



## STRATEGIC BUSINESS PLAN – ISO/TC 101

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### Executive summary

The market for continuous mechanical handling equipment covers all equipment that is used for mechanical handling of material (bulk or unit loads) in order to provide a continuous material flow. It does not include Cranes and other lifting devices, industrial trucks shuttles in racking and shelving and storage/retrieval equipment.

Economic stagnation respectively slight recessions of various industrial countries in Europe and Asia have significantly affected the export rates of the main exporting countries – Germany followed by USA and Japan.

The accumulated export rates of all European countries are dominating the world export in the field of continuous conveyors by more than 50%.

### **Realised and/or expected benefits from the work of the ISO/TC 101:**

- The savings associated with harmonised dimensions of spare parts are significant for suppliers of conveying systems and for users.
- Standardised design and calculation methods will make comparison of quotations much easier for the investing industry. Furthermore, it will increase confidence in reliability and safety of material handling equipment.
- Uniform across the world standards are to be considered an important part of quality assurance systems.
- Legislators are provided with tools to apply standardizes principles to health and safety.
- With the reopening of this TC, it is important to develop standards in the field of continuous handling systems for a worldwide acceptance.

### Introduction

#### 1.1 ISO technical committees and business planning

The extension of formal business planning to ISO Technical Committees (ISO/TCs) is an important measure which forms part of a major review of business. The aim is to align the ISO work program with expressed business environment needs and trends and to allow ISO/TCs to prioritize among different projects, to identify the benefits expected from the availability of International Standards, and to ensure adequate resources for projects throughout their development.

## 1.2 International standardization and the role of ISO

The foremost aim of international standardization is to facilitate the exchange of goods and services through the elimination of technical barriers to trade.

Three bodies are responsible for the planning, development and adoption of International Standards: [ISO](#) (International Organization for Standardization) is responsible for all sectors excluding Electrotechnical, which is the responsibility of [IEC](#) (International Electrotechnical Committee), and most of the Telecommunications Technologies, which are largely the responsibility of [ITU](#) (International Telecommunication Union).

ISO is a legal association, the members of which are the National Standards Bodies (NSBs) of some 164 countries (organizations representing social and economic interests at the international level), supported by a Central Secretariat based in Geneva, Switzerland.

The principal deliverable of ISO is the [International Standard](#).

An International Standard embodies the essential principles of global openness and transparency, consensus and technical coherence. These are safeguarded through its development in an ISO Technical Committee (ISO/TC), representative of all interested parties, supported by a public comment phase (the ISO Technical Enquiry). ISO and its [Technical Committees](#) are also able to offer the ISO Technical Specification (ISO/TS), the ISO Public Available Specification (ISO/PAS) and the ISO Technical Report (ISO/TR) as solutions to market needs. These ISO products represent lower levels of consensus and have therefore not the same status as an International Standard.

ISO also offers the International Workshop Agreement (IWA) as a deliverable which aims to bridge the gap between the activities of consortia and the formal process of standardization represented by ISO and its national members. An important distinction is that the IWA is developed by ISO workshops and fora, comprising only participants with direct interest, and so it is not accorded the status of an International Standard.

## Business Environment of the ISO/TC

### 1.3 Description of the Business Environment

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

The market for continuous mechanical handling equipment covers all equipment that is used for mechanical handling of material (bulk or unit loads) in order to provide a continuous material flow. It does not include Cranes and other lifting devices, industrial trucks, shuttles in racking and shelving and storage/retrieval equipment.

Predominantly continuous mechanical handling equipment is to be considered as important components of complex facilities and must be specifically designed for each purpose. Only few equipment may be manufactured as series product (e.g. band-conveyors at the cashier of supermarkets).

The market of continuous handling equipment is very heterogeneous. Some of the main customers are as follows:

- Mining industries
- Iron & Steel industries
- Cement industries
- Powerstations
- Automobile industries
- Ports of transshipment
- Food & beverage industries
- Airports
- Postal services and other distribution services
- Waste & recycle handling industries
- Warehousing
- E-commerce fulfillment center
- etc.

The markets of continuous mechanical handling equipment is dependent on the economic situation of the world's industrial countries since conveying systems are typical capital goods that go in line with huge investments e.g. new facilities, works etc. The concentration in large parts of the industry, e.g. mining, automobile, etc. may lead to an increasing influence on various regulations concerning design, calculation, safety requirements etc. for this kind of equipment

The elaborated standards are widely accepted and the need for additional standards is not evident. Thus, the industry is very reluctant to participate in new work items.

#### **1.4 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 ISO/TC:

Band- and belt conveyors in general have a market share of almost 40% (e.g. lignite conveying systems in open cast mining's or luggage transport systems at airports etc). Other bulk material conveyors, such as chain-conveyors, screw- conveyors, bucket-elevators come up to market share of 15-20%. The same rate as for typical continuous conveyors for unit loads, such as overhead chain conveyors, roller and wheel conveyors, electrically powered monorails. In addition to these main kinds of continuous handling equipment some pneumatic and hydraulic conveyors as well as some very specific conveying systems - such as ship un-/loading systems, pallet conveyors, sorting and distribution systems – are worthwhile to mention.

#### **Benefits expected from the work of the ISO/TC**

- The savings associated with harmonised dimensions of spare parts are significant for suppliers of conveying systems and for users.
- Standardised design and calculation methods will make comparison of quotations much easier for the investing industry. Furthermore, it will increase confidence in reliability and safety of materials handling equipment.
- Legislators are provided with tools to apply standardised principles to health and safety.

#### **Representation and participation in the ISO/TC**

## **1.5 Membership**

### **Countries/ISO member bodies that are P and O members of the ISO committee**

## **1.6 Analysis of the participation**

Currently the main countries, who are P-members, coming from Europe. With the reopening of this TC, this situation could be changed in future. Nevertheless, many countries in the world uses harmonised European Standards, either fully adopted or only partial, in this field due to the high safety level through compliance with the European Machinery legislation.

## **Objectives of the ISO/TC and strategies for their achievement**

### **1.7 Defined objectives of the ISO/TC**

The TC will further develop the existing package of international standards in the field of continuous conveyors. For example, the existing European harmonised standards could be used as a basis for these standards.

### **1.8 Identified strategies to achieve the ISO/TC's defined objectives**

European harmonised standards could be used as a basis for developing an ISO-standard. This could be done via Vienna agreement. First, it should be identified the commons and the differences between the European standards and other national standards to get an ISO-standard. The results should be implemented in a Technical Report in which the European Standards (e.g. EN 619 / EN 620) are compared with other standards as a basis for an ISO Standard.

## **Factors affecting completion and implementation of the ISO/TC work programme**

- a) It is anticipated that the Technical Committee will act as a supervisor of the sub-committees' work and as a policy setting body for the future. The positions of the Chairman and Secretary of the Technical Committee are currently held by Germany.
- b) The degree of active participation of member bodies.
- c) The degree of all participants' efforts to enhance mutual understanding.
- d) Regional directives should not be a controlling factor for consideration/implementation of an ISO/TC 101 work project.

## **Structure, current projects and publications of the ISO/TC**

### **Information on ISO online**

The link below is to the TC's page on ISO's website:

**[ISO TC 101 on ISO Online](#)**

Click on the tabs and links on this page to find the following information:

- About (Secretariat, Committee Manager, Chair, Date of creation, Scope, etc.)
- Contact details
- Structure (Subcommittees and working groups)
- Liaisons
- Meetings
- Tools
- Work programme (published standards and standards under development)

## **Reference information**

[Glossary of terms and abbreviations used in ISO/TC Business Plans](#)

[General information on the principles of ISO's technical work](#)