

Job Report

Soil Mixing with an LRB 16

“The low transport weight of the LRB 16 was decisive for this project. Once in operation, it also fully convinced us with its diesel consumption of only 20 l/h.”

Manfred Mueller
Partner at HD Equipment



LIEBHERR



Situation

The island of Jersey lies in the south of the English Channel. Large parts of Saint Clement, its smallest community in terms of area, used to lie below sea level. Flooding was therefore a frequent occurrence. Although the areas are now filled and a sea wall has been erected one thing remains: very soft soil with a lot of groundwater. Thus, soil improvement

Application

The LRB 16 was equipped with three hollow drilling linkages. First of all HD Equipment drilled 5–8 m deep into the ground. The binding agent suspension was pressed into the soil with up to 14 bar through nozzles positioned at the lower end of the mixing tool (paddle). This was done while the rotating linkages were extracted from the soil. Thus, a homogeneous soil mixing structure was produced. With a drilling depth of

Feedback

HD Equipment opted for the LRB 16 with triple mixing tool because the low transport weight was paramount in this project. The weight was not allowed to exceed 40 t at the shipping port in Jersey. A further advantage of the machine is its modular construction. The piling and drilling rig can be equipped with 1, 2, or 3 paddles, which are available either

on the building site was an extremely important factor for the “Samares Nursery” project. The German company HD Equipment was awarded the contract in November 2017 and has successfully applied the LRB 16 for soil mixing. Subsequently, a residential area with 200 units and a health centre was built.

8 m, the consolidated soil on the jobsite can bear 14 t per linear metre. Approx. 60,000 l of suspension were injected into the soil and 300–450 m² of reinforcement structures were erected by HD Equipment per day. Over a period of 4.5 months the company mixed approximately 6 km or 27,500 m² of soil.

as longitudinal or transverse attachment, depending on the requirements. As an all-rounder, the LRB 16 is suitable for all common applications in the fields of drilling, vibrating and impact driving. With a diesel consumption of only 20 l/h the machine delivered a clear statement regarding efficiency in Jersey.

LRB 16 – the robust universal machine for a multitude of tasks:

- High frequency vibrator with slim design
- Predrilling drive
- Ring vibrator
- Hydraulic hammer
- Double rotary drilling
- Kelly drilling
- Continuous flight auger drilling
- Soil mixing