

VISIT TO ENERCON WIND TURBINE MANUFACTURING CENTER

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After the intensive visit to wind farm operation and control centre, next stop of the ESRs was ENERCON wind turbine manufacturing facility located at Viana do Castelo. The manufacturing site contain the facilities to develop the most of wind turbine components which includes manufacturing of blade, tower, generators and converter station. Most of the manufacturing work is done by hand. The first unit ESRs visited was the development of blade for E-82 turbine and new model E-92. The manufacturing material that is use for the blade usually, fibre glass and balsa wood. The main difference in the blade of E-82 and E-92 type is the tip of E-92 which has been design for uniform turbulence effect and to reduce the sound. Further, the spike on the blade of E-92 control the flow of air on one direction over the blade to increase the efficiency. Next, ESRs visited the tower manufacturing unit. The hub height for the E-98 is approximately 138m. The tower is consist of 20 ceramic block and one metallic section at the top. After that, generator and converter manufacturing unit has been shown to ESRs. It was very interesting for the visitors to have the opportunity to observe the steps and key component of wind turbine manufacturing on the field. At the end of the visit, ENERCON representative show the 7min video of the installation of wind turbine on the site.



On the behalf of MEDOW, ESRs would like to thank the EDPR and ENERCON for their kind invitation and opportunity to understand the practical aspect of wind farm development and operation.

