#24 Standards and Standards Organizations

**What are standards?**

Standards are documented agreements containing technical specifications or other precise criteria to be used consistently as rules, guidelines, or definitions of characteristics, to ensure that materials, products, processes and services are fit for their purpose. Therefore, International standards contribute to the reliability and effectiveness of the goods and services we use.

**ISO, International Organization for Standardization**

(The most widely recognized standards organization)

ISO is a non-governmental organization established in 1947. The mission of ISO is to promote the development of standardization and related activities in the world with a view to facilitating the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological and economic activity.

ISO is comprised of three types of membership.

1. **Member Body**
   - A specific national body most representative of standardization in its country.

2. **Correspondent Member**
   - An organization in a country which does not yet have a fully developed national standards activity.

3. **Subscriber Member**
   - In particular, countries with very small economies.

The “Member Body” of ISO is comprised of over 95 countries that have established standard organizations. The Member Bodies along with the Correspondent Members and Subscriber Members all contribute to the work and development of a standard. Thus, ISO’s work results in international agreements, which are published as International Standards.

Examples of Member Bodies are; from the United States the American National Standards Institute ANSI, from Canada the Standards Counsel of Canada SCC, from Italy the Ente Nazionale Italiano di Unificazione UNI, from the United Kingdom the British Standards Institution BSI and from Germany the Deutsches Institut fur Normung DIN.

**How are ISO standards developed?**

ISO standards are usually developed from the needs of a particular sector of industry.

In general, the industry sector communicates its need to a national “Member Body” such as ANSI or DIN. They in turn relay the request to the entire ISO membership. If formally agreed upon by the interested countries, they first develop the technical scope of the standard, then the participants negotiate the specifications within the standard and finally there is a formal acceptance and approval.
The final acceptance and publishing of an International Standard is achieved by the agreement of two-thirds of the participating ISO members and 75% of all members that vote.

STANDARDS FOR CONVEYOR BELTING
The following is a partial list of International Standards referred to in the conveyor belt industry.

ISO 10247   Characteristics of covers – classification
ISO 1120    Determining the strength of mechanical fasteners
ISO 251     Width and Lengths
ISO 15147   Lt. Conveyor Belts, Tolerances on width and lengths of cut light belt
ISO 252     Conveyor belts, Ply adhesion between constitutive elements
ISO 252-1   Textile belts, Ply adhesion between constitutive elements
ISO 283     Full thickness tensile strength and elongation
ISO 284     Electrical conductivity
ISO 340     Flame retardation
ISO 4195-1  Heat resistance
ISO 433     Marking
ISO 4649    Determining abrasion resistance
ISO 703     Troughability, Characteristics of flexibility and test method
ISO 9856    Determination of elastic modulus

Note: Some countries have their own belting standards and imported products may need to comply with those standards.

A complete list of ISO Members Bodies, their standard organization and their web sites are available from the “members section” in the ISO web site: www.iso.org.

In addition to International Standard organizations, we should be aware of other organizations that can effect the belting industry.

For example and not limited to:

3-A Sanitary Standards, Inc.
Their mission is to enhance product safety for consumers of food, beverages and pharmaceutical products through the development and use of 3-A Sanitary Standards and 3-A Accepted Practices.

Among their objectives, they develop, maintain and publish uniform standards and practices for the sanitary design, fabrication, installation and operation of equipment and machinery. Web site: www.3-A.org.
**NSF International**
NSF International is a non-profit organization devoted to research, education, testing and certification. NSF develops standards for equipment, products and services that bear upon health. Web site: www.nsf.org.

**CEMA Conveyor Equipment Manufacturers Association**
Its purpose is to promote among its members and the industry standardization of design, manufacture and application. Web site: www.cemanet.org.

**RMA Rubber Manufacturers Association**
RMA is the national trade association for the rubber products industry. Web Site: www.rma.org.