

ICS 27.100
CCS J 83

DL

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

DL/T 1965-2019

**Rotary dumper system operation and maintenance guidelines
(English Translation)**

Issued on: June 4, 2019

Implemented on: October 1, 2019

Issued by: National Energy Administration

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009 "Guidelines for Standardization Work Part 1: Standard Structure and Compilation".

Please note that certain contents of this document may involve patents. The issuing agency of this document is not responsible for identifying these patents.

This standard was proposed by the China Electricity Council.

This standard is under the jurisdiction of the Electric Power Industry Standardization Technical Committee for Coal-fired Machinery.

Drafting organization of this standard. Datang Jingjinji Energy Development Co., Ltd.

1 Scope

This standard specifies the general requirements for the operation, maintenance and safety management of the rotary dumper, as well as the common faults of the dumper and the solution.

This standard applies to rotary single-vehicle dumper systems used in thermal power plants and ports, and multi-vehicle dumper systems can be implemented by reference.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version Applies to this document. For undated references, the latest version (including all amendments) applies to this document.

GB/T 3766 General rules and safety requirements for hydraulic transmission systems and their components GB/T 5014 elastic pin coupling GB/T 5015 elastic pin gear coupling GB/T 5272 plum blossom flexible coupling GB/T 5843 flange coupling GB/T 6069 Roller chain coupling GB 26164.1 Electrical Safety Work Regulations (Thermal and Mechanical Parts) GB 50150 Electrical equipment handover test standard GB 50229 Code for fire protection design of thermal power plants and substations GB 50231 General specification for construction and acceptance of mechanical equipment installation engineering JB/T 6406 Electric hydraulic drum brake JB/T 7015 Rotary dumper JB/T 7020 electric hydraulic disc brake JB/T 7934 Type and basic dimensions of expansion coupling sleeve JB/T 8712 Star gear reducer JB/T 9050.1 Cylindrical Gear Reducer Part 1: General Technical Conditions JGJ 82 Technical Specification for High Strength Bolt Connection of Steel Structure

3.1 Personnel safety

3.1.1

The operation and maintenance personnel should be full-time personnel who have passed the training and examinations.

Should be authorized.

3.1.2

The operating personnel shall follow the relevant regulations of GB 26164.1 in their operations.

3.1.3

The maintenance personnel shall follow the relevant regulations of GB 26164.1, GB/T 6067, and GB 50229 during operation.

3.1.4

Operation and maintenance personnel should master the basic knowledge related to the use of the dumper, including.

- a) The working principle and technical parameters of the main organization;
- b) How to use instruments, meters, buttons and handles;
- c) Basic knowledge of maintenance;
- d) Handling methods for simple faults;
- e) Emergency measures for emergency situations;
- f) The performance and use of safety protection devices;
- g) Familiar with fire escape routes.

3.1.5

The operation and maintenance personnel shall abide by the operation and maintenance procedures related to the dumper during the operation.

Pay attention to the safety signs on the device.

3.1.6

During the operation, the operating personnel should focus on operation and monitoring, and should not work fatigued, should not leave their posts or deliver Authorized personnel will do it on your behalf.

3.1.7

During operation, emergency shutdown should occur when a situation that endangers equipment and personal safety occurs.

3.2 Operational safety

3.2.1

The dumper is only used for tipping and unloading of design materials and should not be used for any other purpose.

3.2.2

The dumper shall not be used beyond the output and operating range allowed by the design.

3.2.3

The operating speed of each mechanism of the dumper should meet the requirements of the design and working conditions, and should not run at excessive speed.

3.2.4

The normal start and stop of each mechanism of the dumper should use the start-stop operation switch, and the emergency stop and limit switch should not be used.

3.2.5

It is strictly forbidden to start the equipment before the failure of the equipment is eliminated; after the accident, the principle of "four don't let go" should be followed to process.

3.2.6

The night work should be well illuminated, and the machine should be shut down immediately when the illumination is interrupted.

3.2.7

Keep communication unblocked during operation.

3.3 Maintain safety

3.3.1

Before equipment maintenance, the dumper should be parked in a safe area, cut off the power and control power supply of related institutions, and locked.

A cordon or safety sign should be set up at the entrance of the plane.

3.3.2

Operational hazard identification and safety risk notification should be carried out before equipment maintenance.

3.3.3

When working on electrical equipment that has all or part of the power outage, power outages, electrical inspections, installation of grounding wires, suspension Technical measures to ensure safety, such as identification plates and installation of barriers, should be implemented by operating personnel or personnel with operating qualifications.

3.3.4

When hot work is carried out in the work area of the dumper, the corresponding hot work measures should be processed and reliable isolation should be adopted.

Work can only be carried out after measures.

3.3.5

Welding, gas cutting and beating are carried out in dangerous enclosed areas that are likely to cause fire and explosion in the presence of dust, oil, grease, etc.

For grinding and other operations, approval procedures should be performed, adequate ventilation and cleaning should be carried out before the operation, and no safety hazards can be confirmed before proceeding.

operating.

3.3.6

When the mechanical and electrical safety facilities are disassembled due to maintenance work, they shall be restored to their original state immediately after the work is completed.

3.3.7

Maintenance work should be carried out by professionally trained personnel, and special operation personnel should have corresponding qualifications.