



## SHAFT ALIGNMENT TURBINE – GENERATOR PPC KERATEA/LAVRIO



PPC facilities

### In General

#### Purpose

The purpose of the application was the alignment of the generator in relation with the gas turbine.

#### Field Work

1 day / 2 staff members

#### Utilised Easy Laser Instrumentation

- Easy Laser Shaft Alignment E 710

#### Deliverables

- Report

#### Difficulties

- The length of the coupling and the sagging parameters of it
- Working inside a Gas-Turbine with little access and obstacles slowed down the processes



The coupling



## Measurement series

The shaft of the turbine should be aligned in respect of the generator shaft. For this reason **Metrica S.A.** utilized Easy Laser E 710 in order to perform the alignment. The system can accept thermal compensation values as also as many generator foot pair as needed. The application offers live monitoring of the movements performed while adjusting the movable engine.

In this application the most demanding task was the calculation of the shagging effect of the coupling which was four (4) meters long. Its length creates big sagging values which should be included in the calculations of the alignment for a successful alignment within tolerances. After studying all the parameters and importing them in the Easy-Laser E710 Shaft Alignment system the alignment was achieved with absolute success.



E710 Shaft Alignment System



Part of the generator



The sensor on the coupling

