

## Case Study

**Service: Unloading Pretension Bolts**

**Location: British Museum,**

**Client: Lyons and Annot**

Working alongside Mace and the team that undertook the dismantling of TC2 tower crane used at the British Museum, Swantest were contracted to unload a series of pretension bolts. The work had to be undertaken over the weekend as a section of Montague Place had to be closed. One of the critical elements in the process was to ensure that the M56 and M48 pretension bolts which were holding down the crane were unloaded in time to allow the base to be removed. The fact that there was over 600kN of pretension load in the bolts meant that traditional methods of burning or cutting would have been far too dangerous as the bolts could shatter and cause injury. There was a detailed sequence of works to dismantle the crane and Swantest were integral in ensuring that the works were completed on schedule. Using a large set of our bolt tensioners we were able to load the bolts, in effect stretching them which allowed us to release the nuts and allow the crane base to be safely removed. Having a large array of hydraulic tools we were able to accommodate variations on the day.

Key to images:

1. Typical Pretension Bolt
2. General Image of part of the crane base
3. Swantest equipment used to unload the bolts
4. Successful removal of all bolts

*“Congratulations to all involved in the removal of TC2 and the Grillage. It goes to show that with a little planning things can be achieved. Please pass on my personal thanks to those who made it happen. Well Done.”*

Regards  
**Willie Shaw**  
 Operations Director  
 Mace Limited

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