PROJECT PROFILE

NOAA Southwest Fisheries Science Center

Project At a Glance

Location

San Diego, California

Situation

The NOAA Science Center had core building air handling units with inefficient belt-driven centrifugal fans that inflated monthly maintenance costs. Two stories underground, accessing the air handling units were difficult— making modularity a crucial requirement when finding a fan replacement.

Solution

Q-PAC, in partnership with Applied Mechanical Solutions and Vertical Systems, upgraded the AHU's with a Q-PAC Kitted Fan System. Using site visits and detailed design drawings, the team pre-engineered a simple and efficient installation solution.

Q-PAC's pre-engineered Kitted Fan System is an easy, retrofit solution for a hard-to-reach AHU.

Challenges

The NOAA critical research facilities constantly replaced and repaired the existing HVAC system's belts, VFDs, sheaves, AC motors, and bearings. The maintenance and upkeep became too costly and inefficient. Matthew Vogel, NOAA's facilities manager, decided to improve building operations by replacing the existing belt-driven centrifugal fans with a Q-PAC Kitted Fan System that could be tailored to the space, operate maintenance-free, and be reliable via redundancy.

Actions

Q-PAC teamed up with the mechanical contractor, Applied Mechanical Solutions, and our San Diego-based manufacturers' rep, Vertical Systems, to select and design a replacement system. Before installation, Q-PAC sent an engineer with detailed design drawings to San Diego to collaborate with Applied Mechanical Solutions-- ensuring the best solution was chosen. The essential components of the customizations remained; modularity, redundancy, efficiency, and security.

Results

Q-PAC's pre-engineered Kitted Fan System solution met the distinct needs of the critical laboratories and offices at the NOAA Southwest Fisheries Science Center. Q-PAC's Kitted Fan System was tailored to retrofit NOAA's outdated system and increase operational efficiencies. Seamlessly fitting NOAA's unique space, the modular design offers peace of mind and security through redundancy while reducing sound and noise within the environment.

Notable Highlights

- Reduced sound and noise
- Pre-engineered and pre-packaged
- Zero maintenance
- Modular design fitting unique space requirements