## The Development of Cable Reel for Explosion Protection Construction

## **Abstract**

It is necessary to use the electrical apparatus of explosion protection type in locations where such combustible materials are present or like. However, the cable reel of explosion protection type in Korea can not be produced at present.

Therefore, we carried at the development cable reel of explosion protection type which having an economy and convenience to contribute to a workplace.

The characteristics of developed cable reel are as follows.

- It can carry and be portable in state of electrical power applied.
- It is easily portable a cable reel by only one waker because a wheel is attached.
- An earth leakage circuit breaker attached to reduce the hazard when a waker was exposed an electric shock.

The specifications of developed cable reel are as follows.

Type of Explosion Protection	Ex d IIB T5
Model	KE-5 EPR, KE-5 CB
Rated Voltage (V)	AC 250
Rate Current (A)	20
Cable Rating	$3.5 \text{ mm}^2 \times 3c \times 30 \text{ m}$
Dimensions (mm)	635 × 340 × 410
Weight (kg)	30

**Key Words:** Cable Reel, Explosion Protection, Flame Proof Enclosure, Explosive Atmospheres