

The importance of closure

CommScope fiber optic splice closures help ensure reliability of fiber optic networks and profitability of operators

Customer

Leading Chinese regional telecommunications operator

Country:

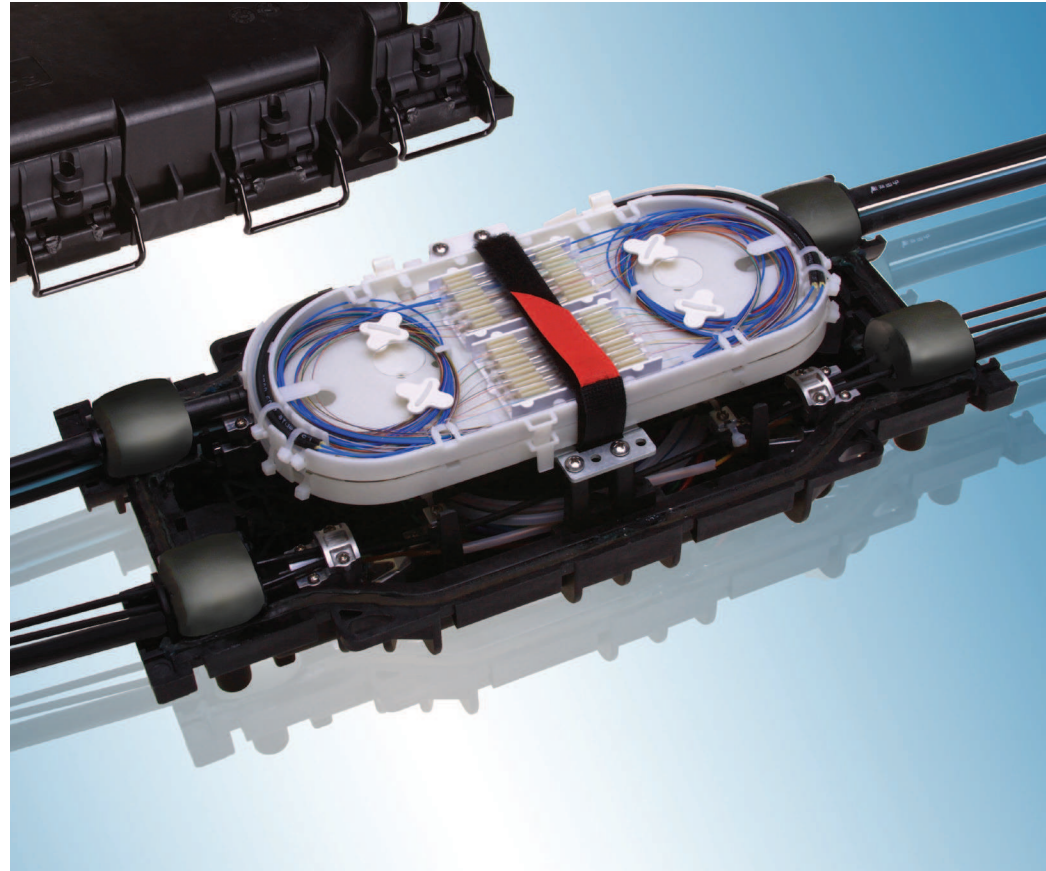
China

Challenges:

- Intense competition for FOSC™ solutions means customer demands value for money and ROI
- Customer construction department must keep expenditure low
- Customer operation and maintenance department focuses on reducing costs
- As such, FOSC solution must be as cheap as possible but also high quality and easily to maintain

Solutions included

FOSC 300CG /FOSC 550D Fiber Optic Splice Closure, Gel Cable sealing



Achieving closure—get it right today, benefit in future

World leading telecommunications companies need and rely on having state of the art network technologies in place—and the means to increase efficiency when installing or making changes to that network.

CommScope recently engaged with the largest FTTH operator in the Province, which provides services to 70 percent of the Province broadband users. Income generated from broadband operations accounts for over 75 percent of the company's annual revenues.

Providing high speed, reliable connectivity in China has become a priority, with internet user numbers continuing to grow consistently. 2016 was the first year that internet users comprised over **50 percent of the population**, underlining the need for high quality infrastructure. Fiber optic splice closures (FOSC) are an essential element of the modern network.

The importance of fiber optic splice closures

There are many applications where an external network has to operate under various harsh outdoor conditions, and this makes FOSC vital in protecting fiber nodes located outdoors. FOSC must also deliver the manoeuvrability, scalability and reliability a modern network needs and they need to be easy to maintain—all factors that directly impact an operator's capital expenditure (CAPEX) and operating expenditure (OPEX).

FOSC—ensuring reliability, delivering value

FOSC is currently listed on the customer's List of Collective Procurement. Given that there are over 300 similar FOSC manufacturers in China, and the customer procures supplies in large volumes, competition to secure business with the customer was naturally very fierce.

As such, product price in particular is a major factor in each bid evaluation. This places added pressure on FOSC manufacturers, who have to balance trying to offer low prices with keeping production costs low; they also risk leaving technology innovations and after-sales service out of the equation.

Therefore the customer's different departments have different priorities. The construction department for example must keep expenditure low, while the operation and maintenance department has to reduce costs in those two areas. In short, one department wants FOSC to be as cheap as possible, the other needs them to be high quality and easily maintainable. There are various risks: using multiple cheaper FOSC can risk network reliability and security, the result of which is higher maintenance costs over time.

Protecting the customer's crucial infrastructure

CommScope offers high-quality gel splice closures which are specifically designed for use in external networks. The CommScope gel FOSC range utilizes memory-function gel as a sealing material, while the gel itself is artificial rubber that has been implanted with flexible memory through radiation cross-linking and blending with large quantities of petroleum-based additives. As a result, it possesses both the flexibility of artificial rubber and the sealing qualities of grease.

The gel is designed to be supple and malleable, enabling its shape to be altered with minimal pressure. Once pressed, the gel spreads evenly in all directions in order to fill all space in the chamber and deliver an outstanding seal. CommScope gel FOSC has been tailored for use in operators' all-optical networks and to guarantee reliability in its connecting points.

Traditional 'horseshoe' gel splice closures have typically presented installation problems: they must be installed on-site and also, because horseshoe gel is hard, installation requires bolts to seal the closures. This results in more time to complete the process. Further time is taken when needing to open the FOSC for maintenance and then still further time when re-sealing, since all original sealing rubbers need to be replaced with new ones. In addition to excessive time and effort, there is an ongoing risk of leaks if the FOSC is not installed correctly.

With CommScope gel FOSC however, this risk is eliminated. Gel strips are in-built and do not need to be added in during installation, while the CommScope FOSC clasp-structure means a simpler, faster installation with a more reliable outcome.

CommScope FOSC perfect for fiber optic networks

In outdoor networks, total investment in FOSC accounts for less than 1 percent of total investment, but poor protection of connecting points is the cause of over 80 percent of network malfunctions.

As such major operators have now acknowledged the importance of FOSC in optical networks, and focus on both the CAPEX and OPEX benefits they can reap. CommScope gel FOSC is the perfect solution to address changing trends in today's optical networks and so CommScope specified FOSC 300CG and FOSC 550D solutions for the customer.

Closing things off with great results

CommScope worked closely and directly with the customer in the early stages of the project, using face-to-face meetings and product demonstrations, to ensure a full understanding of the CommScope FOSC solution.

Customer confidence was enabled via on-site tests and trial installations of the FOSC and technical staff were assigned to customer sites to give installation training upon product delivery. CommScope is committed to ensuring all customers have a great experience from working with an expert partner.

The customer's decision to use CommScope gel FOSC solutions helped them reduce installation time while also improving the efficiency of regularly-scheduled maintenance.

On-site installation now takes 15 percent less time than when installing traditional horseshoe gel closures and on-site maintenance times have also been reduced by 30 percent.

To read more about CommScope gel FOSC solutions and their benefits to telecoms operators, please visit: [Fiber optic splice closures](#)

Everyone communicates. It's the essence of the human experience. How we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers— we provide the essential expertise and vital infrastructure your business needs to succeed. The world's most advanced networks rely on CommScope connectivity.



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