

Job Report

Wheeled Excavator

A 924

Litronic®

The A 924 Litronic Wheeled Excavator

in operation at
LEONHARD WEISS GmbH & Co. KG



LIEBHERR



Situation

As a result of constantly increasing HGV traffic on motorways, demand for service stations with washroom facilities and an adequate number of truck parking spaces is also rising steadily. In this context, spring 2016 saw the start of refurbishment work at the Silberbach service station near the town of Herrieden-Ansbach. The plan was to create 110 additional truck parking spaces with more modern washroom facilities as well as noise reduction and privacy walls. To ensure that this major project could be completed quickly and on schedule, good planning and a reliable fleet of construction machinery were both necessary.

Leonhard Weiß was self-employed from as early as 1900. He won the contract from the West German Railway Company to build the Aalen-Neresheim-Ballmertshofen section of rail track. This job laid the foundations for the company as it is today. With a workforce of over 4,400 people, it provides services to regional and national customers with its three business units: road and rail construction, track infrastructure construction and engineering and turnkey construction. Leonhard Weiss uses the latest construction machinery from Liebherr to enable it to meet the very high demands of its customers.

Task

Wide-ranging foundation work had to be carried out for the complete refurbishment of the Silberbach motorway service station. Work that needed to be completed on site included canalisation, drainage ditches, the installation of a gravel base course, installation of the gabion fence and the laying of

topsoil. A construction machine capable of removing a complete embankment area in one operation was required for the extensive modelling and landscaping work. The machine also had to be able to change location quickly and easily at any time without damaging the road surface.

Solution

Liebherr-Hydraulikbagger GmbH assessed the needs of Leonhard Weiss GmbH & Co. KG and was able to offer a machine that satisfied all these requirements: the powerful A 924 Litronic wheeled excavator with special embankment equipment.

The A 924 Litronic features a Liebherr diesel engine that develops 140 kW/ 190 HP (ISO 9249) and meets Stage IV emissions regulations using newly-developed Liebherr SCR technology. Liebherr's innovative SCR system which comprises an SCR catalytic converter system and other components including an injector and AdBlue® supply, enables nitrogen oxides (NOX) to be reduced by 91 per cent. Low exhaust emissions, in strict compliance with current regulations, and low fuel consumption help protect the environment and scarce resources. The Liebherr-Power Efficiency (LPE) system improves the efficiency of the drive components to ensure perfect interaction. This enables the machine to be operated close to its minimum level of fuel consumption. Despite the substantial embankment equipment, consisting of a 9.70 m long mono boom and a 7.40 m stick, fuel consumption was still just 15.7 litres/hour.

Other features of the A 924 Litronic include two stick cylinders in series to enable a large working area to be covered whilst keeping transport length and height relatively low. A working radius of up to 18 m enables levelling work to be carried out in one operation. This delivers enormous time savings as embankment work no longer has to be carried out in several stages. As well as a financial benefit, this capability brings a range of other major benefits not available on comparable machines.

The A 924 Litronic's mobility is another of its major benefits. The hydraulic excavator can change its location quickly and flexibly and, for example, work on a motorway from the hard shoulder without leaving any signs of damage on the road surface.

Liebherr tyres without a spacer ring improve the stability of the A 924 Litronic by ensuring increased air pressure and a larger support surface area. These tyres also deliver a better self-cleaning effect than conventional tyres with a spacer ring. Stability is a major safety criterion for the machine driver, particularly when using long pieces of equipment, and the improved stability provided by tyres without a spacer ring means the driver can work with confidence and in maximum comfort at all times.

The combination of joystick control and the automatic working brake ensures that the A 924 Litronic can be controlled efficiently, thereby improving productivity. Using the joystick control, the driver can steer the wheeled excavator proportionally using a mini joystick. This means that working and driving movements can be completed simultaneously without the driver having to reposition their hands. The automatic working brake also ensures that there is no longer any need to press the brake pedal manually. This makes for faster operations, particularly for jobs where the excavator has to be moved frequently.

In terms of safety, the A 924 Litronic scores highly thanks to its large cabin windows and camera-based rear and side area monitoring system with high-contrast colour display. Together these features enhance the machine driver's safety and ensure safe operation of the wheeled excavator at all times by providing an excellent overview of the working area and zone around the machine. There is even an optional roof wiper to keep upward visibility clear in wet weather.





Technical Data – A 924 Litronic

Operating weight	approx. 26 tons
Engine type	Liebherr D934
Engine output	140 kW (190 HP) at 1,700 RPM
Emission control	Liebherr-SCR technology
Emissions stage	IV

Equipment

Two-piece boom	9.70 m
Stick	7.40 m
Attachment tool	Direct mounting, tiltable ditch cleaning bucket, 2,000 mm, 0.50 m ³ , 2x50°
Max. reach	18 m
Stabilization	4 point outriggers