

Transformer replacement in Sentmenat, Barcelona



ALE has carried out the replacement of a 205t transformer, located in the work area, with a second 230t transformer, located in the repair area, within the Sentmenat electrical substation.

The first stage involved transporting the transformer from the work area. The transformer was skidded outside of the work area by pulling with cable winches and jacking it up with 8 climbing jacks until it was rested on the SPMTs. The transformer was transported using 12 axle lines of SPMT to a temporary auxiliary area.

The second stage involved the installation of the replacement transformer. The second transformer was skidded from the repair area by direct pulling with cable winches. Once it was outside of the repair area, the transformer was jacked-up using 8 climbing jacks and transported using 12 axle lines of SPMT to the work area, where it was lowered and supported on its bogies to finally slide into its final position.

The final stage consisted of transporting the first 205t transformer from the temporary auxiliary zone to the repair area using 12 axle lines of SPMT. It was jacked and skidded into position using the techniques above.

The manoeuvres were carried out within the scheduled timeframe as a result of good planning and the impressive manoeuvrability of the SPMT that allowed ALE to overcome the numerous restrictions of space on-site.

Project:	Transformer replacement in Sentmenat, Barcelona
Project location:	Sentmenat electrical substation, Barcelona , Spain
Equipment:	12 axle lines of SPMT , 8 climbing jacks with 90t unit capacity
Weights:	Transformer withdrawn: 205t and transformer installed: 230t
Key Features:	Reduced Costs; Bespoke solution; Minimised disruption