

Client's Background: The client is a global leader in the design, development and manufacture of aerosol dispensing solutions that meet a wide range of market needs and different applications. These solutions utilise plastics and other polymers that are needed in the manufacturing process.



Fig. 1 - Skirted silos used for storing polymer granules



Fig. 2 - Pneumatic conveying discharge system

Project Requirements:

- The client was disappointed with the inaccuracy of the measuring devices they were already using on their skirted silos.
- They wanted to find a technology that could deliver greater accuracy. The material stored in the silos was polymer granules, which were pneumatically conveyed from the silos to the injection moulding machines in the factory.
- The client also wanted local support, installation and calibration services from a Brazilian company.

The factory manager knew, via other companies in Brasil, about Thames Side Sensors' excellent VC3500 & MasterMount® solution and contacted Thames Side's agent in Brasil (NVcon) with a request to propose a high-accuracy solution for exact measurement of the weight of material stored in the silos. Importantly, NVcon was also able to offer fast local support and local installation and calibration services.

Solution:

- Thames Side Sensors recommended using their benchmark VC3500 (15 tonnes capacity) load cells together with their patented MasterMount® assembly for repeatable and accurate weighing performance.
- The MasterMount® is very popular because of its fast, simple and safe installation. The load cell can be installed and removed (if necessary) without the use of specialised tools, such as a hydraulic jack, or other equipment.

- The unique MasterMount® design also eliminates any requirement for dummy load cells for installation, or while any welding work is being done on the vessel / silo.
- Load cell installation under each leg of the silo takes only a few minutes to complete, resulting in significant time and cost savings on site.
- To create a complete weighing system for each silo, a junction box and Thames Side's popular XT1000 high speed weight transmitter was used; this provides continue transmission of the weight signal to the factory's command and control system.
- The installation, commissioning and calibration of each weighing system was completed very quickly by the experienced team at NVcon.

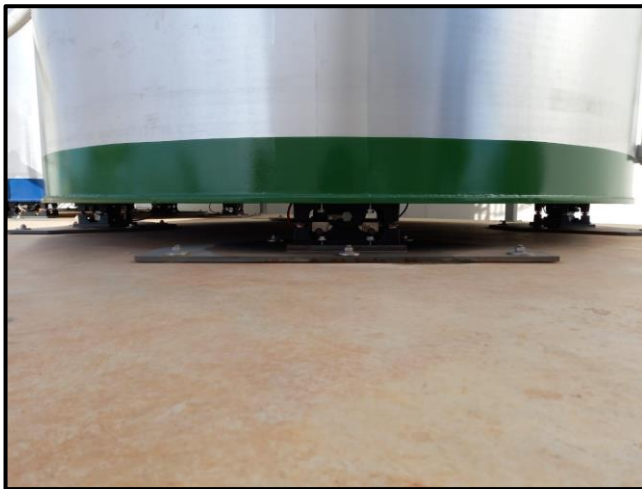


Fig. 3 - Overview of VC3500 with MasterMount®



Fig. 4 – VC3500 installed with MasterMount®

Client's Testimonial:

"The equipment after installation and calibration presented a sensational performance in addition to its ease of maintenance."

Engineer E.B.

Manager of Engineering