



# EPERC Newsletter

European Pressure Equipment  
Research Council

Number: 9

May 12<sup>th</sup>, 2021

## Work in progress

This year the Task Groups of EPERC, despite the sanitary situation, have restarted their activity: **on January 22<sup>nd</sup> TG 1 (Fatigue) has made its first telematic meeting**, while **on January 25<sup>th</sup> the newly born TG 12 (Recertification of existing pressure equipment) has made its first meeting**, always using the Microsoft Teams<sup>®</sup> platform. The reports of these meetings are freely available on our web site at the following links:

<https://www.eperc-aisbl.eu/wp-content/uploads/PDF/TG/EPERC%20TG%201%20FATIGUE%20Minutes%20Teams%20Meeting%2020210122.pdf>

[https://www.eperc-aisbl.eu/wp-content/uploads/PDF/Milan%20jan%202021/2021-01-25\\_Minutes-TG12-PE%20Recertif-Rev%200-AT.pdf](https://www.eperc-aisbl.eu/wp-content/uploads/PDF/Milan%20jan%202021/2021-01-25_Minutes-TG12-PE%20Recertif-Rev%200-AT.pdf)

while EPERC members can see and download all the presentations in the restricted area. We are now planning a meeting of **TG 7 (Fitness for service)** and a meeting of **TG 3 (Flange leak tightness)**: the relevant agendas and dates will soon be placed on the web site.

In the restricted area we have also placed two important documents presented at the **last meeting of CENTC54/WG53/SG Design Criteria**, chaired by our Mr. **Guy Baylac**, to which also our Mr. **Claude Faidy** was called to participate. This could be the start of a close **collaboration between EPERC and WG53**, with the intention to come to a **further development of Clause 18** (Detailed Fatigue Assessment) of EN 13445.3. Note that EPERC, if needed, is able to **promote research projects** on this subject, like it was done many times in the past: in fact a **joint venture among the interested EPERC members** may be eligible for a **financial support of the European Commission**.

## New EPERC web site

Our web site **has been recently completely rearranged** with a more modern appearance. In the restricted area EPERC members can now find also **further presentations made during preceding meetings**, such as the Seminar on Pressure Vessel Integrity and Fatigue failures (Gand, 2016). We are

planning to use the web site in order to give to members and non-members all the information which could be interesting for the European Pressure Equipment industry.

## International telematic conference

Having in mind the success of the Rome conference of April 2019, we are considering the **possibility of organizing a similar conference before the end of this year, or at the beginning of 2022**. Of course the actual restrictions to travels caused by the Covid 19 don't give us the possibility to organize a physical conference: therefore we are thinking, as we have already made with the Task Group meetings, to organize also the conference using Microsoft Teams<sup>®</sup>. On the one hand there is an advantage for all the participants, that can follow the conference remaining in their office, therefore with a considerable saving of time and money; on the other hand there is the **problem of the different time zones**, because we cannot count on the contemporary presence (as it was in Rome) of experts coming from USA, Japan, China and Korea. Of course it is possible to organize two or three different sessions by recording the interventions of the experts: but in this way the discussion on each single intervention becomes impossible. We are in any case studying the problem, looking also at the other organizations (such as ASME and HTRI) which this year have already scheduled their annual conferences in telematic form.

## European Seminar on Fitness for Service

In the first meeting of TG12 we have realized that **the problem of recertification of existing Pressure equipment is only an aspect of the more general problem of fitness for service**: in fitness for service there are many aspects that are covered in other TGs: **Fatigue, Alternatives to Hydrotest and Creep** are all topics that must be considered in dealing with operation of pressure equipment, and of course also in the **evaluation of their residual life**. The problem is complicated by the fact that **the Pressure Equipment Directive covers only the construction of pressure equipment, and doesn't contain prescriptions for service**. Therefore the idea of organizing before the end of the year, at least at European level, a **telematic seminar on Fitness for Service**, could contribute to

the development of new standards, and possibly also of new legislative provisions related to this subject. The opinion of members and non-members will be very much appreciated.

### Working Group Pressure

EPERC has recently been admitted as Observer in the Commission's Working Group Pressure, which automatically involves participation in the Working Party Guidelines for all matters concerning European legislation on Pressure Equipment. Our delegate to these important committees will be our Vice chairman Mr. Andrea Tonti of INAIL. We wish to Andrea a successful participation in the future work of WGP/WPG, and we thank the European Commission for this important recognition granted to our association.

### News from CEN

On April 28<sup>th</sup> there has been the plenary meeting of TC54, always organized in telematic form. Many questions have been raised in this meeting concerning the **substantial stop of many important amendments of EN 13445**, the European Unfired Pressure Vessel standard, also in order to understand what could be the future of this important standard, whose **revision was expected in 2019, however still missing at the beginning of 2021**. Working Group 53 (Design and Calculations) is **still waiting for the update of many important clauses of Part 3**, first of all the new **Clause 18 (Detailed Fatigue Assessment)**; but important revisions are to be expected also on Clause 9 (**Reinforcement of Openings**), Annex A (**Weld details**) and Clause 16 (**Non Pressure Loads**): all these work items (on which the work was started more than 3 years ago) have already been submitted to the Public Enquiry, which has approved them with comments; **all the comments coming from the Public Enquiry have now been processed**, as well as the comments of the so called **HAS Consultant** (the expert charged by the Commission to check compliance of all the new pressure equipment standards with the Essential Safety Requirements of the Pressure Equipment Directive). We wish to remind that, according to the CEN rules, after the Public Enquiry all accepted comments are to be automatically included in the new draft standards or draft amendments, while **the TC has to supply a justification to explain the reasons why a specific comment has not been accepted**. After that, the Formal Vote will take place, and the new standard or amendment will be finally accepted. However this procedure undergoes **a slight modification when a comment is made by the HAS Consultant** and the TC doesn't accept his comment: in this case **an agreement must absolutely be found, otherwise the standard will lose the so called "Presumption of Conformity"** with the Directive. Well, probably the

main reason for the delay of the 2019 (now 2021) Edition of the standard was **a comment of the HAS Consultant on a Clause of Part 3 for which higher nominal design stresses were provided for austenitic stainless steels** with a rupture elongation **"greater or equal" to 35%**, while the text of the Directive simply said **"greater"**. Stupid problem? Not at all: in fact **there are a lot of austenitic stainless steel specifications where the rupture elongation is exactly 35%**, and therefore acceptance of the comment would have caused a substantial decrease of the nominal design stress of many austenitic steels, with a consequent increase of thicknesses and weights of the vessels made of these materials, and **a loss of competitiveness of EN 13445.3** in respect of other important standards. Discussions on the problem took place at many different levels, until **the problem was finally solved with the presentation of a document** showing that the degree of safety guaranteed by the standard was practically the same required by the Directive (in reality, the matter was a little bit more complicated, but it would take too much space in order to give you all the details of the discussion). Coming back to the **amendments of the other clauses, practically for them the only missing step is the Formal Vote**: which however **cannot take place before the publication of the new 2021 Edition** of the standard. In the TC54 meeting new rules have been provided for the CEN approval procedures to be used for the future amendments: there are however many possible alternatives. A final decision has still to be made by the **CCMC (Cen Cenelec Management Centre)**. In any case it seems that for **all the outstanding amendments a special procedure will be followed: they will be merged into a single amendment** to be sent to the Formal Vote just after the publication of the Edition 2021 of EN 13445, which is expected in the third week of May. This in any case means that these important revisions of part 3 of the standard will be published only at the beginning of next year.

The general e-mail address of EPERC AISBL is: [info@eperc-aisbl.eu](mailto:info@eperc-aisbl.eu)

There are various topics concerning Pressure Equipment for which suitable technical solutions have not yet been found, and for which discussions among the experts are therefore needed. Please check carefully which one of these topics is important for your professional career: pay attention to the costs that new ideas and new rules could reduce, get in contact with your colleagues and evaluate the possibility of joining EPERC, either as a company or at least as individuals. All the BOD members are ready to answer your questions and to clarify your doubts.

BOD Members:  
Fernando Lidonnicci (Chairman)  
Guy Baylac (Convenor of TG1)  
Crescenzo Di Fratta (Convenor of TG2)  
Claude Faidy (Convenor of TG4 and TG7)  
Andrea Tonti (Convenor of TG 12)