



MOM/OSHD/2024-07

3 JUL 2024

To: Lorry Crane Owners  
Lorry Crane Authorised Agents  
Authorised Examiners (Lifting Equipment)  
All Interested Parties

### **MANDATORY INSTALLATION OF STABILITY CONTROL SYSTEM IN NEW LORRY CRANES**

Lorry cranes<sup>1</sup> are frequently used in proximity of public areas. If lifting operations are not properly managed, this can potentially cause severe impact to both workers and members of the public. However, due to space or operational constraints, full extension of lorry crane stabilisers may not always be possible. Therefore, this can compromise safety of lifting operations. Stability control system is a proven technology that can prevent toppling of lorry cranes in such situations.

#### **ADVANTAGES OF A STABILITY CONTROL SYSTEM**

2 A stability control system is designed to detect the deployment and extension of each stabiliser of a lorry crane, subsequently calculating and restricting crane movements within a safe lifting zone. By installing a stability control system, the risk of overturning of a lorry crane can be effectively mitigated. This allows for safe operations in space-constrained situations with partially extended stabilisers.

#### **IMPLEMENTATING STABILITY CONTROL SYSTEM IN NEW LORRY CRANES**

3 From 1 Jan 2025, the Ministry of Manpower will require new lorry cranes<sup>2</sup> registered under the following lifting equipment classification codes to be installed with an acceptable type of stability control system.

- i. 631 Lorry Loader – Telescopic Boom
- ii. 632 Lorry Loader – Articulating Arm
- iii. 633 Lorry Loader – Telescopic Boom and Articulating Arm
- iv. 638 Lorry Loader – Recovery Truck<sup>3</sup>
- v. 639 Lorry Mounted Cranes, n.e.c.

#### **ACCEPTABLE TYPE OF STABILITY CONTROL SYSTEM**

4 The stability control system installed in new lorry cranes from 1 Jan 2025 shall **determine the rated capacity of the crane** by continuously monitoring the deployment and extension of every stabiliser, outreach and position of the crane. The stability control system shall **reduce the rated capacity or stop all manoeuvres** if stabilisers are not sufficiently deployed, ensuring that the crane remains stable while in operation.

<sup>1</sup> Loader cranes mounted on a vehicle chassis, as depicted in Annex A, are commonly referred to as lorry cranes.

<sup>2</sup> Refers to lorry cranes that are registered for the first time with the Ministry of Manpower. Existing lorry cranes that are subsequently re-registered due to change in ownership are excluded.

<sup>3</sup> Stability control system will be mandatory for recovery trucks only if installed with loader cranes.

5 The stability control system shall be factory-fitted by the lorry crane manufacturer or installed by the authorised agent for the respective brand of lorry crane.

6 Stability control systems that limit or stop crane movements based on crane or vehicle inclination are not acceptable.

#### STABILITY CONTROL SYSTEM FOR EXISTING LORRY CRANES

7 Owners of existing lorry cranes without a stability control system are strongly encouraged to install an acceptable type of stability control system. This is to ensure greater assurance of safe lorry crane operations, especially when stabilisers are partially extended.

#### MAINTAINING FUNCTIONALITY AND ACCURACY OF STABILITY CONTROL SYSTEM

8 The stability control system is one of the safety devices installed in lorry cranes. Similar to all other safety devices, it is crucial for the stability control system to be properly maintained and periodically calibrated for safe lorry crane operations.

#### STATUTORY EXAMINATION OF LORRY CRANES

9 Authorised examiners are required to ensure and indicate that an acceptable type of stability control system has been installed when registering a new lorry crane from 1 Jan 2025.

#### FURTHER INFORMATION

10 Owners, authorised agents, authorised examiners and relevant interested parties are required to exercise all due diligence in ensuring compliance to the above requirements, the Workplace Safety and Health Act and its subsidiary legislation.

11 For queries and clarifications, please contact the MOM Contact Centre at 6438 5122 or [mom\\_oshd@mom.gov.sg](mailto:mom_oshd@mom.gov.sg).



**BERNARD KWOK**  
for COMMISSIONER FOR WORKPLACE SAFETY AND HEALTH  
OCCUPATIONAL SAFETY AND HEALTH DIVISION

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ANNEX A : TYPES OF LORRY CRANES

