



Roxtec on site

Securing the EMP barrier



Efficient EMC solutions

Norway is in the forefront when it comes to national preparedness regulations for protection of power substations against EMI, electromagnetic interference, and EMP, electromagnetic pulses.

Since 2004, transmission system operator Statnett evaluates Roxtec EMC seals as one out of several tools for protection against threats such as HEMP, high-altitude electromagnetic pulse, and IEMI, intentional electromagnetic interference, in their power substations.

Terrorism, enemies in warfare and natural phenomena such as lightning count as threats to the power

distribution. HEMP and IEMI incidents must not interfere with the transmission system. Norwegian preparedness regulations are strict to ensure safety – and a stop in the power supply would cost millions.

“We follow our EMC specifications to protect our systems in many ways, which may include Roxtec seals,” says Gunnar Svendsen, station manager at Statnett.

Roxtec EMC solutions protect electrical equipment against EMI/EMP.

“Statnett uses standardized attenuation tests for shielded rooms in order to verify compliance with national requirements.”

Gunnar Svendsen, Statnett

Sealing and shielding

Several transformer stations throughout the country are equipped with the Roxtec EMC system ES. According to Roxtec, the system combines sealing with electromagnetic shielding. The cable entries are tailor-made as huge boxes to ensure shielding but also to simplify installation – which can be seen as an example of how Roxtec provides technical support to cover customer needs.

Prepared for the future

Between 100 and 300 signal cables enter the control room through two boxes with Roxtec EMC transits under the raised floor. Roxtec has developed a solution making it possible to open the box covers and seals to add cables. Gunnar Svendsen appreciates this feature for the future:

“Our stations operate for typically 20-25 years, so we need to replace and add equipment.”

Why use Roxtec?

- Certified protection
- Easy to use and install
- Customized solutions
- Flexibility for cables of different sizes
- Built-in spare capacity for future needs



80



Statnett transformer stations utilize the Roxtec EMC system.

Project facts

Project description

Electromagnetic shielding of control rooms in transformer stations

Involved companies

Statnett

Applications

Sealing of signal cables entering a shielded area

Sealing requirements

EMI/EMP protection

Roxtec products

Customized EMC boxes with Roxtec EMC solutions (Roxtec ES transits)

See more on roxtec.com/statnett-norway

Protecting life and assets

Roxtec is the world leader within flexible cable and pipe transits. Since the start in Sweden in 1990 we have grown successfully to cover all continents. Our passion is innovative sealing solutions, and our goal is to make our world a safer place.

- Extensive R&D resources and advanced test facilities
- Customers in more than 80 markets
- Inventor of Multidiameter™