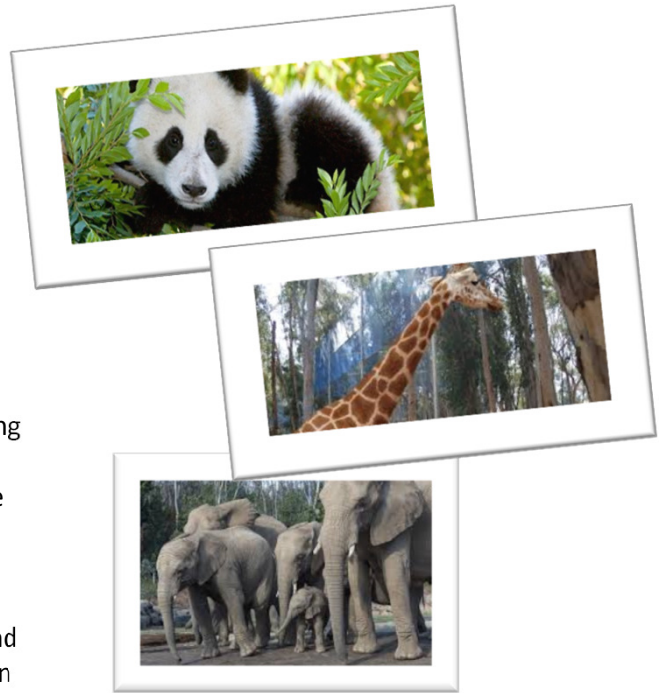


Conserving Our World

Can humans really talk to some animals? Where can you find a one-of-a-kind Frozen Zoo with over 8,000 living tissue samples? Will 16,000 plants and animals disappear from our earth as endangered species? 200 researchers at the San Diego Zoo's Beckman Institute for Conservation Research, located in Escondido California, are busy looking for the answers by applying the most innovative and creative science possible. The largest zoo-based multidisciplinary research facility in the world boasts the latest advances in science and technology to help rescue endangered species from the brink of extinction. Motivated by sustainability and conserving our world for future generations, the 50,000 square foot facility containing numerous laboratories, offices and an extensive library was designed to meet Silver-Level LEED certification standards from the US Green Building Council.



As part of a medical and science campus, the Beckman Center lies adjacent to the San Diego Zoo Safari Park's 1,800 acres of free-range enclosures and natural habitat exhibits for over 3,500 animals and 1.5 million botanical specimens. Natural environmental settings (as well as the 2 million zoo visitors annually) create vast amounts of airborne pollen, seeds, dust and dirt. The York air handlers, installed to remove and replace fresh air throughout the center, require plenty of air filtration with the help of multi-stage filter banks that utilize a dozen disposable MERV 8 (35%) extended surface pleated prefilters plus another set of final MERV 14 (90-95%) high capacity extended surface mini-pleat filters. The system's air intake louvers

and coils are built into the outside walls of the brick building. Along with fresh air, the air intakes drew in environmental dust and moisture, which in turn clogged and collapsed the disposable prefilters. Restricted air flow, HVAC system downtime, increased cleaning maintenance and frequent filter change outs were a costly problem. A quick fix with non-woven blue tackified polyester cut-to-size was tried, but didn't hold up well to outdoor climate, accumulated waste with frequent changes and looked terrible from visible public walkways.



Located at the base of the building, the air intakes are surrounded by botanical elements and fine dust from decomposed granite dirt covered public walk ways and animal enclosures.

Construction and maintenance lead for the facility, Jeff Wilson, worked with Mitch Arango of Total Filtration Services to find a sustainable air intake solution. PreVent® equipment protection air intake filters were custom sized and finished with a flexible edge and grommets to install easily onto the outside louvers with matched mount clips. The UV protected electrostatic polypropylene filter captures airborne dust and debris before it enters the system, allowing the filter banks to work efficiently at capturing fine particles. Facility maintenance removes the filter screens monthly, hoses them clean and quickly reinstalls them. Pleased with the results, the air handlers are running efficiently clean and maintenance has reduced filter bank disposable prefilters to quarterly change outs and final filters last 2 years.

A preventative maintenance solution, like PreVent equipment protection filters, is a very cost effective and sustainable way to keep equipment running clean and energy efficient in an effort to conserve our world for future generations. For more information on preventing clogged equipment air intakes, contact sales@permatron.com or 1-800-882-8012.