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**RAILWAY INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

TB/T 2140-2008

**Railway ballast
(English Translation)**

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Foreword

TB/T 2765 Train Monitoring Device can be divided into 5 parts.

- Part 1. Technical Conditions;
- Part 2. Recording;
- Part 3. Regulations on Voice and Electronic Beeping;
- Part 4. Special IC Card;
- Part 5. Adjusting Light Display Interface Box.

This Part belongs to Part 2 of TB/T 2765 Train Monitoring Device.

This Part was drafted as per the rules specified in GB/T 1.1-2009.

This Part shall be under the jurisdiction of CRRC Zhuzhou Institute Co., Ltd.

Chief Drafting organizations of this Part. CRRC Zhuzhou Institute Co., Ltd.

Participating drafting organizations of this Part. Henan Thinker Automatic Equipment Co., Ltd.

Chief drafting staffs of this Part. Shen Zhulin, and Zhang Jiahuan.

Participating drafting staffs of this Part. Yang Qingxiang, and Yang Lijun.

Training Monitoring Device - Part 2. Recording

1 Scope

This Part of TB/T 2765 specifies the record mode, record items, record item points, record generated conditions, dumping and data processing of recording of the train monitoring device (can be expressed by LKJ).

This Part is applicable to the train monitoring device (hereinafter referred to as device) on the locomotive, bullet train and self-rotating wheel running equipment.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

TB/T 2765.1-2015 Train Monitoring Device - Part 1. Technical Conditions

3.2 Software information collection adopts variable record mode; when the information collected reaches specified condition, the corresponding record shall be generated.

3.3 When the variation of information collected during one record period exceeds the

specified interval, only record once change of the information collected. The record period shall be no greater than 2s.

4.1 Input information

The input information indicates the overhaul parameters inputted to the device, setting relevant parameters and the like information; which mainly include locomotive model, locomotive number, wheel diameter, driver number, train number, train marshalling, g) Train tube pressure, equalizing reservoir pressure, locomotive brake cylinder pressure, accuracy of 10kPa; h) Locomotive running condition information (traction/brake position, zero position, forward/backward position and diesel engine speed, etc.).

5.2 The recording shall record the item points beyond 5.1, it can supplement other

item points, such as input contents, software version, etc.

5.3 When the transportation requirements change, it shall increase or decrease the

record items and item points through the negotiation between the supplier and the purchaser.

6.1 For the record items of the input information, when detecting the input information

is changed, corresponding records shall be generated.

6.2 For the record items of the information collection, when the change of information

collection reaches the specified conditions, it shall generate corresponding records; thereof the mainly specified conditions are as follows.

- a) Each time when the collected speed changes greater than or equal to 2km/h or declines to 0km/h;
- b) In the stopping state, each time when the collected pressure changes greater than or equal to 40kPa; in the non-stopping state, each time when the collected pressure changes greater than or equal to 20kPa; the collected pressure declines to 0kPa.

- c) Each time when the collected rotation speed of diesel engine changes greater than or equal to 40r/min.
- d) When the collected locomotive signal status changes.
- e) When the collected locomotive running conditions (traction/brake position, zero position, forward/backward position) change.

6.3 For the record items of operation information, when the device detects the effective operation information, corresponding records shall be generated.

6.4 For the record items of running status information, when the running status of the

device conforms to the specified record conditions, the corresponding records shall be generated.

17 Terminal-II beep ending

Device detects the Terminal-

II beep ending information

When device detecting the Terminal-II beep information
from invalid to valid

18 Terminal-I electric horn beep ending

Device detects the Terminal-I

electric horn beep ending

information

When device detecting the Terminal-I electric horn beep
information from invalid to valid

19 Terminal-II electric horn beep ending

Device detects the Terminal-

II electric horn beep ending

information

When device detecting the Terminal-II electric horn