Education Case Study

Simple Energy Savings.

Wheeling University

Formerly Wheeling Jesuit University

WHEELING UNIVERSITY

In 2016, Wheeling Jesuit University College of Engineering utilized the Tune® Filter (originally named T7 EMI Facility Filter) for their EGR481 Capstone Engineering Project for their senior students. Aligning with their mission to examine new technologies, and due to the Tune®'s real-world application, students conducted a 14-month installation and measurement project in the 155,000 square foot McDonough Athletic Center as their "Pilot" building located on campus.

In putting the 11 Tune® Filters installed through the proper scientific method, they selected other buildings on campus to act as "Controls" to compare and establish measurable data during the 12 months after installation.

Data was collected and compared at 2, 4, 6, 9 and twelve months, resulting in a 12.5% KWh decrease in consumption and 10% increase in electrical savings. They expect this to continue to expand to other buildings across campus.

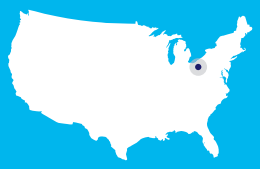
METHODOLOGY

- **Pre Installation preparation time** (2 months) and budget (minimal)
- **Choose a building** a candidate as the 'Pilot'
- **Choose buildings for comparison** as 'Control(s)'
- **Establish target minimum** required savings
- **Establish data collection** and validation processes
- **Schedule installation**
- **Monitor month to month results** for Pilot and Controls
- **Compare results** with the controls
- **Examine data** at 2, 4, 6, 9 and 12 months

DESCRIPTION

McDonough Athletic Center 155,000 sq ft complex with two gyms, pool, offices at Wheeling University

LOCATION / REGION



EQUIPMENT / SOLUTIONS

11 Tune® Filters installed across eleven sub panels.

RESULTS

12.5%

KWh DECREASE IN CONSUMPTION

10%

INCREASE IN SAVINGS ON ELECTRICAL

"It's an invaluable experience when our students can see such a **forward thinking technology** applied on campus. It shows the immediate need for future innovation."

Robert Yahn,
Wheeling University

CONCLUSIONS

- **After 12 months, the Pilot building electric KWh consumption** is down 12.5% and electric cost is down ~10%.

  (results for the 155,000 square-foot McDonough Athletic Center complex [two gymnasiums, pool, offices, etc.] and where eleven Tune® Filters were installed in the sub panels)

- **Control Buildings experienced increases** in KWh consumption and electric costs, during the same project period.
- **Ease of installation and low cost** make this an affordable long term consideration for public and commercial buildings since there is no electricity consumed and no annual maintenance on the Tune® Filter.
- **The Project is a success for WU** and expect to expand implementation of the Tune® Filter technology to other buildings on campus.

In busy educational applications, Tune® filters deliver robust energy savings.

tune®
Simple Energy Savings.

Save energy + Save electronics + Save resources = Save money

SUSTAINABILITY POWER
TOGETHER, LET'S HELP HEAL THE PLANET

An Authorized Distributor
www.SustainabilityPower.com