

DIMETIX APPLICATION EXAMPLE

AE-1102

CONTROLLING OF THE FILLING AND POUR OF STEEL AND IRON

Industry: Metal industry
Application type: Level measurement / Monitoring

Brief description



Pic 1: Steel moulding

This application controls and monitors filling and pouring of molten steel and iron in the foundry. Dimetix laser distance sensors are in operation to measure the level of steel and iron in order to avoid an overflow.

The metal industry is a core focus for Dimetix AG, with extensive experience in integrated steel mills, foundries, aluminium smelters and steel mills driving. The continuous development of monitoring solutions helps to optimally meet the demands of industry. Experience gained from several applications in the metals industry alone gives Dimetix AG a comprehensive understanding of the potential issues facing particulate monitoring for steel mills, in particular:

High temperature flue gases and high ambient temperatures create demanding conditions for sensors. Rough and dusty environments require dependable and rugged sensor operation, where reduced sensor maintenance requirements, reduced sensitivity to sensor contamination, and a range of durable sensor options for challenging stack conditions are of significant benefit to plant operators.

Customers advantages

- Measuring range 0.5 m up to 500 m
- Accuracy ± 1 mm
- Repeatability ± 0.3 mm
- Extended operating temperature
- Solid metal case IP65
- Supply voltage 9 – 30 VDC



Pic 2: Steel works



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 ± 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° 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 ± 1.0 mm
- Repeatability ± 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

