

GENERAL INFORMATION

INDUSTRY

Energy and gas

MACHINE

Synchronous generator – 47 MVA

TECHNOLOGY USED

Infrared thermography

PROBLEM ENCOUNTERED

A preventive infrared thermography inspection programmed before a shut-down revealed a rising temperature level on the flexible coupling which conveys the gas from the turbine to the boiler.

Turbine

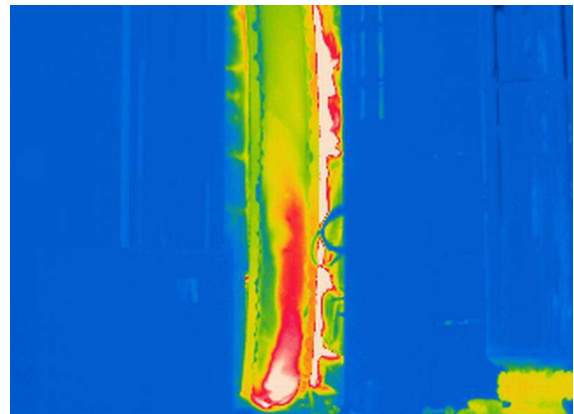


RESULTS OF ANALYSIS

DIAGNOSIS

Analysis of the data highlighted a non-uniform temperature distribution on the surface of the flexible coupling.

Infrared thermography image – abnormal wear on the coupling



EVALUATION

Serious

RECOMMENDATIONS

To inspect closely the coupling and evaluate the possibility of substituting it at the earliest programmed shutdown.

RESULTS OF ACTION TAKEN

RESULTS OF INSPECTION / CHECK UP

Subsequent test confirmed the presence of abnormal wear on the coupling.

Turbine coupling



AVOIDED OCCURENCE

Emergency shut-down of the plant and replacement of the coupling due to damage.

AVOIDED DOWNTIME

Data unavailable

COST BENEFIT OF LOST PRODUCTION AVOIDED

Data unavailable