**Mechanical Equipment Inspection Diagnosis Report**

You are required to produce an inspection report that covers all aspects of the examination of the centrifugal fan. You will observe the setup and running conditions of the unit and then devise a Condition Monitoring Scheme that can be used to measure and confirm the equipments operating parameters, this can then be checked and used to monitor the fan to improve reliability.

You must start by producing a method statement covering all aspects of the work, this will include details of all the equipment and tools you intend to use. You are also required to produce risk assessment where you need to consider all the hazards that you may encounter, and how they translate into risks associated with carrying out the inspection the work of opening up the equipment for inspection and the reassemble. Then detail the control measures you need to implement to manage those risks.

The information you need to gather for your report must include all of the following areas:-

* Title & date.
* Your name & group number.
* The type of equipment.
* Materials of construction.
* General external condition.
* General areas of concern.
* List the most likely modes of failure and what you need to measure to improve the reliability.
* Specify any modifications or repairs that need to be carried out.

The report is to include meaningful photographs and possibly sketches taken at key stages of the work, they should detail any areas of interest found during the inspection.

Finally, if you are in any doubts about any of the requirements of this exercise please ask, also note you do not commit to any lifts during the rigging exercises until they have been checked and sanctioned by the T.O. and please include this into a control measure for your risk assessment.