

## IN-SITU FLANGE FACING ON LOWER TURRET FLANGE FOR COAL HANDLING UNLOADER

### GOLTENS GOES TO GREAT HEIGHTS TO PERFORM IN-SITU MACHINING AND KEEP PROJECT ON TRACK IN INDIA

Goltens was asked to undertake critical flange facing on the lower turret flange for a Coal Handling Unloader at a thermal energy plant in Jamnagar in Western India. The Unloader for the M/S Essar Project, supplied by Cargotec in Sweden, a leading Bulk Handling System Manufacturer, had an outside diameter of 4.72 meters and an interior diameter of 4.47 meters.

Goltens inspected the flange, located almost 23 meters above ground to evaluate the extent of the machining required and to plan the logistics for working at that height. As the Unloader had yet to be installed, this critical machining had to be completed in as short a period possible to allow the project to be completed on schedule.

Goltens mobilized its laser alignment, flatness checking and flange facing tools to the site along with 2 teams of In-Situ Machinists to work around the clock until the job was completed.

#### ON-SITE MACHINING CONSISTED OF:

- Flatness checks of the turret flange and laser alignment of the flange facing machinery
- Machining of the turret flange to remove surface abnormalities (pre-machined flange had an undulation of 0.64mm).
- Finish machining of turret flange to required flatness with results less than 0.16mm.

#### IN-SITU FLANGE FACING RESULTS:

Goltens technicians completed the job within 5 days working with 2 teams of machinists, allowing the project to stay on schedule. All work was carried out within the maker's strict tolerances and to the satisfaction of the customer.

The customer was so satisfied with the approach, quality and attitude of Goltens that Goltens was immediately awarded the machining on a second turret which was completed in only 3 days.

#### PROJECT FACTS: COAL HANDLING UNLOADER

Equipment Maker:	Cargotec Sweden
Turret Flange Dia:	OD-4720 mm ID- 4470mm
Height From the Ground:	22.8 M

