

Pharmaceutical Industry

CASE STUDY

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Key Facts

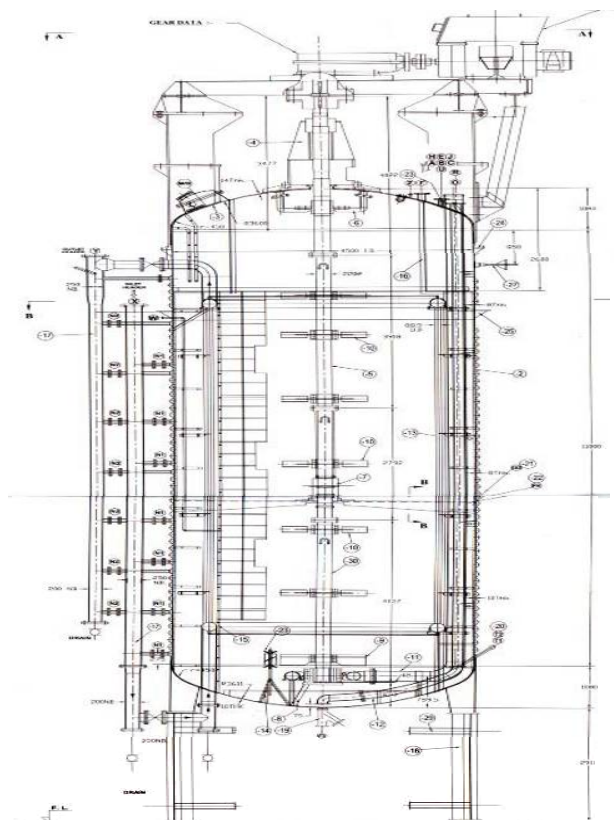
Sector	Pharmaceutical Industry
Category	Root Cause Investigation and RLA of Fermentor

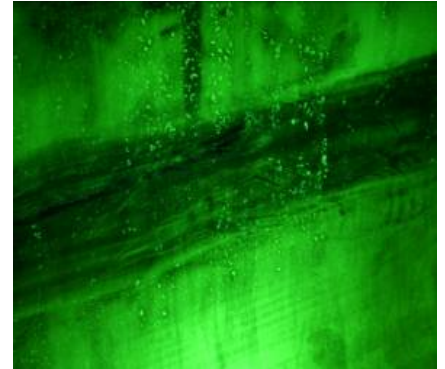
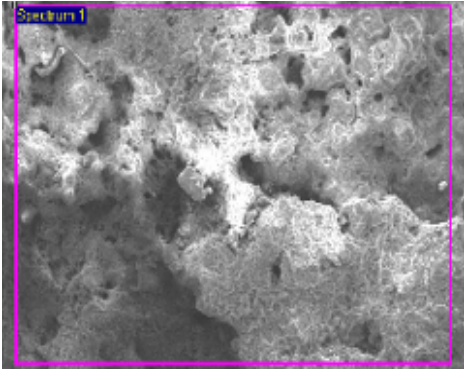
Problem

- The Fermentor had been in long use. Of late, a leakage problem had started and repair works needed to be undertaken since 2002.
- Leakages in form of minor leaks from the shell wall of the Fermentor and from weld and HAZ regions of the heating coil as well were observed.
- The frequencies of leakages had been increased since couple of months in terms of contamination in the batch.

Diagnosis

- The internal wall of Fermentor is free from any micro cracks and pitting damage. The nature of leakage is through Stress Corrosion cracking which is established after the destructive analysis of coil and in situ-metallography of another Fermentor leakage region.
- The SCC damage can be correlated with termite and it can be seen at different level as the origin could be at the different levels and its effect can be experienced at different plane.
- The life of the Fermentor can be kept limited by the number and frequency of leakage observed from a particular Fermentor as it has economic implications vis-à-vis repairing and non-productive days.





Solution/Recommendations

- A Systematic cooling water treatment and chilled water treatment needs to be worked out to ensure chloride free water.

Contact Us

If you are interested to learn more about TCR Advanced,
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