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

GB/T 25370-2020

Replacing GB/T 25370-2010

Foundry machinery - Vocabulary

铸造机械 术语

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1:1-2009: This standard replaces GB/T 25370-2010 "Glossary of Foundry Machinery": Compared with GB/T 25370-2010, the main technology of this standard The changes are as follows:

---Modified and adjusted the field division and chapter order of the original standard casting equipment terminology (see Chapter 2~Chapter 10,:2010 edition Chapter 2~Chapter 8);

---Added "basic terms" "transportation ration and other casting related equipment" (see Chapter 2 and Chapter 10);

--- Modify the original "melting and pouring equipment" to "smelting and pouring equipment" (see Chapter 9, Chapter 3 of the:2010 edition);

--- Revise the original "shaking-out equipment" to "shaking-out de-coring equipment" (see Chapter 5, Chapter 5 of the:2010 edition);

--- Modify the original "special casting equipment" to "investment and lost foam casting equipment" (see Chapter 8, Chapter 8 of the:2010 edition);

--- Deleted 49 terms such as self-centering vibrating screen, resonance screen, sand blasting machine, and lever-type metal mold casting machine (see Appendix A);

---Added 283 terms such as core-making 3D printing equipment, core removal machine, grinding cleaning machine, squeeze casting machine, etc: (see Appendix A);

---Modified 192 terms such as vibrating boiling sand drying device, old sand recycling equipment, shot blasting machine, and forming mechanism (see Appendix A): This

standard was proposed by China Machinery Industry Federation: This standard is under the jurisdiction of the National Foundry Machinery Standardization Technical Committee (SAC/TC186): Drafting organizations of this standard: Jinan Institute of Casting and Forging Inspection and Testing Technology Co., Ltd.; Nan'an China Machinery Standardization Research Institute Co., Ltd.; Fujian Filter Guan New Material Technology Co., Ltd.; Qingdao Sanrui Machinery Manufacturing Co., Ltd.; Fujian Minxuan Technology Co., Ltd.; China Automotive Industry Engineering Co., Ltd.; Qingdao Antai Heavy Industry Machinery Co., Ltd.; Dongguan New Fulcrum Technology Service Co., Ltd.; Kunge Wagner (Qingdao) Machinery Co., Ltd.; Weihai Gongyou Foundry Machinery Co., Ltd: The main drafters of this standard: Tang Zhiwen, Sun Shanshan, Zhan Changjun, Yan Zuoxiu, Zhu Bin, Liu Xiaolong, Ding Renxiang, Li Yi, Xing Haiwei, Chi Yingjie: The previous versions of the standard replaced by this standard are as follows:

---GB/T 25370-2010: Foundry machinery terms

1 Scope

China's national vocabulary for foundry machinery. It defines the terms and definitions for the machines and equipment used in foundries, covering the whole plant from sand preparation to casting cleaning. A foundry is a sequence of quite different processes housed together, and each has developed its own vocabulary, often locally and often before anyone wrote it down. Sand preparation has mullers, mixers, aerators, coolers, screens and reclamation plant. Moulding has flask and flaskless machines, jolt-squeeze, high-pressure, impact and vacuum processes, core shooters and core blowers, and the shell, cold box and no-bake systems, each with its own terms for equipment that does superficially the same thing. Melting has cupolas, induction furnaces, arc furnaces, holding furnaces and ladles. Pouring has automatic pouring machines and their control. And cleaning has shakeout, shot blasting, grinding, cutting and heat treatment. The result is a field in which the same machine has several names, different names describe the same operation, and a specification written in one foundry is misread in another. A single vocabulary is worth having for that reason alone, and it is worth more where the equipment is bought internationally, since foundry technology is traded worldwide and a plant is frequently assembled from machines of several origins. This is a long document because it covers all of it, and it is the reference the individual machine standards of the sector build on. Issued on 19 November 2020 and in force since 1 June 2021, it replaces GB/T 25370-2010.

This standard defines the basic terms of foundry machinery and sand processing equipment, molding core making equipment, falling sand and core removal equipment, cleaning equipment, metal molds Commonly used terms and definitions of casting equipment, investment and lost foam casting equipment, melting and pouring equipment, transportation ration and other casting-related equipment: This standard applies to the formulation of standards in the field of foundry machinery, technical documentation and

related scientific and technological literature publications:

2 Basic terminology

1 Molding material Material used for modeling (core making):

Note 1: Usually refers to the raw materials used in the manufacture of sand molds (cores) and other disposable molds (cores), including foundry sand, binders and their hardeners, and various other materials: Additions that increase or improve certain properties of the sand mold (core):

Note 2: Modeling materials in a broad sense also include mixtures made of the above materials in a certain proportion: 2:

2 Foundry sand; sand The general term for refractory materials with certain particle size, shape and particle distribution requirements used to manufacture sand molds (cores) in casting production: 2:

3 New sand newsand Raw sand Foundry sand used for the first time that has never been in contact with molten metal or binder: 2:

4 Old sand usedsand Molding sand or core sand that has been in contact with molten metal or binder that has been used in casting production: 2:

5 Reconditionedsand Used sand that can be reused after the old sand treatment process:

Note: Reused sand cannot directly replace new sand: Appropriate amount of new sand should be added when using it to ensure that the quality of molding sand meets the requirements and is stable: 2:

6 Reclaimedsand Used sand that has been treated by sand regeneration technology to reach or approximate the performance of new sand:

Note: Reclaimed sand can be used instead of new sand: 2:

7 Molding sand; molding mixture It is made of molding materials such as foundry sand, binders and add-ons in a certain proportion and is a mixture that meets the molding requirements: