



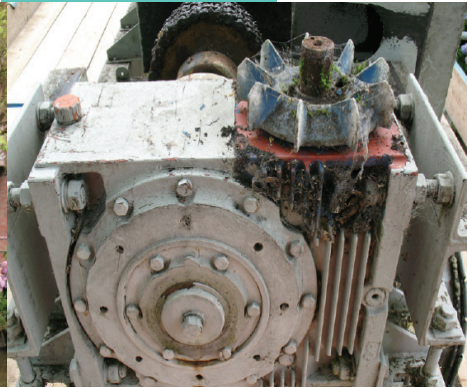
Engineering & Maintenance

Lucy's Mill Sluice Gate - Environment Agency

Before



During



After



“The Environment Agency personnel responsible for the asset were impressed”

- Colin Barker, Regional MEICA Engineer - Environment Agency



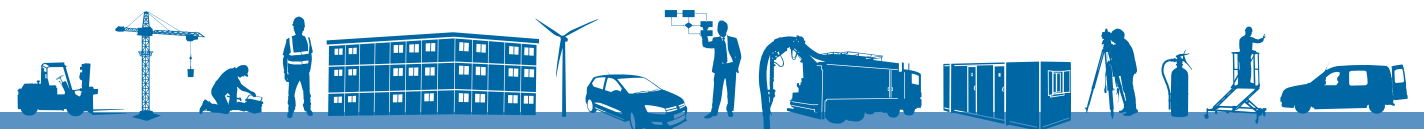
KEY OBJECTIVES

- To attend site immediately to diagnose the problem
- Install a pull lift system

Lucy's Mill Sluice Gate is an automatic flood control structure near Stratford Upon Avon. The gate was reported as inoperative which substantially increases the risk of flooding to the town centre and surrounding areas.

KEY RESULTS

- The gate was fully operational within a relatively short space of time



What do we need to do?

We were required to attend site immediately in conjunction with electrical contractors to diagnose the problem. The fault was found to be a failure of the mechanical gearbox mounted on the top of the structure. We were required to install a pull lift system to allow the gate to be lifted manually as heavy rainfall was forecast over the coming weekend.



How did we go about it?

Due to the location of the gearbox scaffolders were immediately contacted to install a working platform around the sluice gate. Once in place we removed the drive shafts and inspected the gearbox which was found to be totally seized. The gearbox was removed and transported back to our Derby workshop facility where it was completely stripped and inspected. All the internal bearings were found to be in a poor condition with one in particular being completely seized. Parts were sourced locally to reduce cost and help in returning the gate into full operation as soon as possible.

What was the result?

The gate was fully operational within a relatively short space of time with the customer very happy to be in control of the water levels on the River Avon.

What were the savings/value added?

On investigation of the fault we were able to identify that the gearbox was installed in the wrong position for its type. Although the position could not be altered we were able to advise a new preventative maintenance procedure to stop the fault re-occurring. Savings were made on the cost of parts sourcing locally rather than from the manufacturer.

What did the customer say?

"The Environment Agency personnel responsible for the asset were impressed at your efforts to repair Lucy's Mill Sluice and have it back up and running so quickly"

-Colin Barker Regional MEICA Engineer - Environment Agency