



## Peru

## Modernization Project of the Talara Refinery, Peru

The Terratest group's subsidiary in Peru, Cimentaciones Prefabricadas Terratest Perú SAC has been contracted by Tecnicas Reunidas Talara SAC, to perform the works of foundation for the Modernization Project of the Talara Refinery, Peru, for the state company Petro-Peru.

Terratest Group's subsidiary in Peru Cimentaciones Prefabricadas Terratest Perú S.A.C has a contract of 112 million soles for the execution of the foundation, using precast piles, for the Modernization Project of the Talara Refinery, in Peru, which is conducted by Tecnicas Reunidas Talara SAC for the company Petro-Peru.

The contract includes pile driving and prefabrication of 140,000 linear meters of reinforced concrete piles of high strength, with depths between 10 and 25 m. It's also contemplated the headless of about 8,000 piles with hydraulic gag of own design.

For the pre-fabrication of piles, Cimentaciones Prefabricadas Terratest Perú S.A.C, has built a plant in Piura, with a daily prefabrication capacity of up to 800 linear meters (expandable), with the most modern technology, and equipped with an external laboratory that lets you take a systematic and immediate quality precast pile control.

The deadline for the execution of foundations construction is 10 months, for which it is expected the provision of 5 pile driving rigs, mounted on a Caterpillar 60t crane, equipped with a Junttan 9t hammer.

Since the area is classified with an index seismic activity of 0.4 g, to confirm the depth of foundation design and check the loads to which the piles will be subjected, and to avoid collapse, and interaction pilote- ground will be performed, 26 vertical compression static tests, 23 static vertical traction tests and other 23 tests, such as lateral thrust according to the design parameters of the foundation.

Also, during the driving of the piles they will maintain the control and monitoring of the rejection of the driving, to check that it has achieved the ability to load the pile, besides carrying out up to 258 dynamic load tests PDA- piles analyzer (Pile Driving analyzer), which facilitates a quick and nondestructive driving conditions and the ground-ground interaction, controlling the integrity of the pile and its ability to differentiate the load between shaft and point.

