



CASE STUDY
P. 1 of 2
Hospital
Boiler Insulation

GEOGRAPHICAL AREA:
Southeast United States

ISSUE:

A large hospital customer needed a solution for boiler insulation to insulate for energy savings and temperature reduction

SOLUTION:

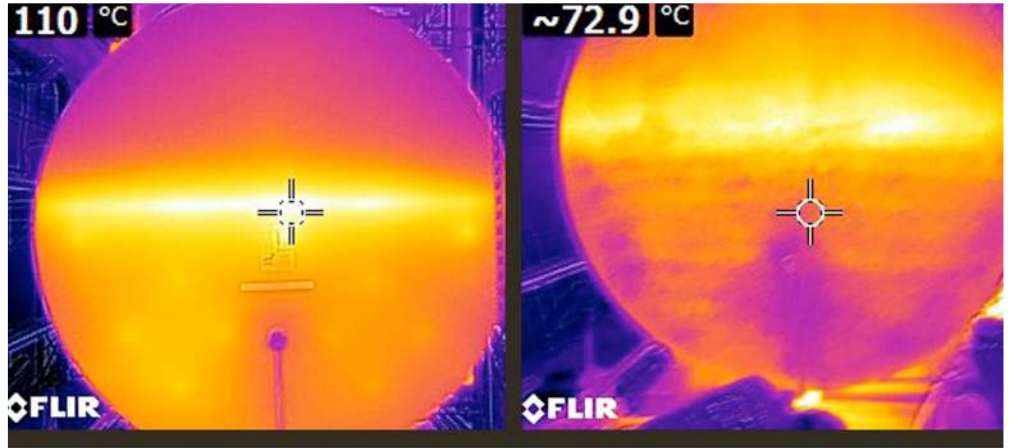
Heat Shield™ EPX-H2O thermal insulation & corrosion prevention coating.

Coverage: 4-coats, then 6-coats

RESULTS:

- ✓ Surface temperature reduction of -66.78F (-37.1C) at just 4-coats.
- ✓ 2 more coats (6-coats total) reduced the boiler even lower from 230F to 136F (safe touch)
- ✓ Lowered energy consumption.
- ✓ Reduced heat radiated from boiler into the surrounding area.
- ✓ Long lasting - 10+ years.

Award Winning Energy Saving and Asset Protection Coatings



UNCOATED BOILER
110C / 230F

HEAT SHIELD™ EPX
COATED BOILER - 4 COATS
72.9C / 163.22F

During a recent boiler trial at a large hospital in the southeastern US, Distributor Quantum Energy Services illustrated the power of the Heat Shield™ EPX-H2O with thermal imaging.

The application was performed in two steps, Day 1: 4-coats of the Heat Shield™ EPX-H2O; and Day 2: 2 more coats of EPX-H2O were added for a total of 6-coats. Just hours after each application the results were as follows:
(BTU estimates reference engineering calculations at Checalc.com).

| | BEFORE COATING | AFTER 4-COATS | DIFFERENCE |
|------------------------|-------------------|-------------------|---------------------------|
| Celsius Temperature | 110C | 72.9C | -37.1C |
| Fahrenheit Temperature | 230F | 163.22F | -66.78F |
| Heat Loss in BTU/h.ft2 | 347.36 BTU/hr.ft2 | 167.72 BTU/hr.ft2 | -179.64 BTU/hr.ft2 |
| | BEFORE COATING | AFTER 6-COATS | DIFFERENCE |
| Celsius Temperature | 110C | 57.8C | -52.2C |
| Fahrenheit Temperature | 230F | 136F | -94F |
| Heat Loss in BTU/h.ft2 | 347.36 BTU/hr.ft2 | 106.30 BTU/hr.ft2 | -241.06 BTU/hr.ft2 |



Infrared imaging during application. Top half of boiler had 4-coats and bottom half had 6-coats of Heat Shield EPX-H20. The temperature was reduced below safe touch to 136F.

Have you hugged your boiler today?
Distributor representative, Dewayne, showed just how cool the boiler surface became with EPX-H20.

