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**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

LS/T 1220-2020

**Technical regulation of transverse ventilation for stored grain in
warehouses
(English Translation)**

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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 the National Grain and Material Reserve Bureau.

This standard is under the jurisdiction of the National Grain and Oil Standardization Technical Committee (SAC/TC270).

1 Scope

This standard specifies the terms and definitions, system composition, basic requirements, process parameters, operating conditions, and operations of horizontal ventilation technology for warehouses and management etc.

This standard applies to the horizontal ventilation of bulk warehouses with a span of no more than 27m.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For the cited documents without date, the latest version (including all amendments) applies to this document.

GB/T 25229-2010 Airtightness requirements for grain and oil storage cottages GB/T 29890 Technical Specification for Grain and Oil Storage GB 50320 Design Specification for Grain Storehouse JB8523 explosion-proof ventilator technical conditions LS/T 1201 Phosphine Circulation Fumigation Technical Regulations LS/T 1202-2002 Technical regulations for ventilation of grain storage machinery

3 Terms and definitions

The following terms and definitions apply to this document.

Bungalow warehouse horizontal ventilationtransverse ventilation for stored graininwarehouse Use the suction fan installed on the vent on the side of the warehouse, through the horizontal ventilation pipe network to make the air flow from the vent on the side opposite the warehouse Inhale and laterally pass through the film-covered grain pile and discharge it from the fan, thereby changing the gas state parameters in the grain pile and adjusting the temperature and humidity of the grain pile Etc., to achieve a safe way to store grain or improve the quality of grain storage processing technology.

Airflowrateperunitareaofgrain the amount of air passing through a unit area in a direction perpendicular to the ventilation airflow per unit time, also known as the apparent wind speed, is expressed by a V meter, and the unit is $\text{m}^3/(\text{s} \cdot \text{m}^2)$ or m/s .

Unit ventilation airflowratepertonoofgrain the volume of air passing through the unit mass of grain per unit of time is denoted by q and the unit is $\text{m}^3/(\text{h} \cdot \text{t})$.

Note: Rewrite LS/T 1202-2002, definition 3.2.

Total air quantity

The total volume of air passing through the lateral ventilation system per unit time, expressed as Q total, in m^3/h .

Note: Rewrite LS/T 1202-2002, definition 3.3.