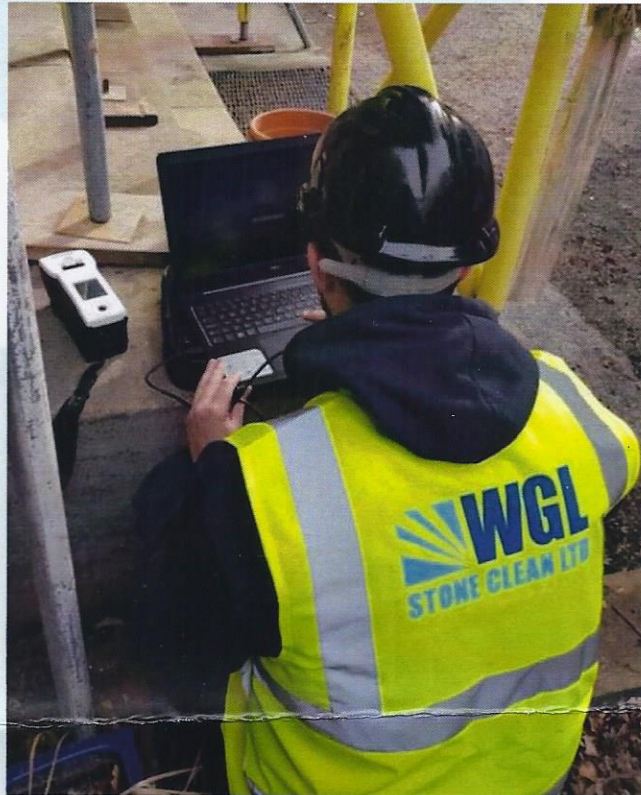


WGL STONE CLEAN LTD



Electronic Repair-Mortar Matching – ‘ERM’

In the last 15 years WGL Stoneclean Ltd has developed an enviable reputation for innovation and originality in the conservation of older buildings. Like most other companies involved in the repairing of brick and stonework we have used a reputable lime-based mortar and then matched the colour of the repair essentially by “eye”. As our people developed experience with natural mortar pigments we could achieve a fairly good match to the original stone colours. A good colour match can save the client significant sums of money as indenting a new piece of stone is a long, complex and normally unsatisfactorily process as the new stone colour is some distance away from the original stone or brick colour. We also realised that the whole colour matching process could sometimes take several days as we were obliged to wait for the repair mortar to dry out before we could be certain of a good colour match.

As a result of a chance encounter with a leading member of Leeds University we were introduced to the Department of Polymer and Colour Chemistry who advised us that colour matching of powders with modern technology should be possible. The technology is now common for the matching of liquids, be they paint or ink or plastic or even dyestuffs used in the textile industry. No one, up to now had adapted the technology to use with powdered pigments and mortars. Over the last few years we slowly developed, with assistance both from the University and the leading manufacturer of Spectrographs a database that has allowed us to use the technology on mortars. By adapting the software, that can handle up to 250 million different colour shades, we now have a database that will handle all masonry colours. We simply point a spectrographic scanner at the masonry and the software will give us the recipe of pigments we should use to match the colour. The process can take seconds. For a large project we would of course try a small sample but we are now confident that we can offer the technology to the marketplace for general use. A properly prepared, professionally mixed and installed repair mortar now colour matched will look indistinguishable from the original masonry work.