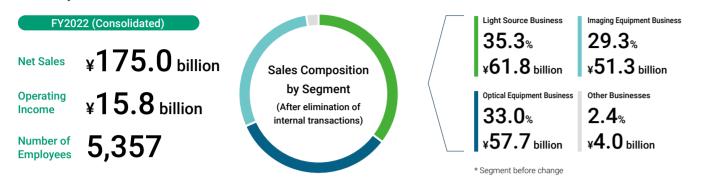
# Ushio at a Glance

Ushio by the Numbers



## Three Business Fields

Ushio's three business segments of Industrial Processes, Visual Imaging, and Life Sciences cover everything from the semiconductor manufacturing process to movie theaters, medicine and environmental health, all over the world. In these three business segments, we will continue to pursue the new potential of light in order to support human well-being and societal growth.

#### Industrial Processes

Semiconductors, FPD, precision equipment, electronic components, photochemistry, printing, industrial equipment etc.



Visual Imaging Projectors, projector light sources, general and commercial lighting, landscape lighting and production, stage and studio lighting, etc.



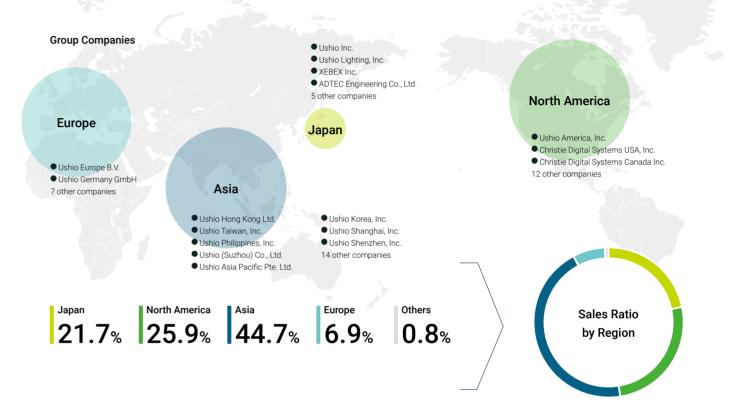
### Life Sciences

Healthcare, natural environment, agriculture, marine and fishery industry, security, energy, space development etc.



## **Global Business Foundation**

In the same manner as light, our business fields transcend national borders and span across the world. Our mission is to provide the necessary type of light source to each country and region at the necessary times. Our global business foundation enables us to fulfill this mission.



#### Market Share of Major Products

#### UV Lamps for Semiconductor Lithography



#### the performance of semiconductors and electrical components that are installed in a wide variety of products, from digital devices such as PCs and smartphones, to household appliances and automobiles. Our ultra-highpressure UV lamps play a major role in this exposure process.

The exposure process is critical to enhancing

#### UV Lamps for LCD Lithography



Our UV lamps for LCD lithography are used in the exposure process for various LCD displays, including those of televisions, laptops, and smartphones. Through their large size and power, these lamps help increase the size of panels and enhance their resolution.

#### Large Field Steppers for Cutting-Edge IC Package Substrates\*



Equipped with ultra-high-pressure UV lamps, our large field stepper for cutting-edge IC package substrates is a tool used to create circuits such as semiconductor package substrates and printed circuit boards (PCBs). In addition to lamps, we develop all the main technologies used in this equipment in-house, including optical components, as well as with regards to material handling, power sources, and software.

Share: 75%

Share:

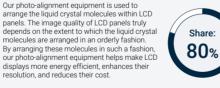
70%

\* Cutting-edge IC package

(stepper market)

#### Photo-Alignment Equipment





Share

65%

Share:

35%

#### Lamps for Cinema Projectors



We develop and produce lamps used in cinema projectors at movie theaters. On the set of movies, video is shot using lighting that is similar to sunlight. As such, lighting that is as similar to sunlight as possible is needed to project images naturally. Our lamps are sometimes referred to as "artificial suns" in reference to their ability to provide this lighting.

#### Digital Cinema Projectors



Our digital cinema projectors are large-scale projectors for movie theaters equipped with xenon short arc lamps and RGB lasers. We also develop large-scale visual systems and virtual reality systems that primarily make use of these projectors. These systems are used not only at movie theaters but also at amusement parks and for large-scale live events.

#### Excimer Irradiation Units for Cleaning Panels



Our excimer irradiation units for cleaning panels are tools that use UV rays to clean LCD panels by removing the organic compounds that become attached to them during the manufacturing process. These excimer irradiation units are equipped with excimer lamps, which Ushio was the first company in the world to develop.

anels t nufacunits Ushio velop. Share: 95%

### UV Curing Equipment for Bonding LCD Panels



Our UV curing equipment for bonding LCD panels enables the batch irradiation of UV rays used in the curing of large-scale LCD panels. Through the introduction of Ushio's unique new technologies, this equipment provides significant benefits to the LCD manufacturing line, by significantly reducing the time required for the curing process—which previously took several hours—to a period of only several minutes.



## DI Lithography Equipment for IC Package Substrates\*



Direct imaging (DI) lithography equipment uses laser light to create the wiring patterns required for semiconductor package substrates and printed circuit boards through direct exposure. Leveraging proprietary technology, we have realized a system balance with the quality, speed, and stability that DI lithography equipment requires.



market)



#### Lamps for Data Projectors



We develop and produce lamps installed in data projectors used at locations such as conferences, live events, and schools. Based on super high-pressure UV lamps, these compact, high-intensity, flickerfree lamps achieve high reliability and are used in a wide range of applications from business to professional use.

#### Halogen Lamps for OA Equipment



Our halogen lamps for OA equipment are used to affix toner to paper by utilizing heat to melt pulverized toner. These lamps are used in such devices as printers and copy machines when drawing text or images on paper.



