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# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA



# GB/T 26891-2011

## Grain and oil machinery - Twin-screw presses

粮油机械 双螺旋榨油机

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**Standardization Administration of the PRC**

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## Foreword

The Standard Appendix A, Appendix B, Appendix C is normative appendix, Appendix D is an informative annex. The standard proposed by the National Food Authority. This standard by the National Standardization Technical Committee OILS. This standard was drafted. National Food Reserve Wuhan Science Research Institute, Wuhan Machinery Manufacturing Co. Food and Agriculture. The main drafters of this standard. Cao Guofeng, WU Xu Xiang, Gu Qiang Hua. Grain and oil machinery double screw press

## 1 Scope

China's national standard for twin-screw oil presses. It specifies the terms and definitions, the working principle, the model designation and basic parameters, the technical requirements, the test methods, the inspection rules and the marking, packaging, transport and storage of twin-screw expellers, and it applies to the twin-screw presses capable of cold pressing. A twin-screw press has two intermeshing screws turning in a figure-of-eight barrel instead of a single screw in a round cage, and the difference is more fundamental than the count suggests. In a single screw press the material is conveyed by friction against the barrel, so the transport depends on the material's own behaviour: a seed that is too oily, too wet or too fine slips, the machine surges, and the pressure profile moves. In a twin-screw machine the flights of one screw wipe those of the other, so material is displaced positively from one chamber to the next regardless of how it behaves, and the machine conveys what a single screw would not accept at all. That positive conveying gives control the single screw press does not have: the residence time is set by geometry and speed rather than by friction, the screws can be built up from elements to give a chosen sequence of conveying, compression and shear, and the machine is self-wiping. In oil processing this matters for the difficult materials - high oil content seeds, materials that must be pressed cold to protect the oil, and feedstocks whose consistency varies - and for pressing to a specified residual rather than to whatever the machine happens to give. The standard specifies the capacity and residual oil, the screw configuration and wear, the barrel and drainage, the drive and torque capacity, the temperature control, the power consumption and the safety requirements. Issued on 29 September 2011 and in force since 1 December 2011.

This standard specifies the twin screw press-related terms and definitions, working principle, model and basic parameters, technical requirements, test methods, Inspection rules, marking, packaging, transportation and storage requirements. This standard applies to the double helix can be cold pressed oil press.

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 191 Packaging - Pictorial signs GB/T 1532-2008 peanuts

GB/T 3768 Determination of sound pressure of sound power levels of noise sources using an enveloping surface reflectance measuring surface Simple Method

GB 5009.5 Determination of national food safety standards in food protein

GB 5226.1 mechanical and electrical safety of machinery - Electrical equipment - Part 1. General requirements

GB/T 5512 Inspection of grain and grain Determination of fat content

GB/T 5529 Inspection of vegetable oils Determination of impurities GB/T 13306 signs

GB/T 24854 grain and oil machinery products packaging technology

GB/T 24855 General technical requirements grain machinery assembly

GB/T 24856 Oil Machinery casting general technical conditions

GB/T 24857 Oil Machinery plates, steel plate member General technical conditions

GB/T 25218 Grain and Oil Painting machinery products general technical conditions GB Z158 workplace occupational hazard warning labels LS/T 3501.2 grain and oil processing machinery - General requirements machining technology requirements LS/T 3501.6 grain and oil processing machinery - General requirements weldment

## 3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Double screw press twin-screwpress Twin-screw press twin-screwpress In the same pressing cage, there are two opposing operation of pressing screw screw press.

3.2 Failure breakdown In addition to just press random tool does not change other than to eliminate the parts in a short time so that the device can not operate normally the case.

3.3 Working hours before the first failure workinghourstofirstfault Under normal operating conditions, press cumulative operation fault occurs from the start of work to certain parts (wearing parts except normal wear and tear)