NEWS RELEASES

Products

Fujikura Begins Sales of 3000-Fiber Optical Cable with 200 μm Fiber Spider Web Ribbon $^{\circ}$

—Adopted first by major telecommunications company Colt Technology Services Co., Ltd. for domestic mainline optical cable—

May 12, 2021 Fujikura Ltd.

Fujikura Ltd. (President & CEO: Masahiko Ito) announced today that it has newly added a 3000-fiber optical cable with 200 µm fiber Spider Web Ribbon® (SWR®) to its lineup of Wrapping Tube Cable® (WTC®), small-diameter high density optical cable with SWR® intermittent adhesion type optical cable fiber line, a proprietary technology, and commenced sales.

Background of Product Development

In recent years, with the spread of video streaming and cloud services, there is growing need for even greater capacity optical networks in order to accommodate 5G, loT and increased cyber security. However, the optical cable laid in domestic mainlines (underground conduits) must be 24 mm or less in diameter because of size constraints from the inner tube used in these underground conduits. Thus, achieving higher capacity optical networks requires optical cable with a higher fiber count for use within confined spaces.

Product Features

- Until now, the 2000-fiber WTC® with 250 µm 8-fiber SWR® had the largest fiber count in Fujikura's WTC® products for domestic mainline applications. Today, Fujikura has developed a 200 µm fiber for 8-fiber SWR®, which makes it possible to increase the optical fiber count to 3000 without increasing cable diameter, boosting capacity. At the same time as increasing fiber count, this new product also weighs less than conventional ones, which is expected to improve installation efficiency.
- The newly developed SWR® with 200 µm fiber adopts an alignment structure using the same pitch between fibers as that of conventional 250 µm fiber SWR®. Therefore, mass fusion splicing can be used to connect not only 200 µm fiber SWR® to each other, but also connect it to 250 µm fiber SWR® or existing 250 µm optical fiber tape. In addition, since existing fusion splicers can be used without modification, there is no need to use a fusion splicer designed particularly for 200 µm fiber, which will also reduce installation costs.
- In addition, at the same time as developing the 3000-fiber WTC® with 200 µm fiber SWR®, Fujikura newly developed an optical closure and launched sales simultaneously. Both obstacle relocation and connections up to a maximum of 3000 fibers were enabled by modifying the size of the optical fiber storage tray as well as wiring and storage structure inside the optical closure.

The performance of this 3000-fiber WTC* with 200 µm fiber SWR* has been highly appraised and it has already been adopted by Colt Technology Services Co., Ltd.*, a major telecommunications company. Fujikura has begun delivering this new product to this company from March 2021 together with the newly developed optical

closure. Mr. Hoshino, President and Head of Asia of Colt Technology Services Co., Ltd. says the following about the company's adoption of 3000-fiber WTC® and optical closure.

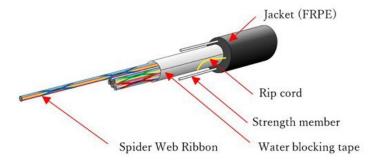
"We at Colt were happy to hear about Fujikura's new 3000 Fiber Optical Cable and have adopted this new product in parts of our core infrastructure in Japan. We have been working with Fujikura for many years and are always amazed by their market leading technological advancements. Given the compact diameter and lightweight design, it has helped us to maximize our investments in our fiber network and allow us to serve our customers for many years to come. In addition, even though we deployed 200 μ m fiber for the first time, we were able to use the existing fusion splicer, and the workability was good as well. Colt is always looking to advance our capabilities and looking forward to continue working with Fujikura as they continue to make improvements to their products."

Going forward, Fujikura is committed to providing total optical cable solutions, including developing leading optical products and expanding its lineup from super high fiber count cables to peripheral equipment and parts, as well as providing installation and maintenance work. This will enable us to move ahead with initiatives to deliver even greater value to customers.

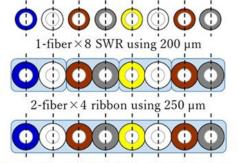


Mr. Hoshino, President and Head of Asia (pictured at left) of Colt Technology Services Co., Ltd. visiting the installation site for 3000-fiber WTC $^{\oplus}$

●3000-Fiber WTC® Cable Structure



●8-Fiber SWR® Fiber Pitch Structure



Conventional rigid ribbon using 250 µm fiber

	3000-Fiber WTC®	2000-Fiber WTC®(Reference)
Number of cable fibers	3000fibers	2000fibers
Diameter	23mm <i>ф</i>	23mm <i>ф</i>
Weight	430kg/km	470kg/km

<About Colt Technology Services Co., Ltd.>

Colt Technology Services Co., Ltd. is the Japanese subsidiary of Colt Technology Services Group, a major global telecommunications company based in London, UK. The company owns and operates a network connecting more than 900 data centers and more than 29,000 commercial buildings in Asia, Europe and North America. It provides ICT infrastructure services to corporate customers using an integrated platform and processes focused mainly on optical cable networks along with data communication, internet connectivity, voice, IT management services and other professional services.