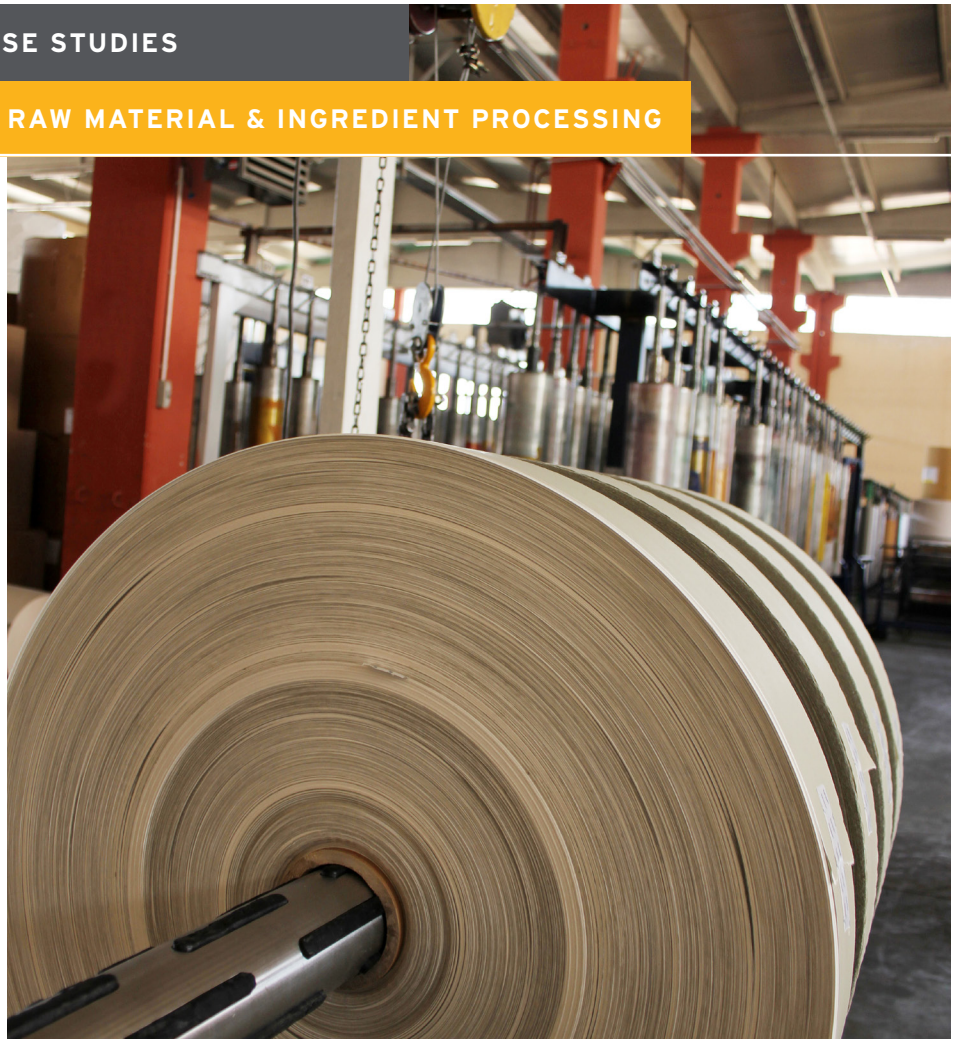
RAW MATERIAL & INGREDIENT PROCESSING



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

DS Smith

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**

eROI℠

ANNUAL SAVINGS

WATER

14,430 m^3
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 CO_2e

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

ECOLAB