

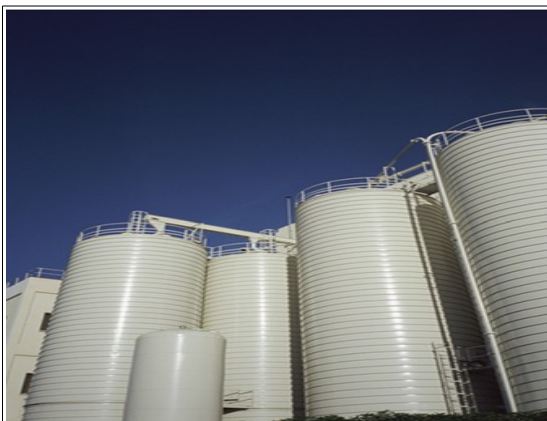
## DIMETIX APPLICATION EXAMPLE

AE-0503

### SILO LEVEL MEASUREMENT

**Industry:** Logistics / Process  
**Application type:** Level measurement / Monitoring

#### Brief description



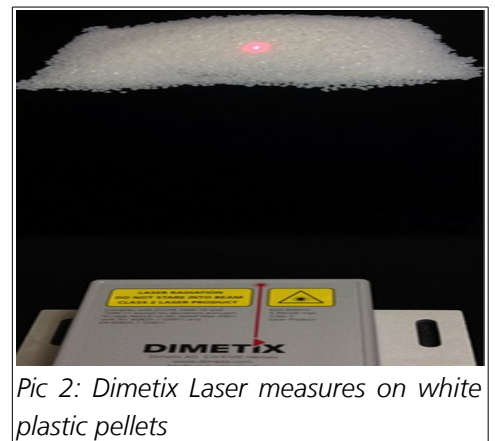
Pic 1: Silos

Industries such as plastic molding, food processing, and construction materials all rely on bulk materials. As these industries move even closer to just in time manufacturing, the ability to produce accurate, reliable, and repeatable level measurements is becoming increasingly important. This means that high inventories of raw materials should be avoided if possible. Dimetix laser distance sensors help you to determine the exact level of your silos at any time. This allows you to optimize your raw material stock.

Dimetix sensors measure accurately at longer distances ( $\geq 65$  meters) on a wide variety of materials, without making contact with the materials being measured. Reliability and repeatability of laser measurements are also independent of color and material. Surfaces consisting of white plastic pellets are measured as accurately as those composed of dry or wet gravel. Even in the case of semitransparent plastic resin pellets, enough light is reflected back to the sensor to obtain accurate and reliable measurements.

#### Customers advantages

- Non-contact measurement, which is beneficial in any number of industries.
- Production delays and breakage eliminated
- Measurements can be acquired by a PLC or PC
- Maintenance free → no breakable moving parts
- Economical, rugged, and compact package



Pic 2: Dimetix Laser measures on white plastic pellets



## Products used

### FLS-C series

The FLS-C distance measuring device measures absolute distances up to 500 meters on reflective foil without contact. Due to most innovative laser technology the FLS-C has a unique accuracy of  $\pm 1.0$  mm. A further advantage of the FLS-C is the quick determination of the positions of moving objects.

The FLS-C is an optical distance measuring device. It measures, maintenance-free, distances up to 65m on natural surfaces. It determines positions of objects that are difficult to access or may have very high surface temperatures. Just as easily, it accurately measures distances in hazardous environments.

The FLS-C is designed to be suitable for both, heavy industrial and outdoor applications. It is constructed of a solid metal case and provides class IP65 environmental protection. **It represents a cost efficient solution even at extreme environment temperatures as low as  $-40^{\circ}$  C.** Furthermore, various features make it flexible for multiple applications in numerous industries such as automotive, paper, metal and textile.

### Specification

- Measuring range 0.05 up to 500m
- Accuracy  $\pm 1.0$  mm
- Repeatability  $\pm 0.3$  mm
- Extended operating temperature
- Solid metal case IP65
- Supply voltage



For new projects we recommend our **D-Series**. Further information can be found [here](#).

For more information please contact us on [application@dimetix.com](mailto:application@dimetix.com)

