

**BUSINESS PLAN**  
**CEN/TC 148**  
**CONTINUOUS HANDLING EQUIPMENT AND SYSTEMS - SAFETY**

**EXECUTIVE SUMMARY**

**Business environment**

- European industry in this sector represents approximately more than 1000 Enterprises with 160.000 employees and turnover of 45 billions € (2009)
- Parties involved:
  - Manufacturers of handling equipment
  - Integrators of handling equipment into construction equipment, building material machine, manufacturing machine
  - Industry users in automotive, airport sector, construction, food, logistic...
  - Health and safety authorities
  - Governmental institutions
  - Labour organizations
  - Testing laboratories

**Benefits**

To define or actuate the necessary standards to be used to perform the desired level of safety and commercial interoperability in Europe, considering its very significant position in the international market.

- Confidence of users in respect of security, quality and ergonomics
- European harmonization of machinery safety requirements for this sector and partly with regard to electromagnetic compatibility
- Free circulation of continuous handling equipment in the EC
- Reduction of international trade barriers as far as possible by:
  - Reference to International Standards
  - Preparation of new standards and revision of existing standards in parallel with the relevant ISO/TC under the Vienna Agreement
  - Transfer of European standards to the ISO level using the procedures of the Vienna Agreement

**Priorities**

To make European standards available related to:

- Continuous handling equipment

## **1 BUSINESS ENVIRONMENT OF THE CEN/TC 148**

### **1.1 Description of the Business Environment**

In the field of continuous handling equipment technology, i.e. equipment which is continuously moving by nature since it is meant to ensure the physical flow of products – and considering the great number of users, the FEM (Fédération Européenne de la Manutention) has developed safety rules for the design, installation and assembly stages as early as 1960s.

This “pre-standardization” work served as a basis for the work of ISO/TC 101 and proved equally useful as “reference material” to elaborate the first CEN standards in CEN/TC 148.

The importance of the European material handling equipment industry and the importance of the sector’s international trade justify the standardization of safety rules applicable to the design of these products to ensure their free movements. Many sectors of industry are involved in continuous handling equipment as, logistic, food, printing, construction, airport equipments,

In 2009 the continuous handling sector was hardly impacted by the economic crisis. Nevertheless, in this unfortunate context it was decided to start simple amendments on standards relevant on CEN/TC 148 to maintain their presumption of conformity to the new Machinery Directive 2006/42/CE. This was the prelude for their next revision, to bring the standards in full agreement with the state of the art.

Work on standards about construction equipment and building material machines have also started in 2010 and produce many comments to be considered about safety guards, means of acces, etc.

### **1.2 Quantitative Indicators of the Business Environment**

Material handling technology is an essential component through the production process for material industry.

According to data from FEM (13 country members), continuous handling equipment In Europe represents:

- more than 1000 companies
- 160000 employees
- More than 45 billion € of turnover

## **2 BENEFITS EXPECTED FROM THE WORK OF THE CEN/TC 148**

Standards elaborated by CEN/TC 148 are candidates for Harmonized European Standards to support and specify general European legislation in respect to machine safety and partly with regard to EMC (electromagnetic compatibility). CEN/TC 148 provides European Standards candidate for harmonization that enables a free circulation of continuous handling equipment in the European Union.

These Standards specify a high level of safety which result in a reduction of accidents and the related costs for health and safety at work.

Furthermore the standards will facilitate a reasonable reduction of the multiplicity of different safety-related technical solutions and the cost saving resulting could be extended.

As a contribution to the reduction of international trade barriers CEN/TC 148 follows as far as possible the following principles:

- reference to International Standards prepared by ISO/TC101 and relevant other Committees;
- preparation of new standards and revision of existing standards in parallel

### 3 PARTICIPATION IN THE CEN/TC 148

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.

Some liaisons are to be considered with other CEN/TCs e.g. CEN/TC 149 "power-operated warehouse equipment, CEN/TC 151 "Construction equipment and building material machines – Safety", CEN/TC 188 "conveyor belts" CEN/TC 196 "Machines for underground mines – Safety", CEN/TC 250 "Eurocodes", CEN/TC 274 "Aircraft ground support equipment", ISO/TC 82 "mining".

### 4 OBJECTIVES OF THE CEN/TC 148 AND STRATEGIES FOR THEIR ACHIEVEMENT

#### 4.1 Defined objectives of the CEN/TC 148

The main objective of CEN/TC 148 is to adapt existing standards on continuous handling equipment in accordance to the Machinery Directive 2006/42/CE by taking account of the state of the art. Each standard is intended to be harmonized it means: It will address the essential requirements listed to the Machinery Directive, by specifying requirements/measures for reducing significantly/eliminating the risks associated with the hazards relevant to the product(s) covered by the standard. Once a standard is published in JOUE, it can be used for claiming "presumption of conformity" to the Machinery Directive with the relevant ESRs of the Directive.

Some features should be considering in the existing standards regarding specific sectors of industry for example conveyors in automotive industry, baggage carousels and check-in conveyors, opencast mining equipments,... A new standard should be developed for safety of cash-desks as requested by the European Commission.

#### 4.2 Identified strategies to achieve the CEN/TC 148s defined objectives.

Continuous handling, which includes handling of (bulk or powder) materials and/or unit loads along a predetermined path, includes clearly distinct technological sectors.

Five working groups were created to cover these sectors, each of them in charge of developing a specific standard:

Groups	Titles	Standards
TC148/WG 1	Safety requirements for continuous mechanical handling equipment for belt conveyors for bulk materials	EN 620
TC148/WG 2	Safety requirements for continuous mechanical handling equipment for unit loads only	EN 619
TC148/WG 3	Safety requirements for continuous mechanical handling equipment for bulk materials excluding fixed belt conveyors	EN 618
TC148/WG 4	Safety requirements for storage equipment and systems for bulk materials	EN 617
TC148/WG 5	Safety requirements for pneumatic handling equipment and systems for bulk materials	EN 741

This organization is proposed to be confirmed for the next step to start a complete revision of these standards.

Only two working groups (WG 1 & WG 2) are maintained active in order to revise EN 620 and EN 619, the other working groups are disbanded by decisions during the plenary meeting in 2015. New working groups will be created later after the works ongoing in order to revise the other standards relevant to CEN/TC 148.

A new WG6 was created in 2013 for safety of cash-desks. The work on this document is pending, waiting for more experts.

All types of machine dealt with in these 5 working groups of course have a common core, which require proper liaison between the groups. To ensure the necessary and efficient liaison the following measures have to be taken:

- Common experts in the groups
- Regular TC meetings to report about progress and difficulties
- If necessary an "harmonization" working group could be set up

#### **4.3 Environmental aspects**

Environnemental aspects of products dealt within CEN/TC 148 have not been considered yet. A review of the key environnemental issues should be conducted in a near future, in order to give appropriate guidance on how they could be addressed. The products covered by the TC are potentially in the Scope of the Directive ErP.

## **5 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE CEN/TC 148 WORK PROGRAMME**

The most important factor causing delays in the delivery of standards is lack of consensus caused by differing national regulations or attitudes towards the subject of study. Divergence of opinions between the technical experts and the CEN consultants on the way to address ESRs sometimes happens is another reason.

Interest in a project is not necessarily maintained throughout the development process and low attendance at some WG meetings could indicate that although membership may be balanced, it might not be representative. There is always the danger that a small group of experts could produce a document, which is voted against by bodies, which did not assist in its development. Often the solution to any of these risk factors that may arise is not in the hands of the committee.

Falling interest in a project can be fuelled by slow progress so it is in the interests of the committee to keep work going at a steady pace while attempting to address all points of view. However it is still possible that external factors over which we have no control, can influence progress.