

Residual life of small steam boilers

Drain the well dry

■ Minimise (unforeseen) stoppages

Imagine what would happen if your boiler stopped unexpectedly. Would you still be able to meet your production schedule? Maybe, but you would probably have to call in your supplier for emergency repairs at expensive emergency rates. And in the meantime your equipment needs a shut-down. Worse still, if the stoppage proves fatal, you will be forced to make unforeseen investments that could affect your company's cash flow and profit margins.

■ Minimal maintenance, maximum return

You may be servicing your boiler too frequently in an effort to avoid unexpected standstills. Or you may be depreciating your investment over a shorter period, so as to replace it before this is strictly necessary. It's a matter of playing safe. A much better alternative would be an optimal inspection and maintenance plan that helps you reduce stoppages to a minimum. It offers maximum reliability for the minimum cost in maintenance, yet offers a constant guarantee of safety and environmental friendliness. Your investment gives a longer return: a well-conceived maintenance schedule will increase the residual life of your steam boiler appreciably.

■ Study based on residual life assessment

The basis for an optimal maintenance plan is a residual life assessment of the critical components in your steam boiler. Laborelec can make this assessment on small steam boilers up to 300MW. Our study leads to an optimal plan for the maintenance, inspection and replacement of critical components.





Total service, from listing to optimal plan of action

■ Laborelec offers a total approach:

- Collation of design and operating data.
- Identification of critical points.
- Choice of the most effective Non-Destructive Investigation Technique (NDT), or development of a newly designed NDT technique.
- Performance of NDT tests and assessment of the results.
- An accurate calculation of the residual life. We have developed our own software program to make these calculations, efficiently and accurately.
- Drafting of a plan of action for inspections, maintenance and component replacements. This plan is designed to give maximum reliability at minimum cost.

■ The most appropriate technique at all times

From the accessibility of critical components, the level of degradation, and the design and operating data, our Laborelec experts can tell exactly which NDT tests are best suited to a proper residual life computation. The tests investigate corrosion, creep and thermal fatigue, and make use of:

Surface techniques

- Magnetoscopy
- X-rays
- Metallographic structural investigation using replicas

Alternative automated depth techniques

- Ultrasound
- Eddy currents

■ Even custom-designed tests

As and when needed, we can also design special new NDT techniques either internally at Laborelec or in co-operation with one of our professional partners. Obviously, these new techniques are extensively tested and validated before we apply them at your company.

We will think along with you to maximise the reliability of your steam boilers and keep maintenance costs to a minimum.



Five reasons for you to choose Laborelec:

- you have one-stop shopping for your energy needs;
- you get access to more than 40 years of experience;
- you get rapid service with reliable solutions;
- you increase the profitability of your installations;
- you benefit from independent and confidential advice.

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