



## AERATION AIR FLOW MEASUREMENT IN ONE OF THE LEADING PHARMACEUTICAL INDUSTRIES, INDIA

### APPLICATION

Aeration air flow rate monitoring for control of Dissolved Oxygen levels in Effluent primary treatment plant.

### PROBLEM

An Integrated pharmaceutical plant with various departments such as API bulk drugs, tablets, liquid syrup manufacturing facility has a variable load of effluent water with a wide range of toxic organic and inorganic effluent into the effluent treatment plant for processing. This poses a challenge to maintain DO levels with respect to aeration air injection for BOD, COD & TOC control as per regulatory norms for reuse. Air Blowers are operated on a fixed pressure control loop which creates a problem on inefficient DO controls. DO is a function of air flow not pressure. Efficient Dissolved Oxygen (DO) control is a challenge to obtain without accurate aeration air flow metering. Ineffective DO control means loss of energy and insufficient bacterial growth for optimum BOD levels.

### OUR SOLUTION

Leomi - 586 Insertion Thermal Mass flowmeter:

- Doesn't require a shutdown for installation.
- High turndown ratio of 100:1.
- No pressure drop against the existing flow meter installed saves energy cost
- Allows leakage detection with better accuracy.  
No maintenance than the existing flow meter used.

### INSTALLATION FACTS

Leomi 586 is installed in the main branch of the Aeration air from Roots Blowers on 12" (DN300) pipe with 1400 Nm<sup>3</sup>/hr flow rate working for 5 years satisfactorily. Customers have repeated orders for their new projects last year 2021.

### CUSTOMER

India's biggest Pharmaceutical drugs manufacturing group, Gujarat.

### PRODUCT

LEOMI- 586, Insertion Thermal Mass Flowmeter.

### WHY LEOMI

- An ISO 9001:2015 company, Startup India recognized
- German technical collaboration Engineered in India
- India's First In-house fully automatic wind tunnel calibration system
- Product quality proven for more than 20 years installed worldwide.

