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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

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Packing, marking, transporting and storing of magnesium alloy wrought products

镁合金加工产品包装、标志、运输、贮存

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Standardization Administration of the PRC

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard was proposed by China Nonferrous Metals Industry Association. This standard shall be under the jurisdiction of the National Nonferrous Metal Standardization Technical Committee (SAC/TC 243). The responsible drafting organizations of this standard. Chongqing University, Chongqing Magnesium Technology Co., Ltd., Shanghai Fangle Auto Parts Co., Ltd. The participating drafting organizations of this standard. Jiaxing Zhongcheng Magnesium Technology Co., Ltd., National Magnesium and Magnesium Alloy Product Quality Supervision and Inspection Center, Shandong Yinguang Yuyuan Light Metal Precision Forming Co., Ltd., Northeast Light Alloy Co., Ltd., Shanghai Jiaotong University, Chongqing Boao Magnesium Aluminum Metal Manufacturing Co., Ltd., Shanxi Yinguang Huasheng Magnesium Industry Co., Ltd. The main drafters of this standard. Zhang Jing, Pan Fusheng, Xiang Dongxia, Qian Yafeng, Guo Jin, Wang Jinjin, Wu Jingmin, Pang Junmin, Li Ping, Chen Huiming, Wen Yu, Chen Jian, Tan Shudong, Wang Yingxin, Peng Liming, Zeng Xiaoqin, Li Weijie, Peng Junhua, Meng Fanping, Huang Lu, Gao Baoting. Packing, marking, transporting and storing of magnesium alloy wrought products

1 Scope

China's national standard for the packing, marking, transport and storage of wrought magnesium alloy products. It applies to magnesium alloy castings, forgings, plates, strips,

tubes, bars, profiles, wire and powder, and it specifies the general rules for packing, the packing methods for each product form, the marking, the transport and the storage. Magnesium is the reason this standard is separate from the equivalent one for aluminium. It is the lightest structural metal in use, which is why it is wanted, and it is also the most chemically active: a magnesium surface corrodes readily in the presence of moisture, and magnesium in finely divided form - chips, powder, swarf - burns and cannot be extinguished with water. Packing a magnesium product is therefore not only a matter of preventing mechanical damage in transit but of keeping moisture away from a reactive surface for however long the product sits in a warehouse, and packing magnesium powder is a dangerous goods problem, which is why GB 190 for dangerous goods package labels appears among the normative references alongside the ordinary handling marks of GB/T 191. The standard sets out the packing method by product form, since a coil of strip, a bundle of extruded profile and a drum of powder present entirely different problems, and it prescribes the marking that must travel with each package. Transport and storage close the document, covering the conditions under which the products may be moved and held. Issued on 29 August 2016 and in force since 1 July 2017.

This standard specifies the packing, marking, transportation and storage of magnesium alloy wrought products. This standard applies to the magnesium alloy wrought products. castings, forgings, plates, strips, tubes, bars, profiles, wire and powder (hereinafter referred to as products).

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this Standard.

GB190 Labels for packages of dangerous goods

GB/T 191 Packing - Pictorial marking for handling of goods

GB/T 2934 General-purpose flat pallets for through transit of goods - Principal dimensions and tolerances

GB/T 3199 Wrought aluminum and aluminum alloy products - Packing, marking, transporting and storing

GB/T 4456 Polyethylene blown film for packing applications

GB/T 4857.4 Packing - Basic tests for transport packages - Part 4. Compression and stacking tests using a compression tester

GB/T 4857.5 Packing - Transport packages - Vertical impact test method by dropping

GB/T 4892 Dimensions of rigid rectangular packages - Transport packages

GB/T 6544 Corrugated fiberboard

3.2.3 A single package can only be used to contain a single type of products, which shall be arranged orderly in accordance with the shape of the product, AND it is prohibited to mix different types of product together.

3.2.4 The distance of the reinforcing band for the packing box, rack, and pallet shall not only comply with the solidity requirements of the packing boxes, racks, and pallets, BUT also comply with cranes and forklift operation requirements; all packing units shall be suitable for mechanical handling (except for small packages for manual handling); as for the purchaser which is not far away, it shall use the recyclable devices; as the purchase which is far away, it may use the disposable package OR otherwise the recyclable packages to supply cargo.

3.2.5 When making wooden crates, racks and pallets, the nails shall be in the form of a step-like arrangement, AND the nail cap shall be knocked in and the nail tip bent. It is not allowed for nail projection or omit; AND the lifting position shall be installed with lifting protection iron corner.

3.2.6 When making metal crates, racks and pallets, they shall be welded (riveted) firmly; it is not allowed for holiday (riveting omission); the welding scar (rivets) shall be ground; AND it shall not damage the product.

3.3 Other requirements

3.3.1 Packing shall use steel band or plastic packing strip. When using steel band, it shall place the protective materials at the edge, corner or steel buckle of the steel band and which directly contact with the products.

3.3.2 The specific packing methods and handling methods of products shall comply with the corresponding product standards or user requirements.

4.1.1 Recyclable package

4.1.1.1 The structure diagram of the recyclable package is shown in Figure 1.

4.3.1 The packing structure diagram of ordinary box-type or carton package is respectively shown in Figure 2 and Figure 4. Figure

4.4 Packing method for strips

4.4.1 The vertical ordinary box type, vertical button type, horizontal button type, horizontal "well" word type, and vertical pallet type packing shall comply with the provisions of GB/T 3199.

4.4.2 Simple packing shall be conducted in the following manner.

a) The structure diagram of simple packing is as shown in Figure 5; Cover plate Cover strip Side plateBottom plateBottom block The net weight of each packing box (piece) shall be in accordance with the product standard or the contract. When the product standard or the contract does not stipulate the net weight, it may follow the provisions below.

a) The net weight of casting is 14 kg ~ 50 kg (carton);

b) The net weight of forgings is 60 kg ~ 350 kg;

c) The net weight of plates is 200 kg ~ 2000 kg (thick plate), OR 50 kg ~ 1000 kg for the thin plate of thickness less than 6 mm;

d) The net weight of strip is less than 110 kg;

e) The net weight of tube and bar is 150 kg ~ 1000 kg, AND that of the profiles is 100 kg ~ 500 kg;

f) The net weight of magnesium powder is less than or equal to 50 kg (aluminum barrel); AND the net weight of magnesium powder is less than or equal to 100 kg (iron, steel barrel).

5.1 Marking of packing box

5.1.1 At each end of each box, there shall be a label or a plate indicating the following information.

a) Supplier name and code;

b) Supplier address;

c) Contact number;

e) Registered trademark;

f) Quantity supplied;

g) Gross weight/net weight;

i) Product batch number. firefighting equipment and leakage emergency treatment equipment of corresponding variety and quantity.

6.3 It is prohibited to transport the magnesium alloy products together with the chemical active substances and easily oxidized corrosive materials in the same carriage, cabin, container; AND it is prohibited to transport openly.

6.4 When the products are transited at the station or dock, they shall be stacked in the warehouse at the room temperature of not more than 30 °C; AND it shall consider using the ventilation and temperature reduction equipment for warehousing in high temperature seasons.