

RAW MATERIAL & INGREDIENT PROCESSING



Paper mill's power plant turns the page on a persistent problem



INSIGHT

DS Smith, a global manufacturer of sustainable corrugated packaging materials and specialty papers, operates a power plant in Porcari, Italy, that produces electricity for the power grid and steam for an adjacent paper mill.

The power plant was experiencing ongoing challenges with intermittent, high levels of iron corrosion particles in its steam generation system. This was negatively affecting its boilers as well as its productivity, profitability and overall operations.

INNOVATION

Enter Nalco Water's team of experts. They identified the source of the magnetite loss and implemented 3D TRASAR™ Technology to reduce iron oxides in the boiler water, which greatly reduced the risk of the plant being taken offline. It also led to reduced boiler water blowdown, erosion and corrosion, which lowered maintenance costs and cut water consumption, decreasing the plant's environmental impact.

TECHNOLOGY

- 3D TRASAR™ Technology for Boilers

eROISM

ANNUAL SAVINGS

WATER



14,430 m³

water saved — equivalent to the annual drinking water needs of more than

13,000 people

\$88,881

total water savings

ENERGY



4,330 tons

of steam saved

3 million

MJ of energy saved by reducing natural gas consumption

\$30,769

in natural gas savings

AIR



160 metric tons

of CO₂e

ASSETS



Extended equipment life through reductions in iron oxide release

Prevented erosion/corrosion that would require costly repairs

PRODUCTIVITY



\$3,692

in maintenance cost savings

100 hours

of reduced maintenance time

TOTAL COST SAVINGS

**\$123
THOUSAND
ANNUALLY**