

ITALY: REPLACEMENT OF A 326 TON STATOR WITH A NEW ONE WEIGHING 265 TON

PROJECT	EQUIPMENT	WEIGHT
POWER	SPTs/ SPMTs / BARGE / GANTRY LIFTING SYSTEM / H/L SHIP	326 / 265 TON



Fagioli were contracted for the substitution of a stator in a power station based in the North-West of Italy. The urgency of the operation required a quick response and the use of different group-owned equipment in order to organize the substitution of the old generator with a new one. The distance between fabrication area and the installation site was only 90 km, but due to the geophysical characteristics of Italy and its road restrictions, the stator could not be directly transported up to the site. Fagioli solved this problem with a brilliant strategy customized to this particular case and planned just in few days because of the unforeseen urgency. First of all, the new stator (265 ton) was lifted, in the storage area, with our hydraulic gantry system and positioned onto 2 x 8 axle lines SPMTs. The convoy reached the harbour of Genoa, where it was lifted onto group-owned H/L vessel Storm with its gears. The ship Storm left Genoa's port to reach Venice (Marghera) circumnavigating Italy (about 1130 miles).



	Lenght	Width	Height	Weight
Old stator	13.1 m	3.9 m	4.8 m	326 t
New stator	11.1 m	3.8 m	4.2 m	265 t

Once arrived in Venice, the new generator was directly transhipped from Storm vessel onto the group-owned Ticino barge headed to Cremona river port on Po river. In Cremona the generator was lifted out of the barge at Fagioli terminal area by our gantry lifting system and positioned onto 2 x 15 axle lines convoy equipped with Schnabel structure. After reaching the power station, the new generator was lowered onto supports in a dedicated area by another set of gantry lifting system. In the meantime, as soon as the new generator arrived, the old one (326 ton) was lifted by a further hydraulic gantry system. Due to space restriction the lifting system and tracks (used to skid the item) were placed onto a dedicated support structure composed of stools and beams.

The old generator was transhipped from the stools onto the 2x15 axle lines convoy destined to the Cremona river port. The item was lifted by the Fagioli overhead crane, repositioned onto the 10 axle lines (three rows) SPTs and loaded onto the Ticino barge with a ro-ro operation. The barge then headed to the harbor of Venice, where the old item was transhipped by means of a further ro-ro operation onto the vessel Storm before leaving for the second circumnavigation of Italy heading to Genoa. Once arrived at Genoa port the convoy reached the warehouse for the storage activity.

The last operation was the extraction of the rotor section from the old generator by means of gantry lifting system and the final transport. This is an example of an ambitious and successful Fagioli approach to complete a challenging project and to satisfy the customer necessities, the overall solution was studied in detail phase by phase covering the road, river and naval transport operations. Fagioli worked under a condition of urgency performing different activities at the same time with group-owned equipment.

