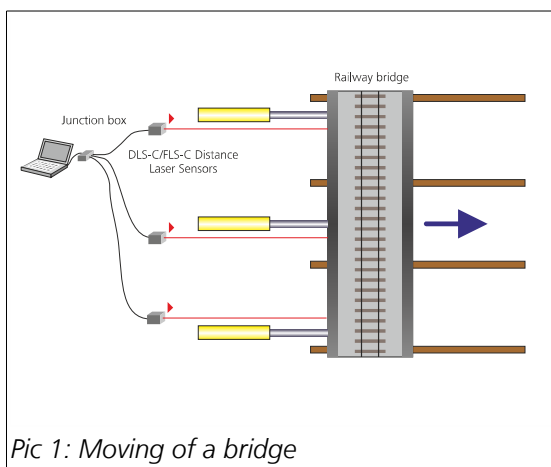


MOVING OF LARGE STRUCTURES

Industry: Geodesy / construction
Application type: Positioning / monitoring

Brief description



Pic 1: Moving of a bridge

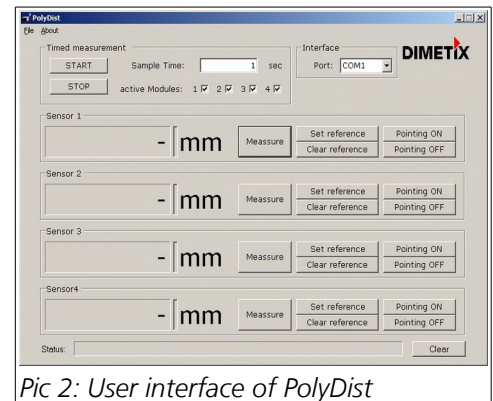
To move large structures like buildings or bridges, the use of hydraulic cylinders are, in most cases, a cost effective solution. Moving these kind of structures calls for utmost precision. PolyDist, manufactured by Dimetix AG, is predestinated to control such processes.

When bridges have to be moved it is mandatory that both bridge ends, bridge head and bridge foot are being moved simultaneously of the same distance. To move a bridge with a known, narrow tolerance band, the process calls for continuous control in order to place it with precision and without damages in the foreseen, new position.

PolyDist enables the Engineer in charge to control the moving process at several positions with continuous, contact less measurements, out of harm's way. In doing so it can be secured that each hydraulic cylinder pushes synchronously the same given distance. The **PolyDist** system is a cost effective solution, which displays the moving process on a PC. The standard – kit foresees a control process with up to 4 DLS-C/FLS-C sensors.

Customers advantages

- Easy installation due to visible laser beam
- Operates in a vast temperature range
- Maintenance free
- Easy software
- Control process with 4 DLS-C/FLS-C sensors



Pic 2: User interface of PolyDist



Products used

DLS-C series / FLS-C series

These two distance measuring devices measure absolute distances up to 500 meters on reflective foil without contact. Due to most innovative laser technology the sensors have a unique accuracy of ± 1.5 mm. A further advantage of these types is the quick determination of the positions of moving objects.

These series are an optical distance measuring device. They measure, maintenance-free, distances up to 65m on natural surfaces. They determine positions of objects that are difficult to access or may have very high surface temperatures. Just as easily, they accurately measure distances in hazardous environments.

Those two are designed to be suitable for both, heavy industrial and outdoor applications. They are constructed of a solid metal case and provides class IP65 environmental protection. **They represent a cost efficient solution even at extreme environment temperatures as high as +50° 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 $\pm 1.5 / \pm 1.0$ mm
- Repeatability $\pm 0.4 - \pm 1.5$ 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

