

FRANCE: TRANSPORTATION OF A 296 TON STATOR AND 245 TON TRANSFORMER TO BAYET POWER PLANT

PROJECT	EQUIPMENT	WEIGHT
POWER	BARGE/SPTs/ SPMTs / GANTRY LIFTING SYSTEM /	296 / 245 TON



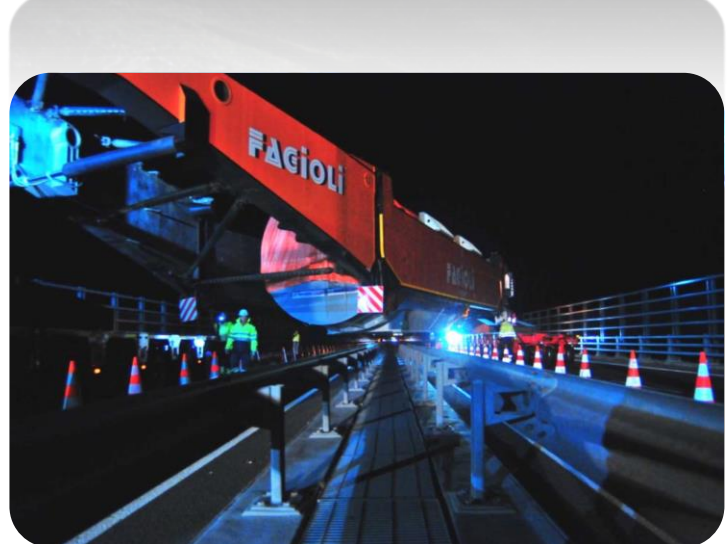
Fagioli performed the transportation of a 296 ton stator and a 245 ton transformer from Chalon sur Saone to Bayet Power plant in France. In France A barge transported two big pieces destined to the new power plant of Bayet. The larger of the two pieces was a stator, 9 meters long, weighing 296 tons and a transformer weighing approximately 245 tons. The two modules were unloaded and positioned onto supports by an overhead crane. A special structure had been prepared in order to support and distribute the huge weight of the two pieces. The route from Chalon sur Saone to Bayet Power Station was about 175km, passing through small villages with bridges that had restricted capacities. Due to the length and weight of the convoy, the route had many obstacles. To perform the transport, Fagioli used two trailers with 15 axle lines each and 4 prime movers. The convoy was 79 metres long, weighing 568 tons, which made the convoy hard to move especially around bends and under road bridges as the height of the piece was almost 5 meters



Thanks to the trailers hydraulic system, Fagioli was able to raise and lower the load accordingly. Regular checks of the load distribution was carried out by both Fagioli operators and French authorities throughout the journey. Some of the old streets proved to be very difficult, they were either, very narrow and required delicate moves back and forth or they needed reinforcing with over-bridge structures, steel plates which were unloaded by a mobile crane and positioned on the road. In order to help decelerate or accelerate the speed, the prime movers were connected in front of the convoy during the several passage uphill, and connected at the back on the downhill.



One challenging passage was the transit onto a small bridge. The bridge was reinforced with steel and concrete blocks. Two huge steel structures were connected and positioned at the side of the bridge. Specially made plates were fixed with pins to the long supports, in order to create a steel surface where the over-bridge structures were connected. This structure allowed the passage of the convoy to distribute the enormous weight on to the structure, avoiding too much pressure on the centre of the bridge.



On the fourth day Fagioli had reached the Loire bridge, and was compelled to face another low capacity bridge. This time, in complete agreement with the client Fagioli came up with an innovative solution, a special trailer configuration called “the crab”. The front load trailer moved on the right lane, while the back one was moving on the left lane. This meant that the load was diagonally suspended in the middle of the roadway which helped to spread the weight across the bridge. The passage of the convoy was a major attraction for the local population.



It took 7 days for the first convoy to arrive at destination and 14 days later the transformer covered the same journey as the stator. Once the transformer entered into the Bayet Power plant premises, Fagioli prepared the gantry lifting system in order to position the item onto its supports. The item was lifted and positioned onto SPMTs. Once everything was ready, the transformer was moved with the SPMTs, and the gantry crane began the final positioning of the piece.

Two years of preparation and continuous contact with regional and local authorities, technicians, police escorts, road engineers...to perform this incredible journey!

