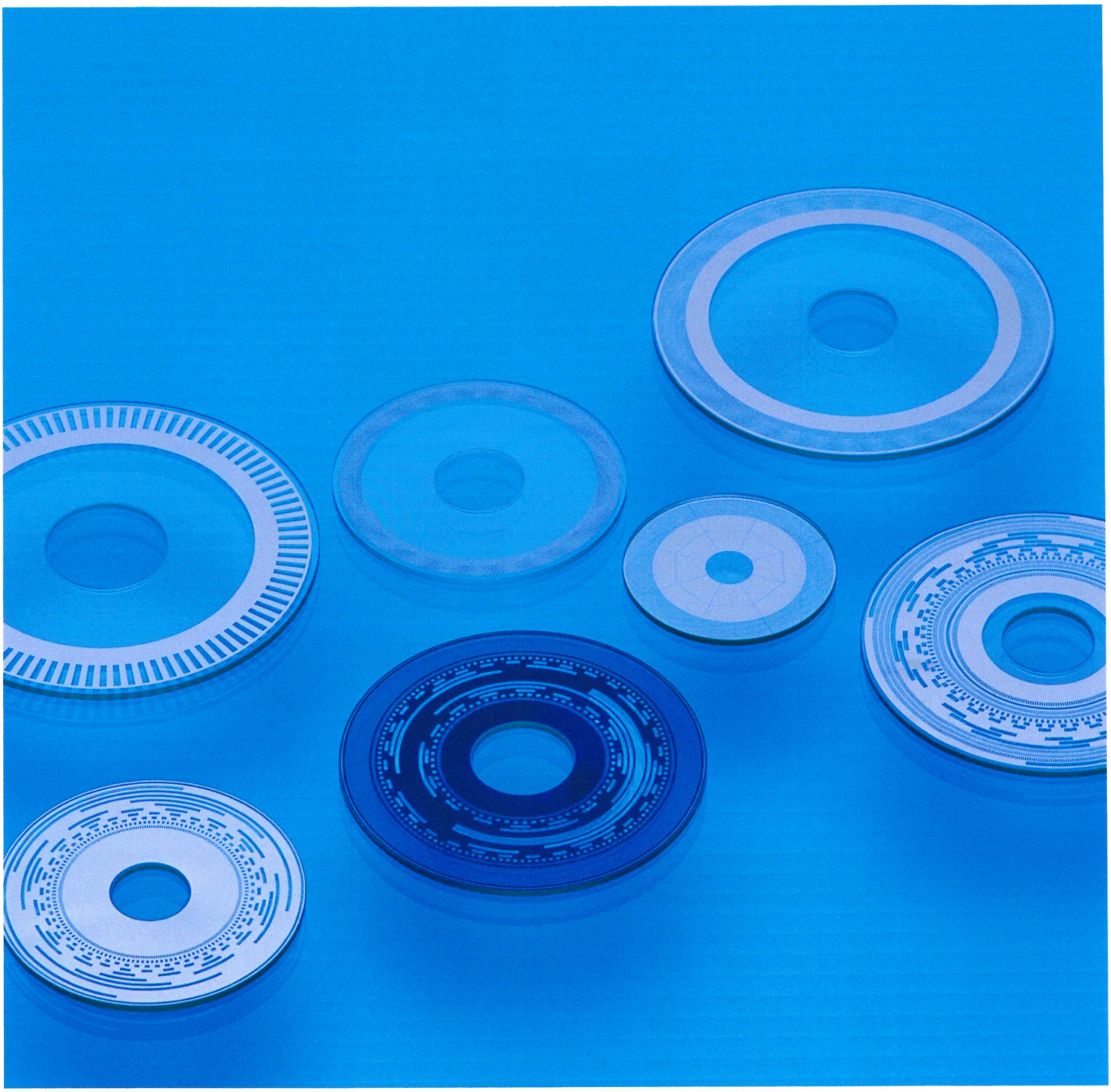
1 ROTARY ENCODER

High-precision Circle Division Writing Technology

For rotary encoders, the precision of the Slit Disk that turns the revolutions into signals or code is quintessential. In order to create more precise patterns, we have incorporated Laser Direct Write Pattern Generators, and carry out production in-house from the master disk.



Unwavering Dependability Founded in Each Step of the Process

Our manufacturing process begins with the grinding of the glass surface. The polished glass then goes through an ultrasonic cleaning machine with 14 tanks to achieve an exceptionally clean surface. A sputtering device is then used to uniformly coat the cleaned surface with a film of chrome (Cr), without even a pinhole-sized discrepancy, creating a glass blank.

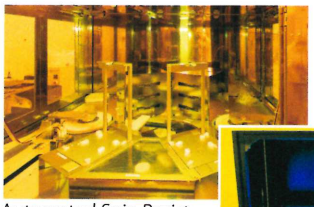
Sputtering Device

Washing Device

RCA Washing Device

Scrubber

Next, in a clean room, photo-fabrication techniques are used to create a precise pattern on the glass blank.



Automated Spin Resist Coater Machine

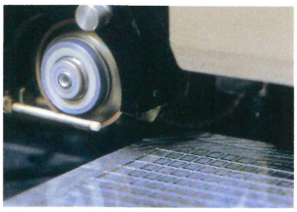
Stepper Exposure Apparatus

Exposure Apparatus

In-line spatter

Finally, we use our expert techniques and original methods to machine the patterned glass blank to the form and dimensions required to attain the final Slit Disk

Core



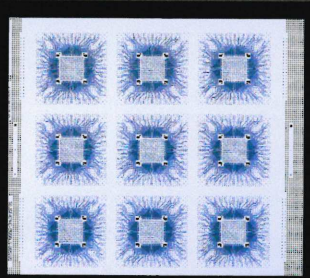
Dicing Machine

In this way, we carry out all the steps ourselves, from grinding the glass to machining the glass, as well as creating the master.

Cr repair device

Photomask and Master Copy Production Process

Laser Direct Write Pattern Generator



High-precision photomasks / Master copies

Image measuring apparatus

Automatic inspection device