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

GB/T 41860.2-2022

**Tools for moulding - Locating rings - Part 2: Locating rings for
mounting with thermal insulating sheets in small or medium
moulds (types C and D)**

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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.

This document is the second part of GB/T 41860 "Positioning Ring of Forming Die". GB/T 41860 "Positioning ring of forming die" has been released

The following 2 parts.

--- Part 1. Type A and Type B positioning rings for small and medium-sized molds without heat shields;

--- Part 2. C-type and D-type small and medium-sized mold positioning rings with heat shields.

This document is modified to adopt ISO 10907-2:2007 "Mould positioning ring - Part 2. Small and medium-sized mold positioning ring with heat shield

Type C and Type D".

Compared with ISO 10907-2:2007, this document has made the following structural adjustments.

--- Added Chapter 2 "Normative References";

--- Added Chapter 3 "Terms and Definitions".

The technical differences between this document and ISO 10907-2:2007 and their reasons are as follows.

--- Modify "Applicable to injection molding machines of models no larger than E12 (according to EUROMAP2)" in "Scope" to "Applicable to clamping force

"Plastic injection molding machines less than 3800kN" (see Chapter 1), after modification to

match the specifications of domestic equipment;

---Move ISO 15600 in the references to normative references (see Chapter 2), and amend to adopt ISO 15600

National standard GB/T 39164;

---Change the reference diameter dia. 90 to the variable dia. D1 (see Figure 1~Figure 7, 4.1, 4.2), and increase D1 to be 100mm in size (see

Table 2, Table 3), the changed size series are consistent with the domestic market conditions;

---Change the thickness "C" in the figure to the variable "t3" (see Figure 2~Figure 4), and explain its value in the table;

--- Subdivide the C-type positioning ring into C1, C2, and C3 types (see 4.1), and match the three structural types of the C-type positioning ring after subdivision

It is more convenient to describe and use;

--- Subdivide the D-type positioning ring into D1, D2, D3 types (see 4.2), and match the three structural types of the D-type positioning ring after subdivision

It is more convenient to describe and use;

---Remove all the requirements on the surface roughness Ra0.4 μ m in the upper right corner of all the figures, and change it to require "the surface of the mating surface" in the clause

The surface roughness Ra should be 1.6 μ m" (see 4.1 and 4.2), and the description of the roughness unit in the note of the original clause is correspondingly deleted, because

Because the roughness of all surfaces is Ra0.4mm is not realistic, it is more accurate after changing;

---Delete the corner mark "a" in the original table (see Table 1 and Table 3), because EUROMAP2 is not applicable in China, and the dimension series has been fixed

Certainly, it is not necessary to indicate the source;

---Delete the description of steel grades in the "Materials" chapter (see Chapter 5), "Steel grades are determined by the manufacturer" is not necessary here;

---In the chapter "marking", add the mark of diameter D1 (see Chapter 6), because after changing dia. 90 to the variable dia. D1, the mark needs

change accordingly;

---In the references, replace the reference [1] with GB/T 38533-2020, the dimensions and specifications of the positioning ring in this document are the same as

Match the "plastic injection molding machine" in GB/T 38533-2020.

The following editorial changes have been made to this document.

- Change the chapter title "Dimensions" to "Structural Types and Dimensions";
- In Figure 1, the index and serial number of the "locating circle" are added;
- Change the description of the index number in the figure about the undercut groove to be indicated by a corner mark, which is unified with Part 1;
- Adjust the corner mark "b" of the heat shield in the figure to "c";
- Adjusted the table format.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

With the development of technology and the expansion of foreign trade, the standards issued by ISO and other international standardization organizations are adopted to eliminate the

The technical barriers are of great significance.

The "molding mold positioning ring" specified in this document is used to determine the installation position of the mold on the plastic injection molding machine to ensure that the plastic injection molding

It is a standard part for the centering of the nozzle of the molding machine and the sprue sleeve of the mold. It can also be used as a fastener to fix the accessories. It has the characteristics of high temperature resistance and high precision.

There are usually four types of points, and the specialized production and application are relatively mature.

ISO 10907 divides the positioning ring into two parts according to whether it has a heat shield or not. When adopting standards, in order to ensure the consistency between domestic standards and international standards

Consistency, GB/T 41860 is also divided into 2 parts.

--- Part 1.Type A and Type B positioning rings for small and medium-sized molds without heat shields;

--- Part 2.C-type and D-type small and medium-sized mold positioning rings with heat shields.

Because the installation structure of the locating ring with a heat shield is different from that

without a heat shield, and each type of locating ring A, B, C, and D is different

It is subdivided into three types, so it is divided into two parts to avoid excessive length of the document and facilitate reference by standard users.

Mold retaining rings - Part 2. with heat shields

C-type and D-type positioning rings for small and medium-sized molds

1 Scope

This document specifies the structural type, size, material and marking of the positioning ring for molds with heat shields. See Figure 1 for the schematic diagram of its installation (Type C).

This document applies to molds with heat shields for plastic injection molding machines with clamping force less than 3800kN.

a) Type C1 b) Type C2 c) Type C3

Description of index number.

1---fixed mold seat plate;

2---Plastic injection molding machine fixed template;

3---Positioning circle;

4---Insulation board.

Figure 1 Schematic diagram of positioning ring (type C) installation

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references

For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

this document.

GB/T 39164-2020 Forming mold injection mold heat insulation board

3 Terms and Definitions

This document does not have terms and definitions that need to be defined.