

| PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY |                          |  |  |  |  |  |  |
|--|--------------------------|--|--|--|--|--|--|
| Circulation date: 2017-07-25                   | Reference number         |  |  |  |  |  |  |
| Closing date for voting: 2017-10-17            | (to be given by Central  |  |  |  |  |  |  |
| Proposer                                       | Secretariat) ISO/TS/P268 |  |  |  |  |  |  |

A proposal for a new field of technical activity shall be submitted to the Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives (part 1, subclause 1.5). The proposer may be a member body of ISO, a technical committee or subcommittee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives (part 1, Annex C).

UNI - Italy

**The proposal** (to be completed by the proposer)

Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover.)

Packaging machinery

Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned.)

Standardization of packaging machines with reference to the aspects of terminology, classification, design and safety.

The scope of the ISO TC will be broad enough to cover the machines used to package products. These machines perform packaging functions for primary, secondary, and tertiary (transport / distribution) packaging. Associated equipment are included.

Proposed initial programme of work (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.

Development of standards on safety, design, efficiency and effectiveness. Existing standards can be considered, adopted, if appropriate, and/or improved.

Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient.)

The intention of the proposed TC is to produce International standards, starting, if agreed, from the evaluation and the possible implementation of the regional or national standards. Priorities have to be discussed and agreed, but the basic suggestion is to start from general requirements, classification, terminology, safety and design aspects.

A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

EN 415-1 to -10 are ten parts of a standard dealing with safety of packaging machines, covering these aspects:

- classification and terminology;
- preformed rigid container packaging machines;
- form, fill and seal machines:
- pallettisers and depallettisers;
- wrapping and pallet wrapping machines;
- group and secondary packaging machines;
- strapping machines;
- noise measurement methods;
- general requirements.

DIN 8743:2014 Packaging machines and packaging installations, time related definitions, reference factors and calculation fundamentals:

DIN 8782:1984 Beverage packaging technology; terminology associated with filling plants and their constituent machines;

ANSI/PMMI B155.1-2016 Safety Requirements for Packaging Machinery and Packaging-Related Converting Machinery

A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

There are no similar standards nor specific standardization activities currently available in ISO on the proposed subject. It is important to base the proposed activity on the requirements given in the horiziontal standards developed by ISO TC 199 on safety of machinery.

## A listing of relevant countries where the subject of the proposal is important to their national commercial interests.

The machines for packaging are largely produced and used in all countries and the industry of packaging technologies is well developed around the world. The Italian Association of Manufacturers (UCIMA) collected some figures:

| Production (referre                                   |              |          |                    |           |                     |          |         |         |            |      |
|---|--------------|----------|--------------------|-----------|---------------------|----------|---------|---------|------------|------|
| Germany 6.38  | 1.790        | 17,2%    |                    | Italy     |                     | 6.237.85 | 53      | 16,8%   |            |      |
| United States 5.13                                    | 2.632        | 13,8%    |                    | China     |                     | 4.623.84 | 45      | 12,5%   |            |      |
| Japan 3.24  | 1.063        | 8,7%     |                    | Spain     |                     | 964.686  | 2,6%    |         |            |      |
| Svwitzerland 853.                                     | 645 2,3%     |          | France             |           | 840.643             | 2,3%     |         |         |            |      |
| UK 801.   | 004 2,2%     |          | South K            | Corea     | 695.664             | 1,9%     |         |         |            |      |
| Other countries 7.2                                   | 287.350      | 19,7%    |                    | TOTAL     | ,                   | 37.060.1 | 176     | 100,0%  |            |      |
| Summarizing the situation for each geographical area: |              |          |                    |           |                     |          |         |         |            |      |
| UE 49,8% Asia 28,1%                                   |              |          | North America15,4% |           | Europa Extra-UE3,2% |          |         |         |            |      |
| South America 2,3                                     | 3% Oceani    | a 0,9%   | Africa             | 0,3%      |                     | •        |         |         |            |      |
|   |              |          |                    |           |                     |          |         |         |            |      |
| Utilization (2015)                                    |              |          |                    |           |                     |          |         |         |            |      |
| United States   | 6.562.1      | .63      | 17,7%              | China     |                     | 4.558.94 | 40      | 12,3%   |            |      |
| Japan   | 2.796.2      | 206      | 7,5%               | German    | y                   | 2.163.0  | 14      | 5,8%    |            |      |
| Italy   | 1.546.2      | 254      | 4,2%               | UK        |                     | 1.132.05 | 59      | 3,1%    |            |      |
| France  | 1.096.7      | 23       | 3,0%               | Spain     |                     | 936.726  | 2,5%    |         |            |      |
| Mexico  | 819.62       | 3 2,2%   | India              |           | 775.695             | 2,1%     |         |         |            |      |
| South Korea   | 738.31       | 0 2,0%   | Canada             |           | 702.512             | 1,9%     |         |         |            |      |
| Turkey  | 635.35       | 8 1,7%   | Russia             |           | 611.492             | 1,6%     |         |         |            |      |
| Poland  | 573.94       | 9 1,5%   | Brasil             |           | 545.555             | 1,5%     |         |         |            |      |
| Thailand  | 483.94       | 4 1,3%   | Australi           | ia        | 470.017             | 1,3%     |         |         |            |      |
| Indonesia   | 454.79       | 1 1,2%   | Netherl            | ands      | 443.613             | 1,2%     |         |         |            |      |
| Other Countries                                       | 9.013.2      | 231      | 24,3%              | TOTAL     | ,                   | 37.060.1 | 176     | 100,0%  |            |      |
| Summarizing the s                                     | ituation for | each geo | grapihcal          | area:     |                     |          |         |         |            |      |
| Asia 36,0% UE   | 28,4%        | North A  | merica             | 19,6%     | South A             | merica   | 6,5%    |         |            |      |
| Europa Extra-UE                                       | 4,0%         |          | Africa             | 3,8%      |                     | Oceania  | 1,6%    |         |            |      |
|   |              |          |                    |           |                     |          |         |         |            |      |
| Export data of 201                                    | 6 are:       |          |                    |           |                     |          |         |         |            |      |
|   | 9.526        | 26,9%    | Italy              |           | 4.818.59            | 98       | 23,5%   | China   | 1.372.731  | 6,7% |
| United States 1.04                                    | 1.198        | 5,1%     | Switzer            | land      | 779.944             | 3,8%     | Japan   | 766.016 | 3,7%       |      |
| France 737.   | 002 3,6%     | Netherl  | ands               | 651.940   | 3,2%                | Spain    | 527.335 | 2,6%    |            |      |
| Sweden 489  | .024         | 2,4%     | Other C            | Countries | 3.774.55            | 53       | 18,4%   | TOTAL   | 20.467.867 |      |
|   |              |          |                    |           |                     |          |         |         |            |      |

There is no limit to the potential interest of the subject. In the European Union the safe construction of these machines is regulated from the machinery directive and other directives or regulations for the free circulation of safe products. Out of the European Union the National Laws have to be considered. It is important to harmonize the design and the conttruction of safe and efficient machines everywhere in the world.

A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

There are specific organizations of packaging industries to be contacted and involved. In particular:

PMMI (www.pmmi.org), The Association for Packaging and Processing Technologies

It is important to involve the horizontal ISO and IEC committee dealing with the machines, in particular: ISO TC 199 Safety of machinery, ISO TC 159 Ergonomics, ISO TC 43 Noise, ISO TC 108 Vibration, IEC TC 44 for the electrical parts of the machines, IEC TC 56 about dependability, ISO TC 270 Plastic and rubber machines, ISO/TC 122 Packaging and ISO/TC 104 Freight containers.

A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

The main involved stakeholders are the designers and the manufacturers of the machines. They are located, as per the above information, principally in Europe, United States, China, Japan and South Korea.

"Governmental representatives" are important to grant the harmonization of the legislations with the requirements of the proposed standards.

"Users" are necessary to ensure that the standard result is the circulation of safe products at economic conditions sustainable by the market. The main geographical areas are Asia, Europe and America. The principal markets requiring packaging machines are food, beverage, pharmaceutical, chemical and tissue.

"Certification bodies" can contribute granting that the proposed solution are well applicable and verifiable in an unique way and without ambiguity.

"Small and medium enterprises" (in particular the micro and small enterprises) are an important part of the market and need to be represented in the activity to grant that the standards are suitable for a safe, economic and sustainable production.

It is estimated that in Europe the SMEs are approximately 70-80% of the suppliers of technology with the 40-50% of the total turnover.

Environmental experts" can evaluate if the standards are prepared in full respect of the environment, even if at European level, it was realized that this type of involvement is more important in the downstream activity rather than in the production of the machines, where no so specific aspects need to be considered.

"Consumers" are less involved, due to the fact the standards are generally addressed to B2B market, rather than B2C. "University and academy" can offer their contribution as far as the more "scientific" aspect of the desing are concerned, in particular the reduction and the measurement of "noise" and "vibration"

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

If the proposal succeeds, UNI (Italy) is willing to undertake the work of secretariat of new TC, and commit to providing all the resources needed to run the committee secretariat, including but not limited to human resources, fund budgetary and supporting policies.

Purpose and justification for the proposal. (The purpose and justification of the standard to be prepared shall be made clear and the need for standardization of each aspect (such as characteristics) to be included in the standard shall be justified. Clause C.4.12.1 through C.4.12.10 of Annex C of the ISO/IEC Directives, Part 1 contain a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

The industry of packaging technology aims to improve the globalization, the harmonization of the circulation of good products around of the world, considering the positive experience gained in Europe where the study of this subject started in 1989 to prepare suitable machines in line with the safe and compatibility requirements expressed by the European Directives.

It is easy to demonstrate the large importance of this industry and the technological benefits that can be offered by a well detailed programme of standarization at international level. These benefits can be at economical level, removing the barriers, at societal level, facilitating the exchanges and improving the safety related to the machines.

The proposal to create an ISO committee is in line with other similar proposals made after having gained a significant experience at European level (e.g, in the field of horizontal aspects of the safety, in ergonomics, in other typologies of machines).

Signature of the proposer Gian Luca SALERIO

Manager of Standardization Area

UNI - Italy

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| Further information to assist with understanding the requirements for the items above can be found in the Directives, Part 1 |
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| Annex C.   |
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