



Study & Proposal on Block Handler



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Agenda

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- Proposal
- Introduction
- Safety Risks
- Standards Development in China
- Summary

To develop relative and sufficient safety requirements to address severe safety risks of block handler due to its unique functions and applications.

Block handler:

- Block handler is a rapidly developing product in recent years, widely used in nearly 30 countries and regions. The booming market requires new technology and large size machines.
- Block handler and wheel loader are essentially different in applications, functions, technical characteristics. The specific safety requirements of block handlers require further attention and investigation based on ISO 20474.



Block handler.mp4

Loading Operation

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Wheel loader



Block handler



Transportation

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Wheel loader



Block handler



Stacking Operation

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Wheel loader



Block handler



- Tipping risks
 - Block size/shape can't be predicted, and the un-centralized load situation often occurs.
 - Long distance backward travelling with heavy load is its normal operating mode.
- Overload risks
 - Overload safety device/measures required.
- Visibility risks
 - Very big size block load is in the front side of machine.
 - Long distance backward traveling with load.

It is highly necessary to develop safety requirements to address severe safety risks of block handler.

- There were debates on the appropriate TC to deal with the block handlers;
- It is officially approved by SAC(China) and the industries that block handlers fall into the scope of EMM;
- China established block handler working group in 2014.

- 3 standards completed.
 - Earth-moving machinery – Block handler– Test Methods
 - Earth-moving machinery – Block handler– Technical specifications
 - Earth-moving machinery – Block handler– Fuel consumption test methods
- 2 standards under development.
 - Earth-moving machinery – Block handler –Safety requirement
 - Earth-moving machinery – Block handler– Terminology and commercial specification
- Started standard development on
 - key components related standards such as axle and transmission.
- After receiving relative comments in Hiroshima, China established working group to analyze and compare the standards between block handler and wheel loader
 - WG Members: Xiajin Machinery, Jingong, XCMG, Lingong, Liugong, Lonking, NCIV, Heli, Minxuan Technology, TJRICM.

- Block handlers are in the working scope of EMM.
- It is highly necessary to develop safety requirements to address and deal with severe safety risks of block handlers.
- SAC (China) has already established the related working groups.
- Based on further study and your feedbacks, SAC (China) has the plan to develop NWIP in the near future.
- Warmly welcome delegates to participate in the study and further development.



Questions or comments?

Thank you.