BUSINESS PLAN

CEN/TC 210
GRP TANKS AND VESSELS

EXECUTIVE SUMMARY

Business Environment

This technical committee CEN/TC 210 has the task to prepare standards for glass fibre reinforced thermosetting resin (GRP) tanks and vessels for fluids. These standards include the:

- specification conditions and acceptance conditions for raw materials in terms of both material technical properties and the manufacturing process,
- chemical resistance properties,
- mechanical, thermal and design properties to ensure that the tank or vessel will be able to meet its design requirements, particularly in terms of its chemical/thermal resistance and pressure and load supporting requirements,
- delivery, handling and installation conditions and recommendations for maintenance.

Parties involved are:
- (GRP) tanks and vessels manufacturers
- (GRP) tanks and vessels using industry
  End users.

Benefits

European standards for GRP tanks and vessels for determining a common European level of safety, efficiency and life cycle of such GRP tanks or vessels will benefit the sector as a whole. GRP tanks and vessels are in principle involved the Pressure Equipment Directive 2014/68/EU (PED).

These European Directives specify Essential Safety Requirements (ESR's) which are dealt with in detailed requirements layed down in harmonised European Standards.

Priorities

The priorities have been:
- to develop European product Standards to meet the requirements of Directive 2014/68/EU (PED)
- to prepare performance standards for the tank or vessel design, calculation and manufacture being applicable to specific (chemical) industries.

1 BUSINESS ENVIRONMENT OF THE CEN/TC

1.1 Description of the Business Environment

The following political, economic, technical, regulatory, legal, societal and/or international dynamics describe the business environment of the industry sector, products, materials, disciplines or practices related to the scope of this CEN/TC, and they may significantly influence how the relevant standards development processes are conducted and the content of the resulting standards:

The work of CEN/TC 210 concerns the task of establishing European Standards for tanks and vessels made of glass fibre reinforced plastics (GRP) in order to

- fulfill the essential safety requirements set up by the Pressure Equipment Directive (2014/68/EU);
- contribute to the prevention of accidents when processing aggressive media.

1.2 Quantitative Indicators of the Business Environment

The following list of quantitative indicators describes the business environment in order to provide adequate information to support actions of the CEN /TC:

- No market information received from CEN/TC 210 member bodies; no data available.
- The demand for tanks and vessels of non-corrosive materials for use in the chemical.
- Processing industry is increasing due to stricter environment regulations.

2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC

- Preparation of harmonized European Standards to support the European Directives PED as referenced above.
- Removal of barriers to trade in Europe and opening of the market throughout all EU member countries by replacing their national standards and rules with these European Standards.
- Determination of high level of quality for these GRP tanks and vessels by setting certain performance requirements as a minimum.

3 PARTICIPATION IN THE CEN/TC

All the CEN national members are entitled to nominate delegates to CEN Technical Committees and experts to Working Groups, ensuring a balance of all interested parties. Participation as observers of recognized European or international organizations is also possible under certain conditions. To participate in the activities of this CEN/TC, please contact the national standards organization in your country.

4 OBJECTIVES OF THE CEN/TC AND STRATEGIES FOR THEIR ACHIEVEMENT

4.1 Defined objectives of the CEN/TC

There is evidence that the applied industries have a need for tanks or vessels of non-corrosive materials for use in the chemical processing industry.

The design and manufacture of GRP tanks and vessels involve a number of different materials such as resins, plastics and reinforcing fibres and a number of different manufacturing methods. It is implicit that tanks and vessels conforming to the European Standards established by CEN/TC 210 should be made only by manufacturers and operators who are competent and suitably equipped to fulfil all requirements, using materials manufactured by competent and experienced material manufacturers.

The objectives of CEN/TC 210 to fulfill these needs are in the preparation of European Standards

1) determining the terminology and the basic requirements for materials, chemical resistance, design and construction, testing, marking, transport, installation and maintenance;

2) giving presumption of conformity with the essential safety requirements (ESR's) of the EC Directives PED;

3) for the use of GRP tanks and vessels showing fitness of use in process industries (chemical, fuels, water, ...).

4.2 Identified strategies to achieve the CEN/TC's defined objectives

CEN/TC 210's only task is to revise "EN 13121-1:2003 GRP tanks and vessels for use above ground - Part 1: Raw materials; Specification conditions and acceptance conditions" without allocating it to a working group.

If needed in the future, appropriate working group(s) could be created for the maintenance of existing standards:

- GRP tanks and vessels for use above ground (Raw materials, Design, calculation and workmanship, chemical resistance, Product delivery, installation and maintenance)

- Above ground portable water storage tanks

- Filament wound pressure vessels

- Underground GRP-tanks for non-pressure storage of liquids (Requirements and test methods for horizontal cylindrical underground tanks for petroleum based fuels, Installation, storage and handling).

Liaisons have been established between CEN/TC 210 and the following CEN Technical Committees:

- CEN/TC 54 Unfired pressure vessels
- CEN/TC 221 Metallic shop fabricated tanks
- CEN/TC 249 Plastics / SC 2 Composits, reinforcements, prepregs
- CEN/TC 267 Industrial piping and pipelines

4.3 Environmental aspects

The environmental aspects at all stages of the life-cycles of the tanks or vessels shall be considered in the preparation of European Standards to avoid potential environmental impacts.

To fulfill these needs the CEN/TC 210 shall insert an item "Environmental aspects" in the meeting agenda at all levels to regularly review the environmental strategy and actions as a procedure for systematically assessing relevant product environmental aspects.

As a tool an environmental checklist based on the CEN guide 4 for addressing environmental issues in product standards, shall be attached to drafts during all stages of the development of the standards and shall be updated regularly to permit the identification of the product life-cycle stages at which relevant aspects are found, and where provisions could be included in the product standards. This checklist shall also be used to check whether a published standard should be revised or not, notably if there are environmental reasons to revise the standard.

5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC WORK PROGRAMME

To fulfill the ESR's of the EC Directives PED and CPD referenced above in an acceptable time the CEN Management Centre (CMC) has set a certain pressure also on CEN/TC 210 to complete their open work items as soon as possible. Also CEN/TC 210 has to take note that the resources of experts are decreasing. Therefore, it becomes necessary to make further efforts to satisfy these requests with high priority.

signed:
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