Concrete Testing

Testing the external surfaces of a concrete water storage tank will allow renovation decisions to be made in time, before more serious problems develop and require expensive remediations to be carried out.

Concrete structures deteriorate over time, due to several common factors.

1. Design issues, poor workmanship and inferior/unsuitable materials used during the construction phase
2. Carbonation of the external concrete surfaces, which reduces the alkalinity and then affects the ability of the reinforcing steel to remain passive
3. Chloride uptake of the concrete, caused by either backfilling with unsuitable materials or the initial concrete mix having a high chloride content
4. Shallow reinforcing steel cover, whereby the above carbonation and chloride issues will affect the structural strength of the concrete quicker than anticipated.
5. Insufficient amounts of reinforcing steel, causing Thermal Cracking due to heating on the outside and cool water on the inside