DIMETIX APPLICATION EXAMPLE



AE-0601

LIFTING OF MINING EQUIPMENT

Industry: Application type: Mining Position measurement / monitoring

Brief description



The displacement of large machines in surface mining requires a precisely planned approach. If a heavy, complex structure needs to be elevated, the lifting process must be controlled at all times. With the Dimetix laser distance sensors, the position of the lifted plant is measured permanently at different locations to ensure the structure always stays in an upright position.

Lampson Australia specializes in heavy lift and transport projects and also provides the associated activities of engineering and rigging design, as well as servicing and maintenance.

Pic 1: Lifting process

Internationally, Lampson has won the highly prestigious award for excellence in lifting and transportation six times so far, from the

"Specialized Carrier and Rigging Association, SCRA", for excellency in hoisting- and transport technology.

Customers advantages

- Non-contact visible eye-safe laser measurement
- Extended temperature range (-40..+50°C)
- Precision up to $\pm 1 \text{ mm}$
- easy installation and configuration due to free Dimetix Software
- use without maintenance



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 <u>here</u>.

For more information please contact us on application@dimetix.com