



Conservation of steam systems with ODACON

To protect against corrosion, active metal surfaces need to be continually neutralised.

ODACON® differs from other methods in so far as it has an inhibiting action and forms a protective coating, thus providing long-term protection. It is in addition simple and economical to use (see fig. 2).

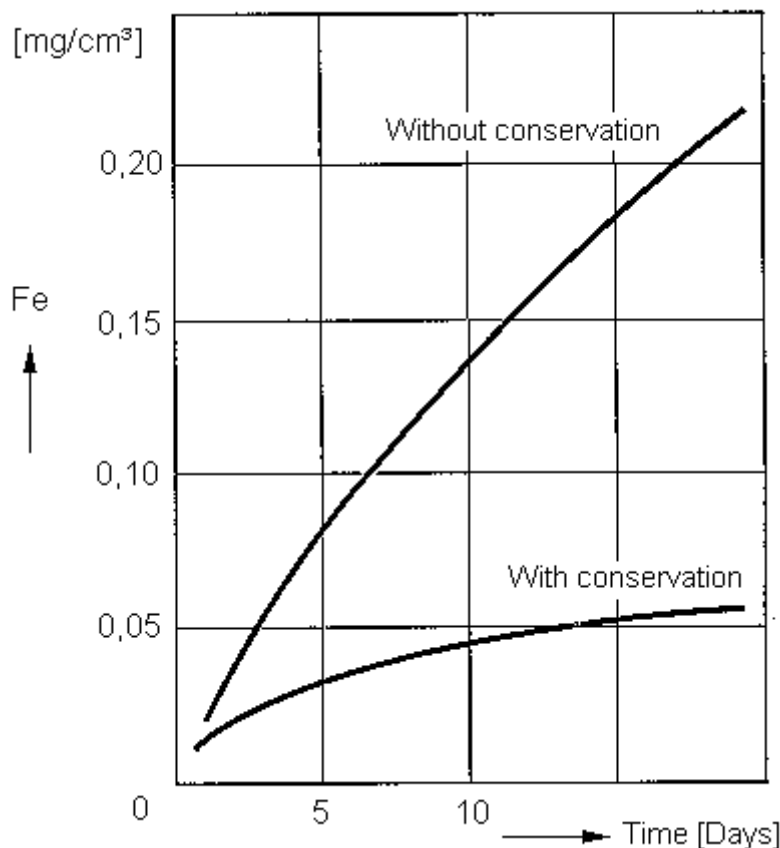


Fig. 2: Corrosion losses in boiler tubes during downtime

Action:

Adding the interfacial surfactant ODACON® to the medium (feedwater, circuit water etc.), results in the formation of a homogenous protective film on metal surfaces whether the system is operating, shutting down or idle.

When added, ODACON® creates a diffusion inhibitor which prevents direct contact between the material and the liquid containing corrosive substances.

The water-repellent qualities of a protected material are immediately apparent (see fig. 3).

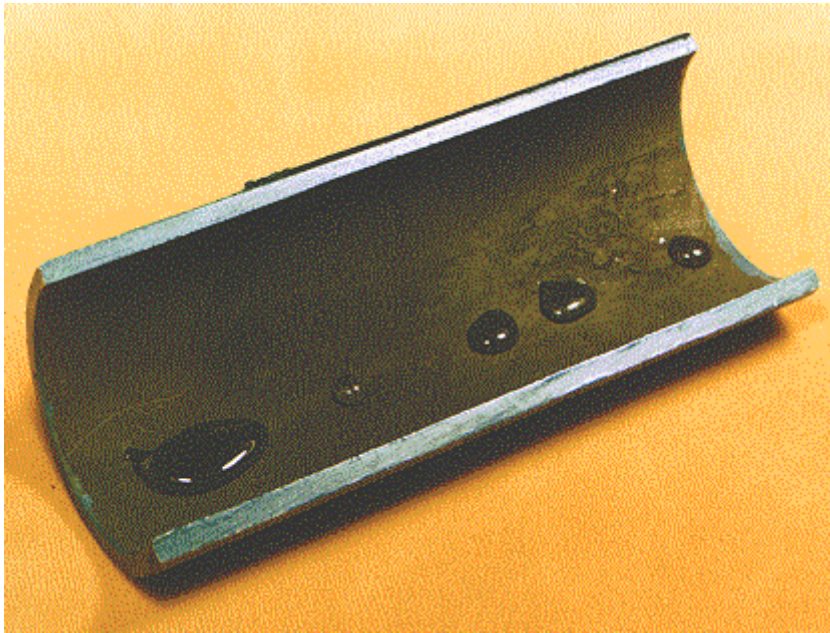


Fig. 3: water-repellent qualities after conservation

The corrosion protective action of the surfactant is characterised by an electrochemically determined protection level.

Analysis of boiler pipes operating at various pressures gave the following protection levels:

- *protection level without conservation* 50 ... 55 %
- *protection level with conservation* 96 ... 99 %

The conservation chemical is a standard non-toxic product which is added to the medium as an emulsion.

The technology is applicable in practically all industries, for instance:

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|-----------------------------|----------------------------|--------------------------------------|
| - <i>power industry</i> | - <i>heating systems</i> | - <i>building materials industry</i> |
| - <i>shipbuilding</i> | - <i>brewing</i> | - <i>plant engineering</i> |
| - <i>paper industry</i> | - <i>chemical industry</i> | - <i>pipeline construction</i> |
| - <i>engine manufacture</i> | | |

as well as in *domestic heating systems*.

Conservation, when combined with *conditioning* by ODACON® is particularly effective and economical.

The chemicals are compatible with almost all common materials and have no negative effect on condensate purification plants or the environment.

Benefits:

- protection for entire systems or individual components
- extends component and pipe system lifetime by more than 50% compared with untreated materials
- simplifies repair works during shutdowns
- its protective action lasts for several months, whether systems are filled, half-filled or drained, additional doses or special drying are not required
- conservation can be carried out during operation or shut-down, thus saving time
- system can be started up immediately
- no pre-startup de-conservation needed
- low technical and financial outlay, no special training required
- ODACON® is easy to dose which can be done on-site