**POWER TO LIFT** 

## STABILITY IN YOUR CRANE WORK

EVS - Electronic Vehicle Stability



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EVS is an intelligent and sophisticated stability safety system which actively monitors vehicle stability.

It is very easy to operate, so easy that most often you, as the crane operator, will not notice it is active, unless you're in a situation that might become critical.

#### The system includes all these conditions when operating:

- load on the vehicle
- load on the crane
- speed
- heel of the vehicle

Therefore, you will get a warning before a situation becomes critical. This means that you can trust the system to automatically limit unauthorized movements and to stop at the designated limit.







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### **USE YOUR LOAD** TO REACH FURTHER

Working with truck-mounted cranes traditionally requires that the stabilizer beams are fully extended if they are to provide the necessary vehicle stability.

Reality, however, tends to be different. Often, cranes have to work in cities with kerbs, walls and a lot of obstacles that make it impossible to fully extend the stabilizer beams. This may also be the case in nature, where working in terrain with uneven and sloping surfaces can be challenging. With EVS you can optimize the working area of the crane without being limited by how far you can extend the stabilizer beams.

The load on the truck body works like an anchor that gives a counterweight to the crane. The EVS system continuously calculates the total stability of the vehicle with the load integrated and actively includes the load on the vehicle. You can then utilize the maximum lifting capacity of the crane up to its limit – 360 degrees around the vehicle, within the stability available.

# WHY CHOOSE EVS?

### Safety and flexibility

- The crane actively gets an optimized lifting capacity in the entire 360 degree working area also in front of the vehicle, when there is load on the truck body.
- EVS provides dynamic operation, continuously monitoring the vehicle stability in relation to current conditions.

EVS carries out ongoing calculations of the total stability of the vehicle, and because EVS also includes the load on the truck body and the total weight of the vehicle, it is possible to lift with optimized capacity in front of the vehicle, without having to worry about lack of stability.



# CONCENTRATE ON **WORK**

EVS is intelligent and user-friendly, so it allows the operator to concentrate on the lifting task. It actively monitors what the operator intends to do, and reacts continuously to ensure vehicle stability.

EVS works together with the safety system RCL, which comes on all cranes. The RCL controller reads the operator's activation of the control levers before the crane begins to move, and informs the crane on how to adapt movements and speed accordingly. In the EVS system it is the RCL that provides information about the conditions and load moment of the crane.

This is the optimal interaction between the RCL and EVS; the RCL constantly monitors the current condition of the crane, and registers the movements of the crane, whereas EVS registers and monitors the condition of the vehicle on an ongoing basis and with extreme precision.

#### Tried, tested, and approved

EVS has been in successful operation on vehicles all over the world for more than 20 years. The system has also been approved according to the EN 280 for working with personnel baskets (MEWP), which requires compliance with particularly strict demands for both safety and reliability.

#### Stable crane operation

Safety is very important for everybody working with machines, cranes or trucks. Still, you need the flexibility of maneuvering your truck-mounted crane freely, without having to waste too much time thinking about whether it is possible to perform the job in question.

EVS will stop the crane at the limit of stability. When EVS registers that the crane has reached the safety limit, the system gradually and almost unnoticeably begins reducing the speed of the boom system. At 90% the RCL activates a signal. At 100% it stops the crane.



# STRONG SUPPORT FOR YOUR DAILY **WORK**

#### AutoSwitch for unintentional stops

If you need to switch off EVS for special situations, you can select the option AutoSwitch for the crane. EVS can be deactivated in the side, where the stabilizer beam is completely extended, and the stabilizer leg is lowered to the ground. AutoSwitch requires that a stability test has been carried out correctly and that all values comply with the requirements for vehicle stability.

#### Information about crane operation and warning systems

HMF Power Display is a radio remote control unit where you can see information on the current load, operation and load moment, the inclination of the vehicle, and a lot more. If the crane stops, you can see the reason immediately, and take suitable precautions.





### HMF GROUP A/S

HMF Group A/S is one of the world's leading crane manufacturers within truck-mounted loader cranes. We design, manufacture, sell, and service strong cranes of high quality.

Our strategy is focused on constantly improving our core competencies. Being innovative, leveraging new technologies and working with smart people, enable us to develop and deliver strong cranes around the world.

#### International crane specialists

With headquarters in Denmark, we are represented around the world through sales and service partners. We believe our success is based on reliable cranes combined with service-minded colleagues and partners.

Our overall product line contains models with lifting capacities ranging from 3-95 tm, vehicle body buildings, and other transport equipment.

Our global network of service partners form the foundation of our service program and our partners have extensive knowledge about HMF cranes. Further, they have original HMF spare parts on hold and in case they are out, we ship on a daily basis from the headquarters in Denmark.



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