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Illinois-based Liftomatic has launched its model 3A-HD-BHDL lifting system for drums weighing up to 1,134kg (2,500lbs)

allows the attachment to better withstand the dynamic forces that often occur in an offshore lifting environment.

"Our offshore products are manufactured to exact demands and we take preventive actions that prevent hydrogen embrittlement in the hook's material," continues Ehrborg. "The risk of hydrogen embrittlement and stress corrosion cracking is minimised through the use of high quality steel, a thoroughly controlled production process, and a low level of hardness (38 HRC) in the finished product."

While a marine environment poses challenges to equipment in terms of extremely cold temperatures and corrosive sea water, the problem of hydrogen embrittlement is caused when hydrogen enters steel during the manufacturing process.

If this occurs, it can cause unexpected

brittle fractures at loads below the stated working limit, which can potentially lead to catastrophic failures of the lifting equipment and damage to operators and property.

As well as recently launching the offshore safety hook, Gunnebo has additionally developed its WRIN STR Handle, a safety handle that is said to provide additional security for the company's BK Safety Hook family.

"With this unique handle operators are able to open and close the safety hook without placing their hands inside the hook, resulting in reduced risk of personal injury on worksites," explains Ehrborg. "The handle is easily mounted on the safety hook, without compromising the integrity of the design and capabilities of the hook."

Ehrborg adds that both pieces of technology can be used in offshore environments with fore-runner/stinger slings on platforms when off-loading to supply boats.

In general, the company says that it is

SMART GRABS FOR PROCESS CRANES

Spain-based Stemm has introduced a range of Smart Grabs, designed to automatically adapt speed and pressure during each handling process to suit the specific characteristics of the product being lifted, with no manual intervention from the operator required.

The grabs are suited to process crane applications: if the product being lifted is, for example, heavy or compacted, of large granulation, or mixed with light products or plastic packages, the grabs will work at a higher or lower speed as required, and regulate the penetration force accordingly.

The attachments use a specialised hydraulic circuit combined with an automaton, to allow for the regulation of pressure, time delays, and other parameters. The working mode of the grabs can be programmed prior to starting work, based on the products or materials being handled; this is done remotely, either from the crane cabin or via remote control through a tablet, PC or smartphone.

The grab's operating regime can be displayed and controlled through the remote control system, gathering data on the number of fast and slow manoeuvres carried out during the homogenisation and preparation phase, helping to reduce the amount of time required to set up the grab prior to beginning each job.

Stemm's Smart Grabs are used across a wide range of sectors. The waste treatment industry benefits from the technology at plants where waste from households, business and shops are collected together with consignments of plastic packaging and rejections from composting and recycling plants; the resultant mix has a varied composition, granulometry and density. During the process of moving the waste to the incinerator lines, the grabs are able to adjust the levels of penetration, drag and speed to best suit the load being picked and carried; for example, when picking up a lot of light plastics, a low penetration force is required, along with rapid and agile manoeuvres.

Other industries highlighted by Stemm include the biomass sector, where the Smart Grabs can help to transfer the product into boilers; the iron and steel industries, for loading different types of scrap such as chips, fragmented scraps, light metal waste and structural scrap; the cement manufacturing industry, where the grabs can help with the mixing process of crushed limestone and clay; and on port cranes, where the ability of the grab to lower the penetration forces when possible reduces cycle time when unloading boats.

