



## FOX FLOWMETERS & FLOW SWITCHES IN ALUMINUM PLANT APPLICATIONS

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Aluminum plants require precision gas flow measurement instruments to improve their cost-per-pound of product. Worldwide aluminum prices and automotive industry demands are driving the requirement for improved flow measurement solutions. Fox Mass Flowmeters and Flow/Level Switches can be used in the following applications:

1. Nitrogen Annealing - Nitrogen is generally supplied by an on-site gas plant. Mass flow measurement is used to allocate costs and identify "wasters", such as leaks in the line or a purge left on to a non-operating annealing oven. Nitrogen is also used as a carrier for the fluxing process and to purge piping systems.
2. Turbo Air Cooling - In continuous casting operations, the aluminum ingot is cooled via compressed air and water. Mass flow measurement of compressed air injection rate improves the air-to-water ratio and hence, the cooling efficiency. Fox flowmeters are ideal for this application.
3. Utility Applications - Fox Mass Flowmeters can be used for internal billing of natural gas to their smelting, casting, annealing, and milling operations. Piping constraints make the Fox In-Line Flowmeter a great choice because the built-in flow conditioner eliminates the need for long, straight pipe runs before the meter.
4. Cooling Water - Chilled water is used in several applications in an aluminum plant. The chilled water pumps need protection from flow stoppage. Fox SW100 "The ROCK" Flow Switch provides this protection.

Common Gases: Air, ammonia, biogas, butane, chlorine, compressed air, carbon monoxide, carbon dioxide, digester gas, dump gas, ethane, ethylene, helium, hydrogen, methane, mixed gases, natural gas, nitrogen, oxygen, and propane.  
Contact Fox for other gases.