

Certificate of Registration



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Register of Copyrights, United States of America

Registration Number
TXu 1-878-177

Effective date of registration:

July 4, 2013

Title

Title of Work: This is the measuring device JTM-10 which can measure the length and the condition of the steel poles buried underground. The steel poles can be any kinds of steel poles used in such places as buildings, tunnels, traffic lights, indicators, etc. This measuring device can be used 2 different ways. One is to measure SH wave (horizontal wave) and the other is to measure P wave (vertical wave). Therefore, this measuring device can measure the embedded length of steel sheet piles, H shaped steel, and rock bolts without pulling out the poles from the ground.

How to measure:

The embedded length can be measured by measuring the real time between when starting to put the sensor to an aboveground exposed part of the measuring object which creates ultrasound oscillation and the time the ultrasound oscillation going back to the sensor after reflecting the other end of the measuring object.

When the underground measuring object is corroded or collapsed, the abnormal situation can be detected through the wave shape on the screen.

When using the corrosion analysis software, the degree and the condition of corrosion will be captured on the screen.

Since this device installs the GPS receiver, the latitude and longitude of the measuring spot will be recorded and displayed together with the time and date. Therefore, you can easily manage the data chronologically.

Page 1 - 53 Operation Manual of JTM10

Page 54-57 Pamphlet of JTM10

Page 58 - Actual operation record including photos taken at the measuring site.

This measuring device JTM10 is registered by the NETIS (New Technology Information System) which is managed by Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan