News Release

AGC to Make Drastic Expansion to Supply System for EUVL Mask Blanks

Tokyo, February 5, 2018–AGC Asahi Glass (AGC), a world-leading manufacturer of glass, chemicals and high-tech materials, has decided to drastically expand a supply system for EUVL mask blanks at one of its group companies, AGC Electronics Co., Ltd. (Headquarters: Koriyama, Fukushima; President: Katsunari Ochiai) in 2018.

As the sophistication and miniaturization of electronic devices continues to advance, so does demand for faster semiconductor chip calculation speeds as well as higher capacities and more advanced integration. The circuit patterns of semiconductor chips must be further miniaturized in order to achieve these goals, yet with currently available optical lithography technology[1] it is theoretically unrealistic to model miniaturized patterns, referred to as "7nm node." EUV[2] optical technology is considered the most plausible technology to create such miniaturized patterns.

AGC began conducting R&D on photomask blanks utilized in EUV lithography technology in 2003. By combining its core technologies (i.e. glass materials, glass processing, and coatings), AGC is currently the only manufacturer in the world capable of handling every aspect of photomask blanks—from the glass material to film material. In anticipation of the expansion of EUV lithography, which is expected to become the prevailing technology, AGC has decided on a drastic expansion of the supply system for EUVL mask blanks at one of its group companies, AGC Electronics in 2018.

Under its ***AGC plus*** management policy, the AGC Group has made a commitment to positioning electronics related business as one of its strategic businesses. AGC intends to continue making aggressive capital investment in EUVL mask blanks, which are expected to see significant growth in demand in the coming years, to contribute to further development of the semiconductor industry.

Notes

1: Optical Lithography Technology: The process of transferring LSI circuit patterns to silicon wafers, etc., using a KrF (krypton fluoride) or ArF (argon fluoride) light source.

2: EUV: Extreme ultraviolet radiation with a wavelength of 13.5nm.

<Media inquiries>
Kazumi Tamaki, General Manager, Corporate Communications & Investor Relations Division
AGC Asahi Glass
(Contact: Yuki Kitano; Tel: +81-3-3218-5603; E-mail: info-pr@agc.com)

News Release

REFERENCE

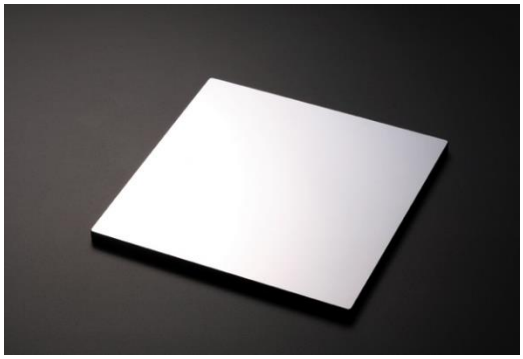
■ About AGC Electronics ■

Official name	AGC Electronics Co., Ltd.
Capital	300 million yen
Representative	Katsunari Ochiai
Head office location	Koriyama City, Fukushima Prefecture
Employees	600 (as of end of December 2017)
Primary business	Semiconductor-related materials business; optical device related business, etc.

■ About EUVL Mask Blanks ■

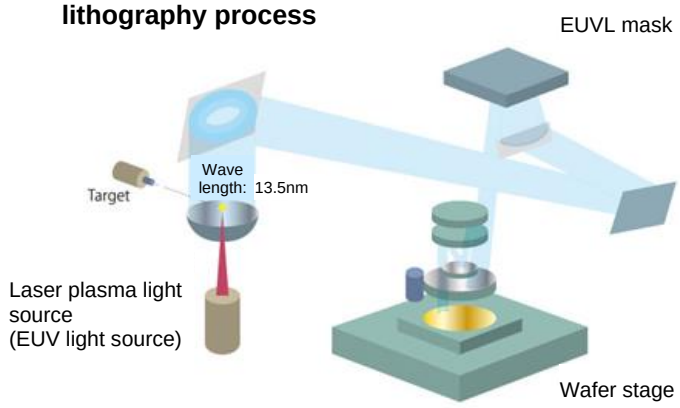
EUV lithography mask blanks ("EUV mask blanks") are the original plate of “photomask” laminated with multiple layers of film on a lower-expansion glass substrate. Due to the further miniaturization of circuits, EUV mask blanks are increasingly expected to:

・ Have as close to zero extremely-small-sized defects as possible;
・ Have extremely high flatness



EUV mask blanks

Outline view of the EUV lithography process



<Media inquiries>
Kazumi Tamaki, General Manager, Corporate Communications & Investor Relations Division
AGC Asahi Glass
(Contact: Yuki Kitano; Tel: +81-3-3218-5603; E-mail: info-pr@agc.com)