

AAF Multi Duty Oil Bath Filters Protects Electrical Components of the University

CASE STUDY - INDUSTRY

Customer Profile

- Location: Riyadh, Saudi Arabia
- One of the oldest universities in Riyadh, established in 1951
- It has established essentially as Islamic-Sharia institution offering a variety of study programs at several educational levels
- It currently has more than 24,000 students and 1,300 faculty

Filtration Situation

Riyadh, the capital of Saudi Arabia, is located on a desert plateau and having an altitude of 600m is exposed to dust storms several times a year. One of the oldest and well-known universities located in Riyadh was facing a lot of issues due to dust storms and sandstorms.

The mechanical floor of the university which has all the control units, firefighting units, air handling units was not functioning properly due to the huge volume of dust accumulated on the components. They wanted to protect the whole mechanical floor from dust which was affecting the electrical components.

The university was using fresh air louvers from a local brand which did not meet the expectations of protecting the equipment environment of the mechanical floor from heavy dust.

AAF International Solutions

The university requested the consultant for better air filtration solution. The consultant submitted many proposals from the industry. Team AAF took the customer to the medical centre where it has installed Multi Duty Oil Bath filters 30years ago in Riyadh. The Oil Bath filters were still efficient enough to trap and uphold the dust and provide the clean air despite being used for 30years. Both the consultant and the customer chose AAF over the competition with the case reference of a medical centre.

AAF experts analysed the risks of the mechanical floor from its surrounding environment and suggested to install AAF Multi Duty Oil Bath filters.

AAF Multi Duty Oil Bath filter is an automatic self-cleaning viscous air filter using a rotating curtain of metal panels and is useful in areas where there is high dust concentration. It uses a rotating curtain of metal panels as the filtering media, requiring little maintenance. This curtain is made of metallic panels that overlap and are coated with oil so they can retain the dust when the air is crossing it. The filtering surface will be in movement due to a drive solution. When the metallic panels are going back into the oil bath, the dust is separated and decanted.



Results

The client ordered 60 units of AAF Multi Duty Oil Bath filters of average size 2m x 3m to protect their mechanical floor. This coarse filter has an efficiency of more than 40% at 0.3micron.

After the installation of AAF Multi Duty Oil Bath filters, the lifecycle of the prefilters lifecycle in the Air Handling Unit (AHU) were doubled. The electrical components in the mechanical floor were functioning appropriately with the clean air provided. As expected, the client was satisfied with the air filtration solution provided by AAF and reordered the same filters for their new project too.



Bringing clean air to life®

AAF has a policy of continuous product research and improvement and reserves the right to change designs and specifications without notice.