



### **Weldon Stone – Bespoke IP54 Voltage Stabiliser for a dusty and high moisture environment**

Weldon Stone, established in 1977, is one of our region's leading stonemasons, specialising in restoration and conservation work.

As part of their ongoing improvements and expansion, they recently purchased a new high end stone cutting machine, but upon installation, they found that their incoming voltages exceeded the recommended levels for that equipment, causing the machine to trip out and malfunction.

Although the incoming voltages were just over the maximum Statutory Supply limit, the DNO (Distribution Network Operator) said that they were within specification and thus could not offer any solution, so Weldon Stone asked their electrical contractor if they could find a solution.

The contractor asked Watford Control if we could offer a solution, to which we said, of course!

The client's voltages peaked up to 443V (256V phase to neutral) and this was outside of the safe operating range of the equipment, causing it to trip out and report a fault.

In addition, solving the solution meant that our stabiliser had to operate in a working environment that was wet and dusty, and, to complicate matters further, the contractor also requested that we design and fabricate a special glanding chamber to facilitate the connection of some SWA (Steel Wire Armoured) cables, which could not be easily rerouted, these had to be in an exact position at the back of the stabiliser.

Rising to the challenge, Watford Control engineers designed a bespoke IP54 enclosure, (manufactured on site at our Corby factory), to handle the dust and moisture generated in the workshop, along with the special cable entry points to facilitate ease of installation.

Watford Control delivered the 25kVA unit with a +/-15% correction range, within 2 weeks, and the new stone cutting system is now functioning perfectly.

This project underscores our commitment to providing bespoke solutions for complex electrical challenges for over 75 years. By delivering this tailored stabiliser, not only did we resolve the client's immediate issue, but we also enhanced the operational efficiency and longevity of their machinery.

We invite you to contact us at Watford Control for innovative, reliable solutions to your electrical needs, ensuring your business operates smoothly and efficiently.