

## **Innovative method for testing/Commissioning of Maintenance Hoists at ground level before erection**

### ***Introduction:***

Electrically operated Hoists are erected for the maintenance of equipments such as Rectifiers in ESP, impellers & motors of Fans like FD fan, ID fan and PA fan. The hoists are supplied by different Units / vendors of different capacities as per the requirements of customer.

### ***Case Study:***

It has been observed at different sites that the hoists commissioning remains pending even after the PG test of Units. It is a big punch point from the Customer at the end of the project.

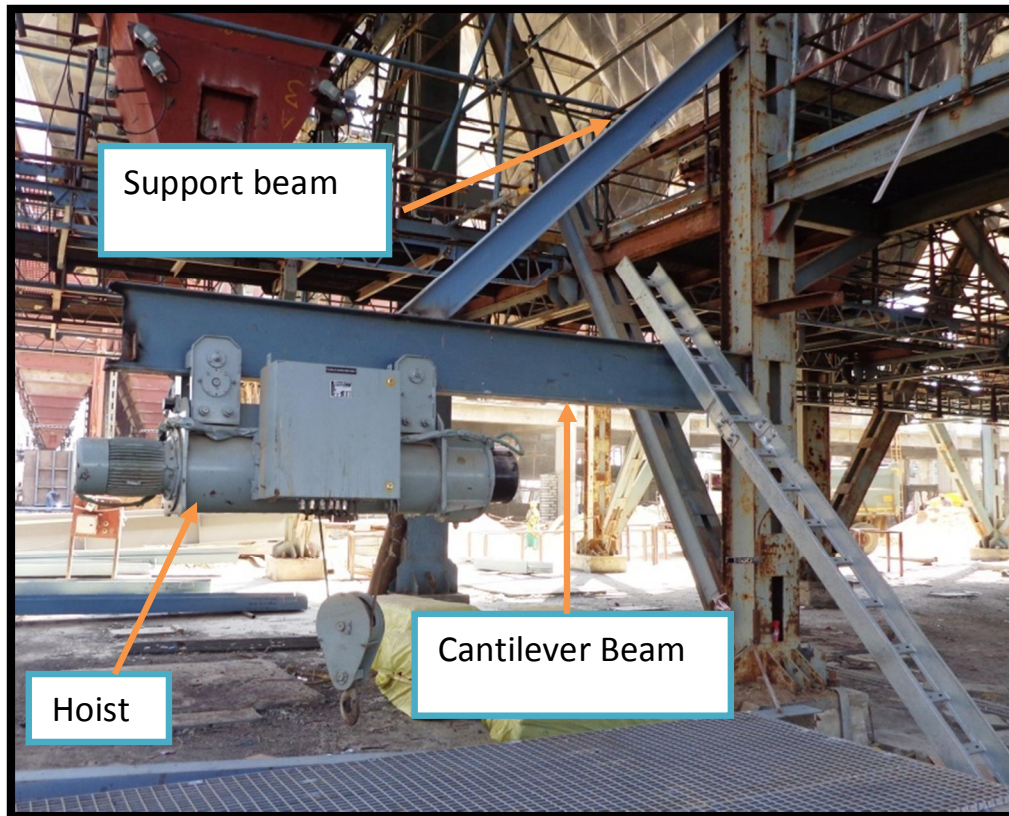
### ***Site action and observation:***

With a aim to counter attack the difficulties of commissioning the hoists at the end of the project it was decided to pre-commission the hoist before erecting the hoist .

### ***Ways and Process of Carrying out the Checking:***

The sole requirement of carrying out the pre-commissioning & testing of this activity is replicating/stimulating the final erection of hoist. This is done by welding a *cantilever beam* at suitable height so as to make hoists and hoist panel at approachable height. It is ensured that the bottom of the cantilever beam section matched with the beam where actually the hoist is to be located.

Refer the below photo:-



***Advantages :***

The greatest advantage of carrying out the pre-commissioning of hoist is that one comes to know about the faults and problems of hoist well in advance and thus avoiding the problem of bringing down the hoist after the erection of hoist. Above all following checks both mechanical and electrical can also be done well in advance. They are:

Electrical Checks:

1. Scheme checking
2. Meggering of motor
3. Limits switch setting

#### 4. Motor trial run and travel

Mechanical checks:

1. Proper lubrication in gear box
2. Free movements of roller wheels
3. Hoist rope checking.



#### **Conclusion:**

***From the above innovative method it can be concluded that an idea whether big or small can definitely save lot of man hours in construction line. Also the pre-commissioning can help us to find the defects if any in the hoists well in advance; one need not to wait till the end for checking.***

