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Implementation Manual for Distributed Optical Fiber Strain Sensor for Civil Engineering Field

Summary

This standard describes how to use the distributed optical fiber strain sensor (DOFSS) in civil engineering field and points to keep in mind, and assists in the easy installation of the sensor.

DOFSS has been expected as the structural monitoring methods in civil engineering field, however, its deployment was limited to a couple of applications. It is considered that one of the major causes is that the unique features of the sensor are not widely understood. This technical paper provides the outline of DOFSS, its advantages and precautions, and how to use it, for facilitation of DOFSS-implementation.