejoicing, however smokers and nonsmokers can coexist, and a properly designed filtration system can mitigate gas and particulate emissions, while still meeting the intent of the local codes and regulations. In conjunction with Conservation Mechanical and Air Inc. of Reno, Nevada, Aspen Engineering and Circul-Aire designed an air filtration system to achieve a smoke free environment.

Bar and Restaurant Owners are Not at Risk of Losing Business Due to Government Regulations

Harrah's Casino Lounge has successfully achieved superior air quality without comprising its clientele or the law. The Summit View Lounge is located on the 16th floor of the hotel overlooking Lake Tahoe which offers fine wine and cigar bar. Harrah's management wanted to provide a pristine environment for its customers by installing a Circul-Aire Air Purification System. This task was successfully accomplished

by providing an environment that was also friendly to the nonsmoker.

The Circul-Aire Air Purification System (A.P.S.) was designed to remove both particulate and gas phase contaminants emitted by cigarette smoke. The objective was to supply the Summit View Lounge area with 12 ACH (air changes per hour) of 100% recirculated air to effectively remove ETS (Environmental Tobacco Smoke) from the immediate area while minimizing the effect of sidestream (second hand) smoke on the nonsmoker.

A.P.S.-1500 Designed to Remove Particulates and Gas Phase Contaminants

The Summit View Lounge was designed with two architectural doors that covered a closet where the A.P.S.-1500 systems could be installed. The



system was designed to provide 1000 CFM of recirculated air from either side of the bar area. This location was assumed to be the strongest point source of contaminants since most smokers tended to congregate around the bar area.

The ventilation strategy was to remove this multifaceted contaminant at the source whenever possible, so as to minimize the chance of cigarette smoke or odour reaching the nonsmoker. A control key pad was installed on the face of both Air Purification Systems (A.P.S.) to enable the bartender to increase or decrease the amount of filtration that was required based on the occupancy of the bar. This feature not only promotes energy conservation, but also prevents the chemical media life from being prematurely expended.

MULTI-MIX® Chemical Media Absorbs All Aromatic Vapours

Cigarette smoke is an extremely complex mixture of particulates and gas phase contaminants, and as such must be treated at various levels. The Air Purification Systems - A.P.S.-1500 units were designed to capture all particulates using a HEPA (High Efficiency Particulate Arrestance) filter at 95% efficiency, then through a two-stage media bank to remove all offending gases including carcinogenic matter released during the smoking process.

TECH-CHEK™ Service for Maintenance Monitoring

The maintenance of the A.P.S.-1500 Air Purification Systems has also been simplified with the TECH-CHEK™ Service supplied by Circul-Aire. With this exclusive service, media samples are tested in order to verify consumption rates.

This lifetime service is monitored by a computerized program from Circul-Aire that indicates the appropriate schedule for media replacement.

This customized service, supplied at no additional charge, not only provides a precise maintenance schedule, but also ensures the highest performance of the A.P.S.-1500 Air Purification Systems installed at the Summit View Lounge of Harrah's Casino.



Circul-Aire A.P.S.-1500 complete with control system at Harrah's Casino, Summit View Lounge

FOR MORE INFORMATION ON A SPECIFIC APPLICATION, PLEASE CONTACT YOUR LOCAL REPRESENTATIVE OR CIRCUL-AIRE.

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