AIRSTAGE CASE STUDY



PROJECT:

Speedway Ford Showroom, Offices and Mechanic Shop

LOCATION

Griffin, GA

COMPLETION DATE

November, 2020

THE TEAM:

HVAC CONTRACTOR:

Blalock Heating and Air

HVAC DISTRIBUTOR:

Johnstone Supply

HVAC MANUFACTURER'S REP:

The Nixon Group

CAR DEALERSHIP GETS OVERHAUL

Speedway Ford is a car dealership located in Griffin, GA that Blalock Heating has been doing the service and install work on for years.

DESIGN CHALLENGE:

The original equipment was nearly 30 years old, there was one 10-ton and one 6-ton split system that serviced the showroom and offices. Both systems had fan/ coil units in the attic with straight a/c's outside and 200k BTU/h Reznor inline duct heaters. The cost to maintain and service the existing systems had become pretty expensive. In considering replacement options it became apparent that the logistics of trying to remove the existing equipment and replace it with new unitary product of the same



Six 24,000 BTU/h Grid-Fit Compact Cassettes were installed in the showroom.

size was going to be a task simply because of the size of the new and old equipment.

The job was completed in two stages, the first stage was the removal of the 16-tons of old unitary equipment that serviced the offices/conference room/ bathrooms/waiting area and showroom. In its place went 18tons of VRF, one 10-ton V-II to service the showroom via six 24k BTU/h ceiling cassettes, and one 8-ton V-II to service the offices/ bathrooms/conference room/ waiting area. That system has one 9k and one 12k BTU/h ceiling cassette for the offices, two 12k BTU/h ceiling cassettes for the showroom, and two 24k BTU/h medium static ducted units for the common areas. This stage of the install was done to help save money on energy bills and



CASE STUDY



24K Mid-Static Ducted Air Handler installed for the common areas of the dealership

improve the overall comfort and service of the building.

The second stage of the job was completed about 2 years later, 28-tons of V-II VRF were installed into the main mechanic shop area of the building. This area of the building wasn't ever conditioned with the exception of a couple of hanging heaters that didn't really do too much as far as heating the space. This stage of the job was completed with the intention of providing a climate controlled area for the mechanics to work.

WHY FUJITSU WAS CHOSEN

The physical size and flexibility of the Fujitsu equipment allowed the design team to utilize the existing mechanical space for all of the new equipment and it also allowed the dealership to add more storage area by using room that was previously taken up by equipment. Individual offices can now be climate controlled to each employee's needs and the customer is also able to more effectively combat the hot spots in the showroom by using the cassettes to control temps across the front wall that is all glass windows. The equipment and controls were able to be placed in areas that would far more effectively condition the space than before.

THE RESULTS:

All of the above, the ease of the install, the energy savings, the noise levels of the indoor/ outdoor units, the reliability of the systems, etc... Since the initial install the customer has noticed a savings of around \$2000.00/month on their gas bills throughout the heating season and an overall savings of around \$300.00-\$500.00/month on electricity. The savings on the electric bill can be a bit deceiving as 16-tons were removed from the original layout and 46-tons were installed including 28-tons that were never there before. Overall the customer is saving a great deal of money per year and they are more comfortable in the space than they have ever been.



Above ↑: 24K Mid-Static Ducted Air Handler installed for the common areas of the dealership

Below \downarrow : Six 24,000 BTU/h Grid-Fit Compact Cassettes were installed in the showroom.



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