

OPTIWAVE in the aluminum industry



OPTIWAVE at Hindalco

Hindalco Industries Ltd. (India) has several KROHNE OPTIWAVE radar level gauges installed in its plant in Belgaum. One OPTIWAVE is installed on a tank with an agitator with 4 stages of blades. The product layer contains a great deal of foam, so that a considerable quantity of fumes is produced. These fumes can make a 15mm thick antenna coating in just 15 minutes; KROHNE therefore recommends a cone-like structure with holes. The tank has more pressure than atmosphere and because of this the fumes are pulled away from the antenna towards the holes and emerge from these holes. The instrument is programmed to take care of the rotating agitator. Another application is an open tank where maintaining a full level is a mandatory requirement of the customer. This is a hazardous area where humans can not stay for more than two minutes even with protective masks. In another open tank caustic lye falls from 5 inlets, producing more fumes. The antenna is continuously kept clean with air to prevent the fumes from entering the antenna. A metal casing is placed around the instrument to protect it.

Level measurement applications in the Aluminum industry are generally very difficult since there is a presence of Heavy Foam, Fumes and agitation inside the tanks. Quite a lot of conventional radar gauges fail to deliver for such applications. The only level radar which used to work well at Hindalco was OPTIWAVE. A major contribution to this outstanding performance is the 24 GHz FMCW, which generates a narrow beam providing easy installation with a smaller antenna. It also penetrates foam very easily. The OPTIWAVE is certainly well ahead of the competition.

Information: KROHNE, Thomas Zimmerling,

E-Mail: Tzimmerling@krohne.de