



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

GB/T 45361-2025

Light industry machinery - Specifications for extrusion die

轻工机械 挤出平模头技术条件

Issued on: February 28, 2025

Implemented on: September 1, 2025

**Issued by: the State Administration for Market Regulation,
Standardization Administration of the People's Republic of China**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document was proposed by China Light Industry Federation. This document is under the jurisdiction of the National Technical Committee for Standardization of Light Industry Machinery (SAC/TC101). This document was drafted by: Zhejiang Jingcheng Mould Machinery Co., Ltd., Light Industry Hangzhou Mechanical and Electrical Design Institute Co., Ltd., Taizhou Huangyan District Metrology and Product Quality Safety Testing Institute, Guangdong Shicheng Plastic Machinery Co., Ltd., Fujian Weisheng Machinery Co., Ltd., Zhejiang Hongchang Electric Technology Co., Ltd., Quanzhou Norda Machinery Co., Ltd., Jiangmen Huilong Plastic Machinery Co., Ltd., and Fujian Shipbuilding and Transportation Vocational College. The main drafters of this document are: Liang Bin, Lan Chunlin, Jin Liyang, Zhang Chunhua, Li Deshun, Lu Can, Long Xuebing, Shen Jinqiang, Zou Zechang, Shou Xiaodong, Chen Qiaohua, Gu Shilin, Bai Rujia, Yang Guochang, Fang Quancai, Liang Yanyan, Chen Taili, Dai Huibin, Yang Ting, Lin Meijing, Chen Fupeng, Hu Jinyan. Technical requirements for flat die heads for extrusion of light industrial machinery

1 Scope

GB/T 45361-2025 is the Chinese standard for the flat extrusion die head used on light industry machinery: the tool at the end of a sheet or film extruder that spreads the melt across the width of the web. Everything about the finished sheet, its thickness profile, its optical quality and how much material is wasted at the edges, is decided in that die, which is why it is specified separately from the extruder. The standard sets the classification and the basic parameters, the technical requirements covering the materials, the machining and surface finish of the melt channel, the thickness adjustment mechanism, the heating and temperature control and the sealing, together with the test methods, the inspection rules and the marking, packaging, transport and storage. For an extrusion line builder, a die maker or a converter buying a die in China, this is the acceptance text.

This document defines the terms and definitions related to extrusion flat die heads, and specifies the structure, materials and accessories, processing, parts, assembly, electroplating, The requirements for thermal devices, appearance quality, inspection rules, marking, packaging, transportation and storage are described, and the corresponding test methods are described. This document is applicable to the production of plastic products such as films, sheets, plates, etc., with a die lip gap of 0.1mm~100mm for extrusion flat die heads Production, inspection, sales and acceptance.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document. GB/T

70.1 Hexagon socket head screws

GB/T 191 Pictorial markings for packaging, storage and transportation

GB/T 196 Basic dimensions of common threads

GB/T 197-2018 General thread tolerances

GB/T 230.1 Rockwell hardness test for metallic materials Part

3 Terms and definitions

The following terms and definitions apply to this document.