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BRYGRAM Application Note

Bowling Alleys

Humidity Control for Bowling Alleys

Bowling is a popular indoor sport and is fast gaining popularity across gaming zones, malls, sports arena etc. Across the globe.Also, referred as Nine Pins and Skittle, Bowling Alleys with fast changing times have become highly sophisticated and technically advanced. The indoor sport has become completely automated with more focus on developing the technical skills.

Effects of Uncontrolled Humidity

Bowling is an extremely strenuous sport and even with the airconditioned environment bowlers tend to sweat profusely. The sweating of good number of bowlers at a given time and moist conditions may lead to common problems such as:

- Slippery floors leading to falls and injury
- Slippery hands/ gloves leading to slippage/ injuries and hygiene issues
- Mold growth leading to damage of the alley and furniture
- Bad odour due to continuous sweating

Causes of Uncontrolled Humidity

Modern state-of-the-art Bowling Alleys have a minimum of 6-10 lanes and handle at least 50 or more 'bowlers' at any given time. Since the bowling arena has a lot of transient human load, the sensible heat load has extreme peaks and valleys. Thus, while the sensible load fluctuates, the moisture loads, on the other hand, remain constant, because fresh moist air is brought in constantly. The conventional cooling system typically switches off after lowering the temperature causing moisture/ humidity to build up, resulting in mold growth which not only damages the furnishing and structure but also gives out odour. Moist air leads to excess sweating which further results to slippages and injuries.

General Recommendation

The Relative Humidity in the Bowling Alleys should be maintained at 30±5% at about 16 °C..

Bry-Air Solution

Bry-Air dehumidifiers are able to control moisture/ humidity levels and provide a conducive environment for bowlers to enjoy the sport. It also helps bring down the maintenance costs of the bowling alley owners.

Bry-Air has successfully installed dehumidifiers in bowling alleys across countries and provided the desired conditions of 16 °C with 30±5% RH.

