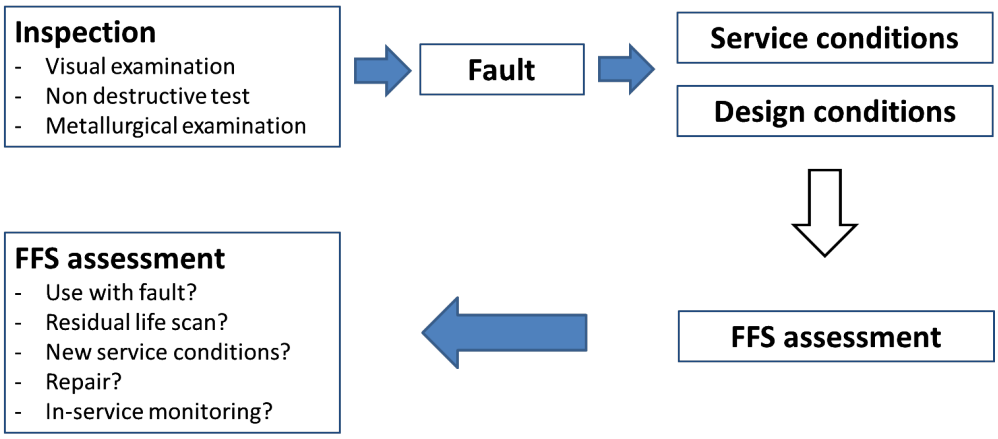
Fitness for service

In an increasingly competitive market, an industrial operator needs an optimum level of reliability and safety to meet modern economic and environmental challenges. This is why, for over 140 years, Vinçotte has been carrying out pressurised equipment inspections for a great many industrialists. In some cases, the inspections lead to detecting faults requiring repairs often in a rush and which extend the equipment's shut down period.

Your tailor-made solution

In order to offer other alternatives to its customers, Vinçotte has complemented its expertise by Fitness For Service assessments. A Fitness For Service assessment done by Vinçotte can be represented by the following illustration:



Applying an inspection program originating for example from a Risk-Based Inspection study may show up degradation mechanisms that you need to know about to ensure the reliability and safety of the equipment used by the operator.
For this, Vinçotte makes a huge range of non destructive tests available to its customers which enable the majority of degradation mechanisms commonly encountered in modern industry to be detected. The non destructive tests carried out by Vinçotte are performed by qualified inspectors based on qualified procedures.
In addition to visual inspection and non destructive tests, Vinçotte can complement its appraisal by metallographic tests, hardness measurements and sample spectral analysis in order to detect the origin of the degradation mechanism affecting the component.
At the operator's request, Vinçotte can carry out destructive tests on samples to complete information on the component's structural integrity.
On the basis of service conditions, design conditions and measurement of faults identified, the Vinçotte engineers can carry out an assessment of the structural integrity of the component affected by the degradation mechanism.
The assessments carried out by Vinçotte clearly provide an answer to the following question: can the equipment be used reliably and in total safety? If yes, Vinçotte recommends an appropriate inspection program to its customers so they can monitor the development of the degradation. If no, Vinçotte suggests new service variations to the user enabling him an immediate restoration of service. If the new service conditions do not meet production requirements, Vinçotte can make welding engineers, welding inspectors and non destructive test inspectors available to the operator in order to ensure quality monitoring of the repair.
For degradation mechanisms such as creep and corrosion for example, the assessment of structural integrity can be complemented by a residual life assessment enabling the user to plan his investments in terms of maintenance.
Vinçotte carries out a single report detailing all the results of the various inspection techniques chosen in collaboration with the user.

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The global report is complemented by a series of recommendations on repairs and/or modifications, on new service conditions if necessary and on future inspections to be planned in order to optimise the reliability and safety of equipment operated by the user.

Your result

- avoiding repair of pressurised equipment which generally causes the planned duration of a stoppage to be exceeded
- better knowledge of the equipment's structural integrity
- better safety level of the equipment
- better reliability level of the equipment
- better synergy between different inspection techniques
- increased credibility, among others with the authorities, by intervention of a neutral, independent party and international reputation.

Please note

Normes et standards

Vinçotte engineers and inspectors carry out their missions based on internationally recognised industry standards:

- American codes: API 510, API 570, API 573, API 574, API 575, API 579-1/ASME FFS-1, API 580, API 581, API 653, ASME B31.G
- European codes: Fitnet (under construction), BS 7910, EN 12952-4,..
  Vinçotte's inspection services are also approved by various national authorities to carry out regulatory inspections and assess the inspection programs for pressurised equipment.

In which situation?

Vinçotte's Fitness For Service services are intended for:

- chemical industries
- petrochemical industries
- pharmaceutical industries
- metallurgical industries
- electricity producers
- transporters of natural gas and other products
- …

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