



WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK



REPORT

Flexible cable seals
for economical
gas storage



The German multi-service company EWE has specified the Roxtec cable sealing system for the state of the art gas storage facilities Nüstermoor and Rüdersdorf. The reason is Multi-

diameter™, the Roxtec adaptability solution based on sealing modules with removable layers. It ensures long-term safety as well as a minimum need for material.

"I saw the advantages immediately," says Manfred van Ohlen, responsible for electric engineering at EWE. "We do not have to keep any stock, and still we are always ready for expansion!"

Roxtec team reports on site
– from gas storage facilities in Germany

We Seal Your World™



Gas storage requires safety in every detail.



Roxtec means built-in spare capacity.



Adaptable solutions for modern society

By storing compressed gas for upcoming needs, EWE is able to meet the fluctuating demand in a cost-effective, balanced and secure way. The reason for using Roxtec seals is similar: the flexibility is a guarantee for low costs, smooth retrofit for future needs and peace of mind.

In facilities like Nüttormoor and Rüdersdorf, EWE stores more than a hundred million cubic meters of highly compressed natural gas. The gas is kept in flushed salt dome caverns a thousand meters below ground level. In the cold winter evenings or whenever needed, it can be used for increasing the output to the grid. One cavern holds enough gas to keep a big city warm for a year. The Rüdersdorf plant

can feed the whole Brandenburg area, including Berlin.

Eliminating risks

EWE uses Roxtec seals for both financial and safety reasons. It is important to ensure operational reliability and avoid risks due to fire, gas or high ground water. Gas-tightness is a must to stop gas from reaching the electronic equipment in case of a pipe leakage.

"We never compromise when it comes to safety", says Hans-Joachim Lowin, electro-technician at EWE. "When you have used Roxtec once, it is easy to continue."

Built-in spare capacity

Roxtec frames in stainless steel are installed in every building – in control rooms, transformer stations and process measuring units. The frames are filled with modules, but

not full of cables. The area efficient Roxtec system makes it possible to add cables without adding costs for downtime, drilling or concreting!

Prepared for upgrades

The built-in spare capacity is beneficial in facilities designed to be operational for several decades. The Nüttermoor facility, for example, is a site under constant reconstruction. "Every month, we open up transits to make changes or add cables of various sizes. It is of significant value that the spare capacity is already there", says Manfred van Ohlen.

Support before and after

All along these projects, EWE and its partners benefit from software design services, fast frame deliveries, free on-site installation training and inspections provided by Roxtec. "There are both qualitative and economical reasons for using the same safe sealing solutions everywhere given our frequent construction works", says Manfred van Ohlen.

Immediate value for users

Already at first sight, the owner representatives and designers knew that Roxtec was the right sealing system. Manfred van Ohlen sees the potential for Roxtec in planned and future facilities. "I am impressed by the sealing solution. It helps us solve our problems directly."

Benefits

- Gas-tight
- Watertight
- Area efficient
- Easy to install
- Future capacity included



Gas-tight Roxtec seals between basements and concrete cable ducts.



” By using Roxtec cable seals, we avoid a lot of waste material.

Facts

Project type:	Construction and upgrades of underground gas storage facilities
Involved Companies:	EWE AG, Oldenburg (owner) UGS Mittenwalde, (design in Rüdersdorf) PSE Engineering, (design in Nüttermoor) Wolff & Müller GmbH & Co. KG, (frame installers in Rüdersdorf) Gebr. Neumann GmbH & Co. KG, (frame installers in Nüttermoor) RES GmbH, (electrical installations in Rüdersdorf) Coldeway GmbH, (electrical installations in Nüttermoor)
Applications:	Cable entries in outdoor and internal walls
Requirements:	Watertight Gas-tight Fire protection according to German civil construction standard DIBt S 90 (DIN 4102-9)
Roxtec products:	978 openings as G frame combinations (stainless steel) in Nüttermoor 660 openings as G frame combinations (back-to-back) in Rüdersdorf Roxtec R seal 200 (stainless steel) Roxtec wedges Roxtec adaptable sealing modules
Reasons for choosing Roxtec:	High demands for safety and certificates Design software and technical support Minimum need for keeping stock on site Easy and cost-effective installation and retrofit Multidiameter™ by Roxtec – adaptability to cables and pipes of different sizes
Roxtec oil & gas references:	Agip ENI, BP, Chevron, ConocoPhillips, CNOOC, ExxonMobil, Fluor, Foster Wheeler, Technomare, Shell, Statoil, Daewoo Heavy Industries, Samsung Heavy Industries, Hyundai Heavy Industries, Keppel Fels, Kvaerner, Raffels Shipyard, SINOPEC, CNPC.



*Ivo Raasch of Roxtec and
Manfred van Ohlen of EWE.*



WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK