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

GB/T 34107-2017

**Seamless precision stainless steel pipes for rail transit vehicle
braking systems**

轨道交通车辆制动系统用精密不锈钢无缝钢管

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard is proposed by China Iron and Steel Association. This standard by the National Standardization Technical Committee Steel (SAC/TC183) centralized. This standard was drafted unit. Jiangsu Yinhuan Precision Steel Pipe Co., Ltd., Jiangsu Wujin Stainless Steel Co., Ltd., China Railway Academy of Sciences Standard Institute of Metrology, Shanghai Fengxian Pipe Plant Co., Ltd., Shanxi Taigang Stainless Steel Pipe Co., Ltd., Zhuzhou Electric Locomotive Co., Ltd. Division, Dalian Locomotive and Rolling Stock Co., Ltd., Qingdao Sifang Locomotive Co., Ltd., Metallurgical Industry Information Standards Institute. The main drafters of this standard. Hua Yang Kang, Wang Zhidong, Song Jianxin, Gao Junli, Zhang Peili, Zheng Wenjie, Duan Jichao, Wang Cunbing, Wang Xiaodong, Dong Li, Gao Pei, Wang Bowen, Shao Xinzong, Wu Zhimin, Pan Kun. Rail transit vehicle braking system with precision Stainless steel seamless pipe

1 Scope

China's national standard for the seamless precision stainless steel pipe used in rail vehicle braking systems. It specifies the order content, the dimensions, shape, weight and permitted deviations, the technical requirements, the test methods, the inspection rules and the packaging, marking and quality certificate, and it applies to locomotives, multiple units, urban rail vehicles and passenger and freight stock. A train's brakes are pneumatic, and the pipe that carries the air is a safety component in the plainest sense: the brake pipe running the length of the train is what applies the brakes, and it applies them by losing pressure, so a break in it stops the train rather than disabling it. That fail-safe design is why railway braking has been trusted for a century, and it is also why the pipe must not fail in the other direction - a slow leak, a fretted wall, a corroded fitting. The pipe is stainless because it lives under a vehicle exposed to weather, brake dust and de-icing salt, and precision because the joints it must seal are made to tight tolerances.

This standard specifies the rail transit vehicle brake system precision stainless steel seamless steel pipe order content, size, shape, weight and allowable Deviations, technical requirements, test methods, inspection rules, packaging, marking and quality certificates. This standard applies to rail transport vehicles (locomotives, EMU, urban rail vehicles,

passenger and freight vehicles, etc.) Air or hydraulic braking system with precision Austenitic stainless steel seamless pipe.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 222 steel finished chemical composition tolerance

GB/T 223.11 steel and alloy chromium content - Visual titration or potentiometric titration Methods for chemical analysis of iron, steel and alloy - The chromochrome acid photometric method for the determination of titanium content Methods for chemical analysis of iron, steel and alloy The dimethylglyoxime gravimetric method for the determination of nickel content

GB/T 223.28 Methods for chemical analysis of iron, steel and alloy alpha-benzoin oxime gravimetric method for the determination of molybdenum content

GB/T 223.59 steel and alloy - Determination of phosphorus content bismuth phosphomolybdate blue spectrophotometry and antimony phosphomolybdate blue spectrophotometry

GB/T 223.60 Methods for chemical analysis of iron, steel and alloy - The perchloric acid dehydration gravimetric method for the determination of silicon content

GB/T 223.63 Methods for chemical analysis of iron, steel and alloy - The sodium periodate (potassium) photometric method for the determination of manganese content

GB/T 223.68 Methods for chemical analysis of iron, steel and alloy - The potassium iodate titration method after combustion in tube furnace for the determination of sulfur content

GB/T 223.86 steel and alloy carbon content - Determination of induction furnace combustion infrared absorption method

GB/T 228.1 tensile testing of metallic materials - Part 1. room temperature test method

GB/T 230.1 Metallic materials Rockwell hardness test Part 1. Test methods (A, B, C, D, E, F, G, H, K, N, T standard ruler)

GB/T 231.1 Brinell hardness test of metallic materials - Part 1. Test methods

GB/T 241 metal tube hydraulic test method

GB/T 242 metal pipe flaring test methods