RoboQS

Tele-operated Robot for Backhoe

Hazard

Earthquake Land Slide Cyclone

Solution Purpose

Response Recovery

Solution Theme

Disaster Prevention Plan Infrastructure Technology Rescue & Medical Treatment Products & Goods

Technology Subject

Plan for Relief & Recovery Support Road Emergency Rescue Operation Machinery & Equipment

Advantages

The remotely piloted robot「RoboQS」can be easily attached to any general-purpose hydraulic excavator on the market.
This technology enables remote control of heavy machinery at disaster sites that are inaccessible to humans.
It has excellent transportability and attachability, and is suitable for emergency initial response and restoration work immediately after a disaster strikes.

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Solution Illustrated

The Tele-robot is easy to transport. Once at the disaster site, it can be attached to almost any commercially available backhoe.

Background

Restoration activities for mudslide disasters and landslide accidents require rapid work to prevent the spread of damage, but they also entail the risk of secondary disasters.
In order to work more safely and quickly, construction equipment must be operated by remote control from a safe location.
Fujita has been engaged in research and development for unmanned construction since the late 1980s, and contributed to the restoration of the volcanic disaster at Unzen Fugen-dake in 1990 in cooperation with the Kyushu Regional Development Bureau of the Ministry of Land, Infrastructure, Transport and Tourism through emergency countermeasure work.

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Exposition of the Solution

1. Safe and Quick

Recovery activities carried out at the site of debris flow disasters and collapses can be carried out safely and quickly through remote control of construction machinery by human operators from a safe location.

2. Unmanned Construction Method

The robot can easily be installed in the driver's seat of standard construction equipment.

Achievements of Examples

●Bungo-Ono City Landslide Emergency Restoration in Japan (2017)
●Nichinan City National Highway 220 Emergency Stone-removal Works in Japan (2017)
●Emergency de-stoning work on National Highway 220 in Tarumizu City in Japan(2014)
and other results available

Corporate Profile

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