Jaguar Land Rover

Nitra, Slovakia

Ground improvement for large new Jaguar Land Rover production facility

The project

Jaguar Land Rover’s new production facility in Slovakia is close to Nitra – a location chosen for its proximity to more than 300 component suppliers and excellent infrastructure including the motorway and main railway line. To allow construction on the difficult ground conditions, Keller was brought in to complete ground improvement via vibro compaction in a joint venture with Bauer Spezialtiefbau.

The challenge

Keller’s ground improvement extended across five facilities: the Energy District (11,200 columns), Paint Shop (6,000 columns), Administrative centre (3,800 columns), Logistics/Warehouse (2,000 columns) and Body-in-White/Weldshop (14,000 columns).

The schedule was particularly challenging allowing less than five months to complete the work.

With eleven rigs working day and night, people from six different countries, and deliveries of 5,000 tonnes of installation material every day, accurate project management and coordination were key.

Decisions also had to be taken quickly. For example, faced with a severe frost, the team brought in a special rig to pre-drill the frozen soil.

The solution

In total, Keller executed more than 37,000 vibro replacement columns on an area of 157,000m^2 within the deadline, with our partner Bauer also executing the same amount.

Project facts

Owner(s)
MH Invest s.r.o

Keller business unit(s)
South-East Europe and Nordics

Main contractor(s)
JV partner - Bauer Spezialtiefbau Gesellschaft m.b.H

Solutions
Bearing capacity / settlement control

Markets
Commercial

Techniques
Vibro stone columns / Vibro replacement