News Release

July 31, 2023

Announcement of the completion of construction of GRANOPT Co., Ltd.'s new plant

An increase in the demand for Faraday rotators (hereinafter, "FRs"), which are mainly used for optical isolators, has accompanied the growth in the fiber optics market. In order to respond to this increase in the demand, GRANOPT Co., Ltd. (Head office: Noshiro-shi, Akita, President and Representative Director: Hiroshi Matsumoto), which is a joint venture between Sumitomo Metal Mining Co., Ltd. (Head office: Minato-ku, Tokyo, President and Representative Director: Akira Nozaki) and Mitsubishi Gas Chemical Company, Inc. (Head office: Chiyoda-ku, Tokyo, President and Representative Director: Masashi Fujii), has constructed a new plant in the Noshiro industrial park in Noshiro-shi, Akita Prefecture.

Background of the construction

In response to the global growth in demand for cell-phone 5G services, in the fiber optics market environment, capital investment in cell-phone base stations, which comprise key infrastructure, is increasing. In addition, in the datacom segment driven by GAMA, the increase in the number of data centers goes hand in hand with a continuing increase in the demand for connections (interconnects) which connect the centers together. The 5G base stations and datacom interconnects are driving demand, and it is expected that FR demand will also see a large increase in the future.

Given this market environment, a new plant has been constructed on the north of the plant that is presently manufacturing FRs (in the Noshiro industrial park). Production equipment will be augmented gradually, in line with future market growth.

■ The new plant

BCP measures were taken into consideration in the design of the plant. Further, the plant design is environmentally friendly, meaning the plant is capable of having solar power generation equipment, supplying carbon-neutral products, and being a "smart factory."

This project is a beneficiary of Akita Prefecture's Akita subsidy program for the promotion of establishment of enterprises, and also of employment subsidies provided by Noshiro-shi, Akita Prefecture. The subsidies will be utilized appropriately as the project progresses.

■ Faraday rotator (FR)

Examples of Faraday rotator (FR) applications include optical isolators (optical components that only allow light to be transmitted in one direction) and optical circulators (optical components that can vary the output port of light). An FR is a single crystal film 0.100 to 0.500 mm thick, and is made of bismuth-substituted (Bi-substituted) rare-earth iron garnet. It is manufactured using the liquid phase epitaxy (LPE) method. A Faraday rotator has the characteristic of rotating the light polarization direction when a magnetic field is applied (magneto-optical effect, or Faraday effect). It is a key device used in high-performance fiber optic systems and optical products to stabilize light sources and prevent oscillation in optical amplifiers when conducting highly sensitive optical sensing. GRANOPT Co., Ltd. is the world's leading FR manufacturer.



Description of new plant
Address: 4-12 Ougibuchi, Ougida, Noshiro-shi, Akita, Japan
Site area: 11,586 m²
Building area: 6,706 m² (total floor area)
Description of building: Reinforced structure with 2 stories above ground
Product manufactured: Faraday rotator



External appearance of the new GRANOPT plant

■ Profile of the joint venture company

GGRA*N*OPT

Name:GRANOPT CO., LTD.Location:4-4 Ougibuchi, Ougida, Noshiro-shi, Akita, JapanRepresentative:President and Representative Director Hiroshi MatsumotoIncorporated on:April 1st, 2005Business description:Manufacture and sale of Faraday rotatorsCapital:150 million yenInvestment ratio:Sumitomo Metal Mining Co., Ltd.: 51%Mitsubishi Gas Chemical Company, Inc.: 49%

Address inquiries concerning this News Release to:

Sumitomo Metal Mining Co., Ltd. Public Relations & Investor Relations Department TEL: +81-3-3436-7705 E-mail: Smm_Koho@smm-g.com