

ICS 45.080
CCS S 11



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

GB/T 45489-2025

**General technical specification of the track panel for medium
and low speed maglev**

中低速磁浮交通轨排通用技术条件

Issued on: March 28, 2025

Implemented on: October 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Conditions of use	2
4.1 Environmental conditions	2
4.2 Line conditions	2
5 Technical requirements	3
5.1 Raw materials	3
5.2 Manufacturing process	6
5.3 Track layout	8
6 Test methods	9
6.1 Chemical composition and mechanical properties	9
6.2 Saturation magnetic flux density	9
6.3 Size	9
6.4 Surface hardness	9
6.5 Conductivity	9
6.6 Oxide film thickness	9
6.7 Total thickness of dry paint film, paint film adhesion	9
6.8 Static load test	9
7 Inspection Rules	9
7.1 Inspection categories and items	9
7.2 Factory Inspection	10
7.3 Type inspection	10
8 Marking, packaging, transportation and storage	10
8.1 Logo	10
8.2 Packaging	11
8.3 Transportation	11
8.4 Storage	11
8.5 Attached Documents	11
9 Warranty Period	11

Appendix A (Informative) Static load test method for medium and low speed magnetic levitation track arrays	12
A.1 Test conditions, instruments and equipment	12
A.2 Loading position and test load	12
A.3 Test steps	12
A.4 Result determination	13

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 is required.

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 the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

This document is under the jurisdiction of the National Technical Committee on Standardization of Urban Rail Transit (SAC/TC 290).

This document was drafted by: Beijing Maglev Transportation Development Co., Ltd., Shandong Iron and Steel Co., Ltd. Laiwu Branch, Shandong Maglev Train China Railway Engineering Corporation, Beijing Railway Transportation Technology and Equipment Group Corporation, National University of Defense Technology of the People's Liberation Army, China Railway Design China Railway Baoqiao Group Co., Ltd., Hunan Maglev Transportation Development Co., Ltd., Southwest Jiaotong University, China Railway Construction Heavy Industry Group Co., Ltd., Tongji University.

The main drafters of this document are: Sun Jiliang, Huo Xiwei, Li Jie, Liu Qiang, Luo Li, Zhao Xinhua, Li Zhenhui, Zhang Xueshan, Zeng Guobao, Long Zhiqiang, Ji Minting, Zhang Yichen, Zong Bin, Zhang Ning, Niu Junkuan, Ma Weihua, Zhang Jinfu, Yan Wenfeng, Yin Xingyu, Zeng Guofeng, Zhou Danfeng, Wang Lianchun, Cheng Yanxia, Yu Peichang, Chen Qiang, Wang Hongxia, Zhu Zhiwei, Jiang Daigeng, Song Yuqing, Yuan Shujun, Wu Yajing, Tian Miaosheng, Zhou Wen, Hu Junxiong, Huang Haitao, Xu Jinguo, Sun Chen, Zhou Hui, and Yang Chunhua.

General technical requirements for medium and low speed maglev transportation track

1 Scope

This document specifies the conditions of use, technical requirements, test methods,

inspection rules, marking, packaging, transportation, Storage and warranty period.

This document applies to the manufacture and acceptance of medium and low speed maglev transportation track with maglev vehicle running speed not exceeding 120 km/h.

2 Normative references

GB/T 68

GB/T 119.1

GB/T 230.1

GB/T 699

GB/T 700

GB/T 1184-1996

GB/T 1231

GB/T 1591

GB/T 1804-2000

GB/T 4171

GB/T 5117

GB/T 5118

GB/T 5237.2-2017

GB/T 6892

GB/T 8923.1-2011

GB/T 11263

GB/T 13012

GB/T 13306

GB/T 14846-2014

GB/T 28699

3 Terms and definitions

The following terms and definitions apply to this document.