

Modulift Spreader Beam Raises Chimney in Tandem Lift



Baltic mobile crane rental company Strele Logistics supplied lifting and rigging equipment, including a Modulift spreader beam, as a 49t chimney was installed at a biological waste treatment facility in Kaunas, Lithuania last month (February).

Strele accepted a scope of work to load the 35m-long, 2.75m-diameter pipe where it was manufactured at Enerstena Group's facility, 3km away, and erect it in its final location. It was first loaded onto a semi-trailer (a trailer without a front axle) using two 15t capacity overhead cranes that were already installed in the building, and a 90t Faun ATF90G-4 mobile crane. Haulage firm Klaipėdos Transekspedicija took care of overnight transportation to the jobsite.

The following morning, a 500t capacity Liebherr LTM1500-8.1 and 200t capacity Terex AC200—the latter was used for tailing—combined in tandem lift to complete the project. Below-the-hook of the Liebherr, a MOD 70 beam was used at 3m in length, to accommodate rigging points manufactured onto the outside of the chimney.

Jokūbas Slavinskas, project manager at Strele, explained that at one stage a second spreader beam was considered with the Terex but synthetic slings were opted for instead. In total, four 10m-long roundslings, four 7m-long steel cables, two 25t shackles, two 55t shackles, and two 85t shackles (the last four were connected to the spreader beam) combined to complete the lift.



Slavinkas said: "The steel cables were rigged on the rigging loops of the chimney. We could not use synthetic slings because the friction force could have burnt them during the erection process". **"The tandem lift was the most reliable option. There were alternatives but they were economically and logistically inferior."**

Slavinkas recalled the lifting process: the Terex crane had to tail the chimney to the position of 15m from the Liebherr to the centre of the pipe. Then the main crane took the chimney alone and mounted it on the foundation. The only problem to overcome was turning the truck transporting the chimney 90 degrees, which required some of the site's waste pile to be cleared away.

He added: "The lifting process took no more than three hours. It took more time to assemble the main crane [four hours] and then to disassemble it [four hours, again]. While there was only

one lift involved in this project, Strele has completed hundreds of projects of this kind. One peculiarity was that chimneys are more commonly erected in multiple pieces of, say, 20m in length."

Of the MOD 70 spreader beam, that can lift up to 70t at 10.5m or 33 ft. and up to 14m or 45 ft. at a lower capacity, Slavinkas said: "It performed well; it offered us what we needed and it was delivered in a timely fashion. Actually, we took the job without having the appropriate beam in stock, although we were already in contact with Modulift and were able to accelerate the buying process. The lift will live long in the memory as the day after [16 February] was a national celebration to mark 100 years of Lithuania's independence and we were lucky the beam arrived in time so we avoided working on such an important day for the country."

