



## **BUSINESS PLAN**

### **ISO/TC 148 Sewing machines**

#### **EXECUTIVE SUMMARY**

Industrial sewing machines and garment machines as well are mainly produced in Asia, but the main export nations of industrial sewing and garment machines are Japan, China and Germany, followed by Taiwan, Italy and the United States. The total exports of industrial sewing and garment machines in 2003 mount up to 4,3 Mrd. EUR.

A peculiarity of industrial sewing machines is that sewing units and systems are frequently built up by the user from components emanating from various manufacturers. Furthermore, in the course of their period of use, units and systems may be adapted by the user for different tasks (owing to, for example, frequent changes in fashion) by means of the interchange of components or the addition of supplementary equipment. Such measures can also serve the purpose of increasing the degree of automation. As a result, the user who assembles several components into a new sewing unit or system is in the position of a manufacturer and thus, like the manufacturer, is responsible for assuring that any hazards inherent in the operation of the new combination are eliminated, and that it conforms to an International Standard by this technical committee and any other relevant standards or regulation.

The main object of ISO/TC 148 is to define a common global level of safety of industrial sewing machines. The current international standard is intended to provide manufacturers, users and official bodies with safety requirements which, in view of the state of the art, are to be met for industrial sewing machines, units and systems.

## 1 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 programme 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 140 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 offers also 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.

## 2 BUSINESS ENVIRONMENT OF THE ISO/TC

### 2.1 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:

### **2.1.1 General description of the market (descriptive)**

Sewing Machines are one of the most heavily traded commodities and used all over the world to sew all kind of textiles, such as fabrics, apparel, industrial fabrics (e.g. canvas, netting). There is also extensive movement between countries as companies take steps to become more innovative and competitive. Products designed and manufactured with sewing machines in one country may be machined in a third and finished in the originating country. This particular development is driven by an increase in production sharing arrangements within the apparel segment of the industry in order to reduce costs.

The historical market leaders USA, Europe and Japan in sewing machine manufacturing increasingly have to rely heavily on their technological development, their capital resource and their capacity to diversify, to retain market share. It is now evident that countries like China, Taiwan and South Korea account for more than 50% of the world-wide output of sewing machines; and users of sewing machines, e.g. apparel manufacturers have begun a significant drift towards those economies where labour costs are less significant than those for technology.

### **2.1.2 Description of the total market (descriptive and quantitative)**

Typically, the production of sewing machines for almost any user may be thought of as a complex of textile manufacturers, distributors, apparel and other product manufacturers, wholesalers and retailers. It would be impractical to list the literally thousands of applications to which sewing machines are put in the domestic and industrial fields.

### **2.1.3 Description of the market structure and the major market players**

#### **2.1.3.1 Structure of the market: Suppliers/Manufacturers (descriptive and quantitative)**

The major manufacturers of sewing machines are various Chinese manufacturers, BROTHER and JUKI from Japan, PFAFF, DUERKOPP ADLER and UNION SPECIAL from Germany, various manufacturers from Taiwan and Korea, RIMOLDI NECCHI from Italy and manufacturers from the United States of America.

#### **2.1.3.2 Structure of the market: Customers (descriptive and quantitative)**

Most of the Customers are in the low price areas of the world, like East-Europe, East-Asia, Southeast-Asia, South-America. But the headquarter are still in industrial countries in Europe, North-America and Japan. The costumers are garment manufacturers and manufacturers of technical textiles e.g. automobile industry.

#### **2.1.3.3 Major factors which may have an impact on the development of the markets**

Employment - It is difficult to establish any norms of employment within the global industry because of the difference in approach to manufacturing sewing machines, i.e. technology versus cheap labour, and the variety of industrial segments. However what is plainly evident is that the world-wide sewing machine market for both household and industrial use is undergoing significant changes. Two important industry trends appear to be the continued automation of production and the internationalisation of company operations. From being a low technology and labour intensive industrial sector, it has rapidly become technologically driven within industrialised countries. The consequent reduction in labour costs will continue to have a direct effect on employment. Employee volume in most industrialised countries has given ground to: a reduced but technically skilled work force, the availability of low-cost and high quality products and good access to markets.

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

Standards developed by ISO/TC 148 are on household sewing machines, determinations e.g. stability of needle thread tension, sewing capacity, directional stability, creep of one ply of material over another and reproducibility of stitch length setting.; on industrial sewing machines safety requirements for sewing machines, units and systems. Fitting dimensions of sewing machine needles.

The diversity of the ISO/TC 148 work programme is relevant to the continued prosperity of the market. The structure of ISO/TC 148 is organised to develop the specifications and safety requirements for the variety of sewing machines.

#### 2.1.5 *Representation of major players in the ISO/TC*

Several national players operate within the TC. By of their market share, resource, experience and historical links with the industry, the USA and the countries of the EC are the most pro-active within the fields and consequently in the ISO committees responsible for drafting standards. Nevertheless, as market share of sections of the global industry shift away from the USA – Europe axis there is an increasing role being played by Japan.

### 2.2 *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 ISO/TC:

International trade (41 main export countries) in the sewing and garment machinery sector over the last 3 years (in Mio. EUR):

	2003	2002	2001
<i>Total export</i>	4.303	4,564	4,618
Japan	1,018	1,197	1,182
PR China	637	550	479
Germany	509	570	638
Taiwan	446	561	581
Italy	256	270	304
USA	233	290	321

International trade (41 main export countries) in the sewing and garment machinery sector over the last 3 years (in Mio. US\$):

	2003	2002	2001
<i>Total import</i>	3.273	3.177	3.101
USA	576	677	693
PR China	567	627	548
Hongkong	402	519	463
Germany	212	222	240
Turkey	179	246	94

### 3 **BENEFITS EXPECTED FROM THE WORK OF THE ISO/TC**

The main priorities in the work of the committee is to develop the specifications and safety requirements for the variety of sewing machines. The priorities are related to technological trends in the business, addressed by the work of the ISO committee.

The diversity of the ISO/TC 148 work programme is relevant to the continued prosperity of the market.

## **4 REPRESENTATION AND PARTICIPATION IN THE ISO/TC**

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

#### **4.2 *Analysis of the participation***

- The participation among developed countries like Japan, Germany and France is grown over the last years.
- Developing countries and countries with economies in transition make an effort to participate but there is a discrepancy between developed and developing countries in terms of safety requirements.

## **5 OBJECTIVES OF THE ISO/TC AND STRATEGIES FOR THEIR ACHIEVEMENT**

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

ISO/TC 148 proposes the following objectives :

- a. To elaborate a coherent library of standards that fulfil the needs of the identified users.
- b. To adjust the existing work programme to be relevant to the needs of the market.
- c. To establish a project-based approach to the development of standards the TC and, thereby substantially reduce the period of development.
- d. To make the standards more relevant by timely delivery.

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

ISO/TC 148 will employ the following strategies to satisfy the preceding objectives:

- a. Establish priority of work items within working groups.
- b. Establish project teams for each work item with designated project leaders and progress with a project-based approach to development of standards.
- c. Give priority to the timely circulation of documents and adherence to target dates.
- d. Limit meetings to when necessary and use other means of communication to resolve issues and progress documents e.g. internet; e-mail.
- e. Continue to make maximum use of the Vienna Agreement to develop standards for global use.
- f. Continue using a single language for meetings to obviate the problems and expense of organising interpreters/translation.

## **6 FACTORS AFFECTING COMPLETION AND IMPLEMENTATION OF THE ISO/TC WORK PROGRAMME**

The following factors have been identified which may affect, to a lesser or greater degree, the development of particular standards in accordance with this business plan :

- a. There is a continuing difficulty in finding project leaders who have the available resource to drive the work and there is a limited intake of new expert participants at WG level.
- b. Where the Vienna Agreement applies, work items subject to delay in CEN may create a consequent delay in the respective project projections.
- c. The cost of hosting meetings continues to be a concern. Electronic and postal communication may assist the progress of documents to a degree, but personal networking and discussion remain an essential to understand national positions and limitations.

## **7 STRUCTURE, CURRENT PROJECTS AND PUBLICATIONS OF THE ISO/TC**

This section gives an overview of the ISO/TC's structure, scopes of the ISO/TCs and any existing subcommittees and information on existing and planned standardization projects, publication of the ISO/TC and its subcommittees.

### **[7.1 Structure of the ISO committee](#)**

### **[7.2 Current projects of the ISO technical committee and its subcommittees](#)**

### **[7.3 Publications of the ISO technical committee and its subcommittees](#)**

## **Reference information**

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

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