



For immediate release

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**GENIE® Z®-45 XTRA CAPACITY™ (XC™) BOOM LIFT GOES
1,000 M (3,280 FT) UNDERGROUND**

(Articulating boom lift chosen for its robust 4WD capabilities and increased lift capacity to support construction of radioactive waste repository)

Emsbüren, Germany, (12th August 2020) – As part of the transformation of a disused iron ore mine in Salzgitter, Lower Saxony, authorized Genie® Distributors, Wienold Lifte, based in Emsbüren, supplied ETS Schacht Konrad Consortium with an articulating Genie Z®-45 XC™ boom lift. Working at 1,000 m (3,280 ft) below ground at a constant temperature of 40°C (104° F), the machine is proving well suited for supporting workers in preparing and stabilising existing tunnels and newly bored storage chambers in Germany’s first deep geological repository for low and medium-level radioactive waste (Konrad Pit).

Fully dismantled, then reassembled in three days

Accessible only by industrial elevator, Wienold Lifte entirely dismantled the boom lift to access the pit. To adapt to the site’s strict fire safety measures, the company also equipped the machine with fire-resistant hoses. Delivered in parts via the elevator, within three days the machine was reassembled and ready to work on site underground.



Only accessible via elevator, the Genie® Z®-45 XC™ boom lift was dismantled and reassembled inside the pit.

“The temperature down there is at a constant 40°C (104° F), which makes every movement a real effort,” explains Martin Szykiel, workshop manager, Wienold Lifte. “The Genie Z-45 XC boom will be staying in the pit for its lifetime. Given the heat, plus the challenges of the work itself, it takes particularly robust and high-quality equipment to perform reliably in such tough conditions.”



Almost ready, the electronics still need to be checked.

Why the choice of a diesel-powered articulating Genie XC boom?

By experience, ETS Schacht KONRAD Consortium knows that, when working in a very hot environment with heavy tools and materials, diesel-powered equipment is better suited to the nature of the task and site conditions with insufficient charging possibilities.

“In addition to working at height, the Konrad Pit requires equipment that can operate with the site’s slopes and gradients,” says Christian Wienold, managing director, Wienold Lifte. He continues: “Equipped with a 35.8 kW (48 hp) diesel engine, the Genie Z-45 XC boom offers excellent 4WD abilities. As a result, the machine is contending with the job and the terrain with ease.”

A heavy working at height application

The transformation of the old ore mine is part of a long-term process. In preparation for its future as a repository, a boring machine is being employed to enlarge existing tunnels and to open up new storage chambers. Then, the mine experts rework the walls employing appropriate equipment.

The Genie Z-45 XC is first used to prepare the wall by drilling holes and reinforcing them with steel. Once this task has been completed the boom is positioned at the centre of the tunnel where it is operated in sweeping, semi-circular movements to enable operators, equipped with a spraying machine, to stabilise the tunnels and finish the walls with a covering of concrete applied from the ground to the ceiling.

Thanks to its dual-envelope design and lift capabilities of 300 kg (660 lb) unrestricted and 454 kg (1,000 lb) restricted, this machine provides the ability to have two workers operating two concrete sprayers simultaneously, a productivity increase that would not have been possible with the standard lifting capacity of 227 kg (500 lb).

Efficient operation with limited space to work in

“More than height, what counts the most on this job is reach capabilities to work productively. If operators had had to use a scissor lift, they would have needed to reposition it at least 20 times a day,” says Wienold. “With the Genie Z-45 XC boom, they benefit from 7.55 m (24 ft 9 in) horizontal outreach and an up-and-over clearance of 7 m (24 ft 5 in) that enables them to prepare and stabilize the walls which is saving them a lot of time. And when they do have to move it, the unit’s tight turning radius and zero turntable tailswing are a definite plus that makes manoeuvring in the relatively narrow shafts through junctions and curves much easier.”

Available from stock

Thomas Opretzka, mobile lifting equipment manager, ETS Schacht KONRAD Consortium says: "The Genie Z-45 XC boom was available from stock. We are glad to say that this meant that Wienold Lifte was able to cater to our demand at short notice."



Genie® Z®-45 XC™ boom lift at work on its long-term mission.

For details on the Genie Z-45/25 XC boom lift, please visit the Genie website at:
<https://www.genielift.com/en-gb/aerial-lift-products/articulated-boom-lifts/z45xc>

About Wienold Lifte

Founded in 1987 and based in Emsbüren, Lower Saxony, Germany, Norbert Wienold GmbH has been a Genie distributor for more than 30 years. Specializing in the sale of aerial work platforms and glass and material lifts, the company operates through seven rental and service branches nationwide and employs 30 members of staff. In addition to a wide range of material and personnel lifts (AWPs), scissor lifts and telescopic and articulating booms lifts, the company's sales offering also includes Glaslifte vacuum lifters and accessories for house appliances and machines, and develops its own material lifts such as the SLK Superlift with counterbalance, the versatile WLU Premium series, and the new Wienold Glass & Material Lift GML800 + series. Company founder Norbert Wienold, his son Christian Wienold and daughter Julia Wienold place a strong focus on providing tailored customer care and forming solid, long-term business relationships. Company services include delivery and collection of machines and equipment, maintenance, repairs, servicing, safety inspections and the provision of spare parts, among others. Wienold is a regular exhibitor at trade shows such as Glasstec, and bauma Munich. More information about Norbert Wienold GmbH can be found at www.wienold-lifte.de

About the Konrad Pit

Located in the city of Salzgitter, southeast Lower Saxony, Germany, the Konrad Pit (Schacht Konrad) is a former iron ore mine proposed as a deep geological repository for medium and low level radioactive waste. Today, the site is in the process of being transformed into a storage depot formed of clustered chambers. In total, up to nine storage depots are scheduled to be added to the existing site at depths ranging from 800 to 1300 m. Storage chambers measure a diameter of 7 meters and a height of about 6 meters for a capacity of approximately 40 m². Ranging from 100 to 1000 m, the length of the chambers varies according to technical constraints and geological conditions. Once filled, the shafts will be closed by section with concrete for the permanent storage of containers of nuclear waste.¹

¹ https://en.wikipedia.org/wiki/Konrad_mine

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About Terex

Terex Corporation is a global manufacturer of lifting and material processing products and services delivering lifecycle solutions that maximize customer return on investment. Major Terex brands include Terex, Genie and Powerscreen. Terex solutions serve a broad range of industries, including construction, infrastructure, manufacturing, shipping, transportation, refining, energy, utilities, quarrying and mining. Terex offers financial products and services to assist in the acquisition of Terex equipment through Terex Financial Services. More information about Terex is available on its website: www.Terex.com, and on its LinkedIn page -- www.linkedin.com/company/terex and Facebook page -- www.facebook.com/TerexCorporation.