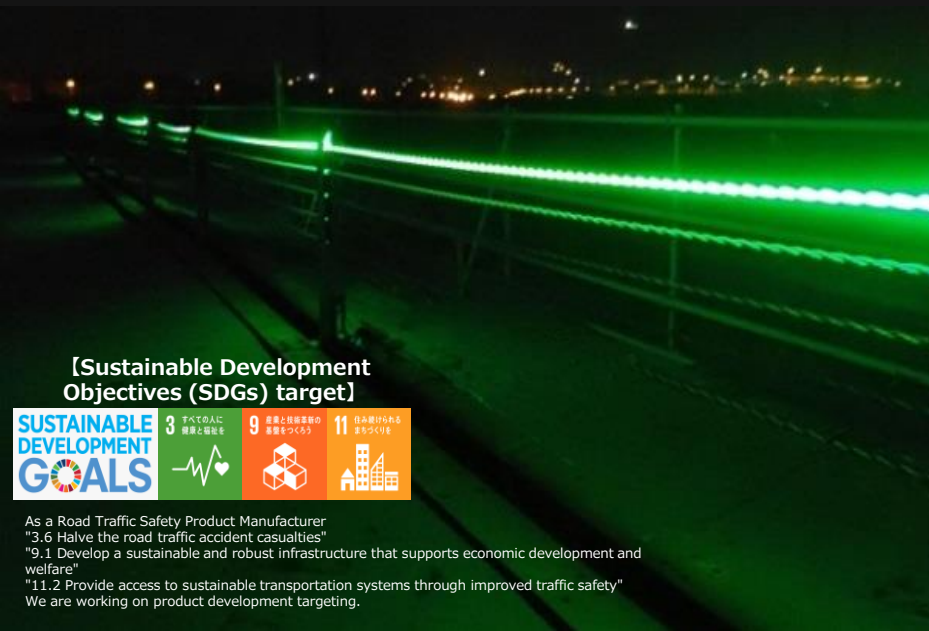


# The light guide type delineators

Lifeline during the night and snow storm

# 【 Glowing wire rope 】

Disaster resilience products based on SDGs



[Sustainable Development Objectives (SDGs) target]



As a Road Traffic Safety Product Manufacturer  
 "3.6 Halve the road traffic accident casualties"  
 "9.1 Develop a sustainable and robust infrastructure that supports economic development and welfare"  
 "11.2 Provide access to sustainable transportation systems through improved traffic safety"  
 We are working on product development targeting.

Patented: Japanese Patent Application No. 2018-527992  
 "Wire rope with resin wire, resin wire winding type  
 And manufacturing method of wire rope with resin wire"

**By the patented technique "Riken spindle". It able to wrap in short time.**

① view where the light emitting part is wrapped around the wire rope

② After made shape, Create cross section.

③ Make a rotating moving body molded with the same twisting direction and pitch as the wire rope.

④ By turning this rotating body, Wrap the light transmitter while moving.

Background of development



Orange color has a good visibility but rubber bar cannot prevent car from jumps out



A wire rope type protection fence that can prevent the vehicle from jumping out but it has poor visibility

- Currently, installing a rubber pole in the median strip of the provisional two-lane section in the highway road.
  - Vehicle jumped head-on collision accident caused by in the opposite lane.
  - As a countermeasure, a wire rope type protective fence was installed and tested, and no accident occurred.
  - The Ministry of Land, Infrastructure and Transport announced that it will officially proceed with the development of the wire rope type protection fence.
  - However, the problem is an accident occurs when the vehicle touches the wire rope.
- It is urgent to take measures against vehicle accident.**

Product features

**1 . Improvement of driver's sight**

Conventional delineators : recognition of "points"  
 Guided light type gaze guidance mark: recognition of "line"  
 → It is easy to check the curves and the shoulder position.



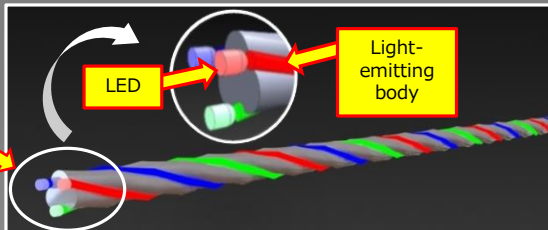
Recognition of "points" by existing type delineator  
 3 . Even when a car collides, it will not scatter to the opposite lane and prevent secondary accident

**2 . Prevention of glare**

Conventional type of delineator: Since the LED light is viewed directly, it is a problem that the glare is strong.  
 Light guiding type gaze guidance mark: LED is applied to the side of the light emitter, and glare is prevented because the LED light not seen directly. The blue light has no effect on the human body .

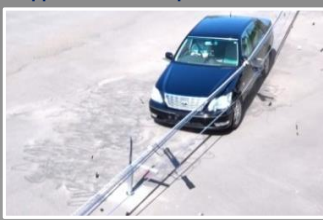


Recognition of "line" by The light guide indicator type



a guidance of light guiding type gaze that prevents glaring light  
 4 . It can also be used as a guide light at the time of the earthquake

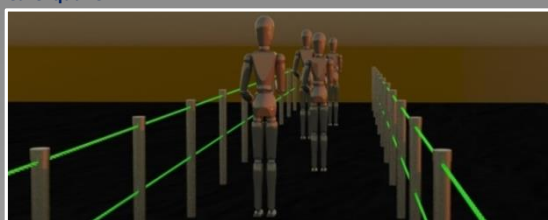
Use applications



5. Installation and restoration work can be done in a short time.



Complete within 5 minutes per 1 span 4 meters



As a safety measure for the Road Shoulder Block of Developing Countries



As a repell light of animal intrusion prevention fence



As a decoration such as illumination of a bridge

- As a visual guidance of the road To 2,500 Km provisional two-lane protection fence nationwide, To the guideway at the time of the earthquake To overseas express highway protection fence, To the Road Shoulder Block of Developing Countries
- For other purposes To the animal invasion prevention fence, to the closing gate, To the ETC gate, to sight-line guidance of a snow fence and sound insulation fence To the monuments such as bridges and buildings of tourist spots, To indoor and outdoor decoration