

### The ENEL Turbogas Teodora Power Station Porto Corsini – Ravenna



This is one of the most advanced power station of the big Italian Enel network; in fact the main Energy is produced by the first two Main gas-Turbines, while the steam, released by this first energy cycle, is conveyed to a second couple of Turbines in order to additionally produce electric energy with the recovered steam of the first cycle phase.

This plant has a total power size of 700 MegaWatt, when all the 4 Turbines are working at full capacity .

Marly installed in this power station the Vertical Turbine pumps which feed the Fire-Fighting system.

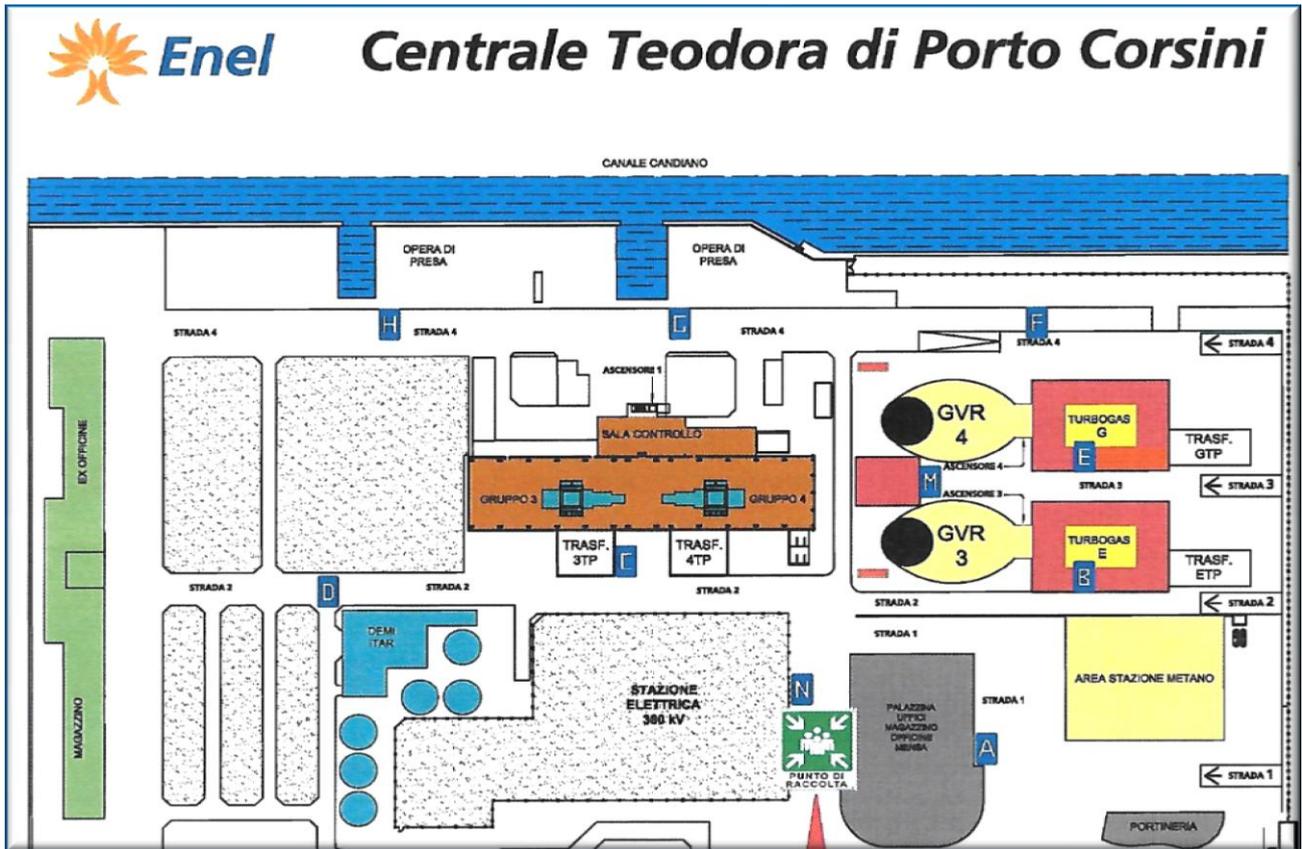
Being this power station one of the biggest of that family, it need to feed the fire-fighting system with a big flow, this is why the water treated from the Marly pumps is sea water coming from the near Adriatic sea canal.

The pumps flow is **480m<sup>3</sup>/h**, the produced pressure is **60 m** head.

The pump is of the model VP16-A/4, the hydraulic stack is of the size of 16" with 4 stages; the maximum absorbed power is 102 Kw.

All the wet parts of the pump is made of **casted Stainless Steel AISI 316**, while the pumped water is sea water. As said due to the high flow demand the pumps is sucking directly from a sea water canal.

# Marly Case History



Here are shown some key assembling phase of the pump bowl made of casted AISI 316, the bowl size is of 16" type VP16-A/4.



# Marly Case History



In those pictures are shown the transportation and some installation phases in the Teodora Porto Corsini, power station.

In the right we can appreciate the oil filling phase of the trust bearing chamber, located in the Head Drive of the pumps.



Here on the right is shown the pump installed, ready for the first start up hydraulic test.

This fire-fighting pump works few hours on weekly basis to satisfy the power station safety tests performing every week.

