

UNIT ALIGNMENT : OPTIMIZE THE USE OF YOUR ELECTRONIC LEVEL

Abstract:

For the maintenance of hydrogenerators as well as for new unit assembly, the use of proper tools and proper techniques can help significantly to obtain accurate measurements, make proper corrections and proper alignment, and reduce outage time.

This paper explains and shows how to use an electronic level for various applications related to hydrogenerator works. The main and most attractive use of the electronic level in a power plant is to accurately measure the shaft system verticality, eliminating the need of the four wires technique. There are other very useful purposes of using the electronic level in a power plant, like leveling brackets, setting-up for machining, verifying seating flange flatness and even checking wicket gate bore alignment, with a simple device designed by the author.

Every application explained in this paper is supported with a calculation example. Once the principle is understood, calculations are fairly simple, and accuracy is excellent.

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