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# Case Study: Weighing system Improves Safety for Gas Company

## **NWI** Weighing

### OVERVIEW

When a gas cylinder supplier came to NWI Group, they were looking for a solution that would provide:

- Flexibility – as the company filled 10 different sized gas cylinders
- Safety – always important
- Efficiency – as the operator needs to perform other tasks while filling each gas cylinder
- Accuracy – overfilling a gas cylinder is a safety concern which must be prevented

### SOLUTION

The team at NWI Group suggested the client install 2 Bilancai DD1010 indicators with in-ground scales and customised software. The system includes digital outputs to connect the gas pumps while filling valves control the fill.



Having 2 in-ground weighing systems provides flexibility as it allows the client's staff to fill 2 different sizes of cylinders at the same time.

The operator places the empty cylinder on the scale, connects it to the filling system and selects the appropriate fill icon. Customised software ensures the tare weight of the cylinder is correct for the size selected. Weighing the cylinder also confirms that it's empty.

Before filling begins, the system verifies the filling valve is correctly fitted. If everything is correct, a green light indicates the operator can proceed and, once pressed, the fill commences. If the tare weight is out of tolerance or the fill valve is not fitted properly, an alarm sounds and the system prevents the fill occurring.

Once filling begins, the operator is free to perform other tasks. When each cylinder's target weight is achieved, the system automatically closes the fill valve and stops the pump.

### OUTCOME

The Bilancai DD1010 is designed to suit industrial applications and harsh environments. It's available in AISI 304 stainless steel with an IP68/IP69K protection rating. The LED touch screen is intuitive to use and able to be read in all environments.

The Bilancai range is NTEP certified, fully customisable and approved for medical gases. It's also exclusively available from NWI Group.

