

## CASE STUDY

# McAdams Junior High School

Dickinson, TX

### + Company

McAdams Junior High School, originally constructed in 1938, is part of the Dickinson Independent School District, and it is committed to provide quality instruction and the necessary resources to students so that they reach a high level of academic achievement through rigorous and relevant content ensuring students exceed state and national standards. In the April 2005 bond issue, a new \$31,095,699 junior high campus was approved which was the largest project approved by voters.

### + Challenge

The new school is designed to have all seventh graders on the first floor and all eighth graders on the second floor for academic classes. With the integration of technology in every classroom and computers used by students, the design engineers knew that extensive computer loads connected in the system would result in poor power quality and significant harmonics. The challenge was designing a system that would deliver power quality and by design, mitigate any potential harmonics generated by the electronic loads in the system.

### + Solution

PQI provided the best solution with the application of ultra-high efficiency e-Rated®, harmonic mitigating Distribution TransFilters™ in the system. PQI was also allowed to provide their expertise to the electrical system design which resulted in a value engineered solution for the school.



### + Impact

The application of PQI's ultra-high efficiency e-Rated®, harmonic mitigating Distribution TransFilters™ in the system resulted in an energy efficiency of 99.2%, an increase of 6.7% over the efficiency of the proposed K-1 transformers.

**POWER QUALITY INTERNATIONAL** is the industry leader in the development, design and manufacturing of harmonic mitigating and energy-efficient transformer technologies. With a passion for solving problems and helping customers achieve power quality and energy efficiency, PQI delivers cost-effective solutions that ensure power quality and energy efficiency for the life of their customers facilities.

