



387 Park Ave South - Cooling Tower Plant Upgrade

One of New York City's older high rise office buildings built in 1923, now has the added capacity to accommodate the demanding cooling loads of modern tenants, thanks in part to its upgraded cooling tower plant. EP Engineering designed and oversaw the construction of a new 800 Ton cooling tower with 75 HP VFD driven pumps for this 183,000 SF building. All this controlled with a sophisticated new building management system adjusting the system operation based on the actual outside conditions demands that previously could not be accommodated.

Challenges:

- For the project to be economically acceptable to ownership, the existing building structure needed to be reused without upgrades and the existing condenser water risers reused as well.
- The floor below the equipment room will be occupied by important ownership personnel and therefore required that special acoustical treatments be applied to the pumps, cooling towers and piping.

Achievements:

- In order to provide the best suited option for the owner, a feasibility study was performed and multiple different scenarios were thought out.
- To minimize the acoustical impact on the building and its surroundings, ultra quiet cooling tower fans were used, custom 4" spring isolators installed below the cooling tower and the pumps and piping were both isolated from the building.
- A state of the art BMS system was fitted to the system and now serves the building based on the actual demand on the system.

Location:

387 Park Ave South
New York, NY 10016

Project Size:

80 ton cooling tower
183,000 SF

