

# Heritage restoration

## Audley End sluice gates

Audley End House sluice gates were found in a very distressed condition with seized barrier sections, broken gearing, main-shaft seizure and severely restricted waterway relief.



Scaffolding and weather-proofing were erected over the site to comply with health and safety regulations.



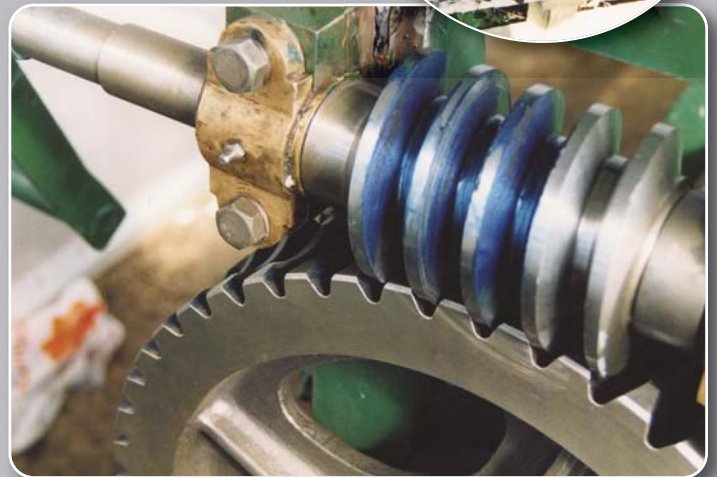
The removal of the top section of the sluice gates including gear components and downright supports.



The underside of the bridge showing the scaffolding in place ready for the removal of the sluice gate mechanism. A poorly executed third-party arc weld showing extensive cracking.



The original gearing proved to be badly damaged. New gears with improved ratios were manufactured and installed by Cast Iron Welding Services.





Re-fitted sluice gate section viewed from inside the bridge.

Re-fitted gearing, main-shaft and bearings. Note: the gates have been manually opened to a height of 5 meters with the aid of the newly fitted gear ratios.



Completed sluice gates with restored mechanism and guards.

The newly finished gates viewed from the river bank opposite.



## 1802 cast iron bridge supports

Restoration work to the bridge which dates back to 1802 required the repair of over 160 fractures using material identical to the parent metal.



The bridge was dismantled and the sections taken to our workshop. Each was stripped and inspected before restoration.