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**Technical requirements for maize combine harvester
(English Translation)**

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Foreword

This Standard was proposed by China Machinery Industry Association.

This Standard shall be under the jurisdiction of the National Agricultural Machinery Standardization Technical Committee.

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Technical requirements for maize combine harvester

1 Scope

This Standard specifies the safety requirements, technical requirements, inspection rules, signs, packaging, transport and storage of maize harvester and maize grain harvester.

This Standard applies to suspended-, towed- and self-propelled maize harvester (hereinafter referred to as harvester); it also applies to all kinds of supporting (maize) cutting table of combine harvesters to harvest maize ears and maize grains.

2 Normative references

The provisions in following documents become the provisions of this Standard through reference in this Standard. For dated references, the subsequent amendments (excluding corrigendum) or revisions do not apply to this Standard, however, parties who reach an agreement based on this Standard are encouraged to study if the latest versions of these documents are applicable. For undated references, the latest edition of the referenced document applies.

GB/T 1147.1-2007 Small and medium-sized power internal combustion engines - Part 1.General requirements

GB/T 4269.1-2000 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for operator controls and other displays - Part 1. Common symbols (idt ISO 3767-1.1991)

GB/T 4269.2-2000 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment - Symbols for operator controls and other displays - Part 2. Symbols for agricultural tractors and machinery (idt ISO 3767-2.1991)

GB/T 6979.1-2005 Equipment for harvesting - Combines and functional components - Part 1.Vocabulary (ISO 6689-1.1997, MOD)

GB/T 9480-2001 Tractors machinery for agriculture and forestry, powered lawn and garden equipment - Operator's manuals - Content and presentation (eqv ISO 3600.1996)

GB 10395.1-2001 Tractors and machinery for agriculture and forestry - Technical

4.2 The drafting of the operating instructions shall comply with stipulations in GB/T

9480-2001.Instructions shall provide appropriate cautionary notes and safety signs. It shall point out that, under working conditions, the squeezing and cutting parts where can be appeared at feeding device or snapping roll of snapping area (working parts). It shall point out that it must not enter into the grain tank when the machine is running. It shall give the instructions of using method of fire extinguishers and the placement of

fire extinguishers.

4.3 All shafts, pulleys, sprockets, belts and chains and other exposed moving parts

shall have protective devices, which shall comply with the provisions of GB 10395.1-

2001 For functional parts such as snapping rolls, stalk-pulling rollers, conveyor spirals

that must be exposed, the safety signs that comply with GB 10396-2006 shall be fixed nearby.

4.4 For self-propelled harvester, it shall be installed with at least two working lamps -

one is directed to the front of cutting table, and another is directed to the grain unloading area. For self-propelled harvester of which the maximum speed is greater than 10km/h, it must be installed at least two headlamps, two front-position lamps, two rear-position lamps, two front-turn signal lamps, two rear-turn signal lamps, two reversing lamps, and two brake lamps.

4.5 For self-propelled harvester, it shall be installed with driving horns, reversing horns

and two rearview mirrors.

4.8 When self-propelled maize harvester is braked at maximum driving speed (when

the driving speed is more than 20km/h, the brake initial speed is 20km/h), the braking distance is not more than 6m, or the braking deceleration is not less than 2.94 m/s²; the parking brake's lock handle that locks the parking brake pedal must be reliable; it can not loose without external force; and it can be reliably parked on the 20% (11°18') longitudinal dry-hard ramps. For parking brake control force, the operating force by hand shall not exceed 400 N; the operating force by foot shall not exceed 600N.

5.1 Harvester shall comply with the requirements of this Standard; and it shall be manufactured by the product drawings and technical documents that are approved by prescribed procedures.

5.2 When the harvester is operated under such conditions - calibrated continuous

through the holes, it needs to have insulation duct.

5.9.1 Accessories and spare parts of harvester machine shall comply with the provisions of the relevant standards. All self-made parts must be inspected as qualified; outsourced parts and purchased parts must have conformity certificate; and only after passing the inspection, can they be assembled.

5.9.2 Adjustment, repair and maintenance of various parts of harvester shall be convenient. Each adjustment mechanism shall ensure the convenient and reliable operation. Adjustment range of each part shall be able to reach the prescribed limit position.

5.9.3 Each control mechanism shall be light-flexible. For automatic-returned operating

parts, after the operating force is removed, it shall be able to return automatically.

5.9.4 Operating symbols of harvester shall be set nearby to the corresponding operation devices; operating symbols shall comply with the stipulations in GB/T 4269.1-2000 and GB/T 4269.2-2000.

5.9.5 Self-propelled harvester's cab structure shall be convenient and comfortable for

driving.

5.9.6 The clutches' engagement of each system of harvester must be smoothly and

reliably, with thorough disengagement.