

Safety Alert - Swing-Up Stabilisers

Version Two - July 2022

What Happened?

The Health and Safety Executive (HSE) has informed ALLMI of a third fatal accident (since 2019) where an Operator was crushed by a 'swing-up' (also known as 'tilting' or 'rotating') stabiliser. Whilst there are differences between each accident, the common issues are:

- The Operator was using hold-to-run levers at the crane base and was not observing the stabiliser leg as it was being retracted.
- The stabiliser leg was retracted in a horizontal position and it struck the Operator.

Swing-up Stabilisers - Background:

Swing-up stabilisers are fitted to lorry loaders predominantly to negate the need for widescale relocation of chassis furniture during installation and have become increasingly common in the last 15 years. They may be manually or hydraulically operated, either by levers at the crane base or via remote control, dependent upon specification.

Guidance:

The following is extracted from ALLMI Guidance Note 033 Swing-Up Stabiliser Safety:

- There is a potential crush risk on the side where the swing-up stabiliser tilts towards the Operator / levers at the crane base. To avoid this, the control measures listed below should be followed.
- Swing-up stabilisers should be pinned / locked in the vertical / upright position before the stabiliser beam is deployed or retracted.
- It is essential that Operators fully observe the operation of the stabiliser leg during deployment and stowage.
- Operators must be made aware that the operation of the swing-up function must be separate from the movement of the stabiliser beam (i.e. they should not use both functions simultaneously).
- Operators must be fully conversant with the manufacturer's instructions regarding the deployment and stowage of swing-up stabilisers. There can be considerable variation between different manufacturer systems.
- Operators must not be positioned in (or lean / reach into) danger zones where there is a risk of crushing.
- If swing-up stabilisers are used on sites where the stabiliser is only partially deployed, there is an increased risk of creating a danger zone where the swing-up stabiliser tilts towards the Operator / levers at the crane base. In this case, consideration should be given to repositioning the vehicle to ensure further extension of the stabiliser beam is achievable prior to the swing-up leg being deployed.
- Residual risk warning stickers / decals must be visible and maintained.
- All loader cranes with remote control have the option to use emergency levers at the crane base. Such levers are only required in the event of remote control failure, following confirmation that the spare battery does not resolve the issue and failure of the remote control 'umbilical cord' (i.e. the umbilical cord should be tried first, before using the emergency levers). Fleet owners are advised to confirm the umbilical cord is available in the cab at all times and is serviceable / fit for use. Should emergency levers need to be used, the above guidance applies in the same way as it would to standard controls.

Immediate Actions Required:

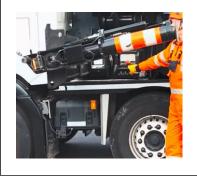
- ALLMI Guidance Note 033 Swing-Up Stabiliser Safety should be briefed to all involved in lorry loader operations.
- Fleet owners should ensure that Operators are competent and have been monitored in the correct use of stabiliser legs.
- Those involved in lorry loader operations should risk assess the crushing hazard from stabiliser deployment and stowage, and include control measures in all lorry loader procedural documentation, such as lift plans.
- Training providers should include coverage of this guidance during Operator courses, regardless of stabiliser type (as Operators may move between vehicles).
- Those conducting familiarisation training on lorry loaders (such as during new vehicle handover or when Operators move to a new vehicle) should include coverage of this guidance.

Staged Photographs

Operator stowing swing-up stabiliser using levers at the crane base



Location of levers at the crane base



Swing-up stabiliser rotating away from Operator on opposite side of vehicle (manufacturer dependent)



Progress Made:

Following the publication of Version One of this Safety Alert in October 2021, ALLMI has:

- Published ALLMI Guidance Note 033 Swing-Up Stabiliser Safety, which has been distributed to ALLMI Members, Training Providers and Cardholders, as well as the wider industry via ALLMI's communication channels and the trade press.
- Ensured all applicable ALLMI training and guidance material incorporates the additional hazards identified with swing-up stabilisers.
- Facilitated discussion by the ALLMI Technical Standards Committee and loader crane manufacturers / importers regarding swing-up stabiliser safety in relation to operation, installation and possible technical safeguards.
- Presented a UK view resulting in work commencing on an amendment to loader crane design Standard, EN 12999:2020. Following the first meeting of the committee responsible, a new clause has been included to design out any possible entrapment issues.
- Held discussions with Tier 1 Contractors regarding the prevention of swing-up stabiliser accidents and associated site policy.