# PRESS RELEASE

## Certified safety solution for crane modernisation

- **Demag refurbishment experts develop safety concept that satisfies standards**
- **For Performance Level d (EN ISO 13849) and SIL 2 EN IEC 62061**
- **EU standards require crane installations to meet safety specifications**
- **No longer a need for individual certification**

**Wetter, Germany, 14 March 2017. Demag Service is the first company to receive certification for the software package with which existing cranes can be updated to meet the latest safety requirements. Users can benefit from high safety standards and faster crane acceptance inspections.**

Crane installations – and not only Demag cranes – can have extremely long service lives. However, this means that the control system may need to be modernised. In particular, this applies to safety-related functions.

For this reason, this task is also currently the focus of attention for many crane owners and operating companies, since the latest EU work equipment directive – which is implemented in Germany as industrial health and safety regulations (BetrSichV) for example – has eliminated the exemption for existing machinery and equipment. This means that older crane installations also have to be adapted to meet the latest (safety) requirements.

Until now, crane owners and operating companies had to go to considerable lengths not only for the implementation, but also for the certification of the new safety functions. This time and expense can now be avoided. Demag Advanced Safety Solution (abbreviated to D.A.S.S.) is a software solution that can be used for retrofitting safety features in existing crane installations and which has been certified by the wood and metal technical committee of the German Industrial Employers' Liability Insurance Association according to the requirements of EN ISO 13849.

As required, the type-tested software can trigger the safe shutdown of individual crane motion axes if any possible irregularities occur. These can include, for example, situations when a drive unexpectedly starts up, an emergency limit switch is approached, an external emergency-stop signals is triggered and if a data transfer error occurs in connection with radio control.

The latest certified version V2.4 of Demag Advanced Safety Solution includes 44 such scenarios that can be recognised by the software. Depending on the type of hazard, the motion axis is then safely switched off or (e.g. if an overload is being lowered) safely slowed down. The control system also enables the operation of two cranes to be safely co-ordinated – for example as collision protection or for tandem control. The requirements of Performance Level d (to EN ISO 13849) and SIL 2 EN IEC 62061 are fulfilled.

The fact that the safety-related software, and the safety concept that it is based on, has now been certified by the Industrial Employers' Liability Insurance Association offers considerable benefits for crane owners and operating companies. Thorsten Minklei, Head of Demag Refurbishment explains: "Thanks to the certification for D.A.S.S., we can offer our customers high safety standards. It also eliminates the need for them to have the safety concept individually checked and approved by another body. That saves time and money."

As far as Demag Service is aware, the Demag Advanced Safety Solution is currently the only software available for updating crane safety features that has such certification. This does not, of course, eliminate the need for careful modernisation and a check of all hardware components in the safety system. The hardware components also have to be designed as completely redundant features. However, the administrative demands for safety-related modernisation are now much simpler, and the crane can be returned to operation more quickly.