

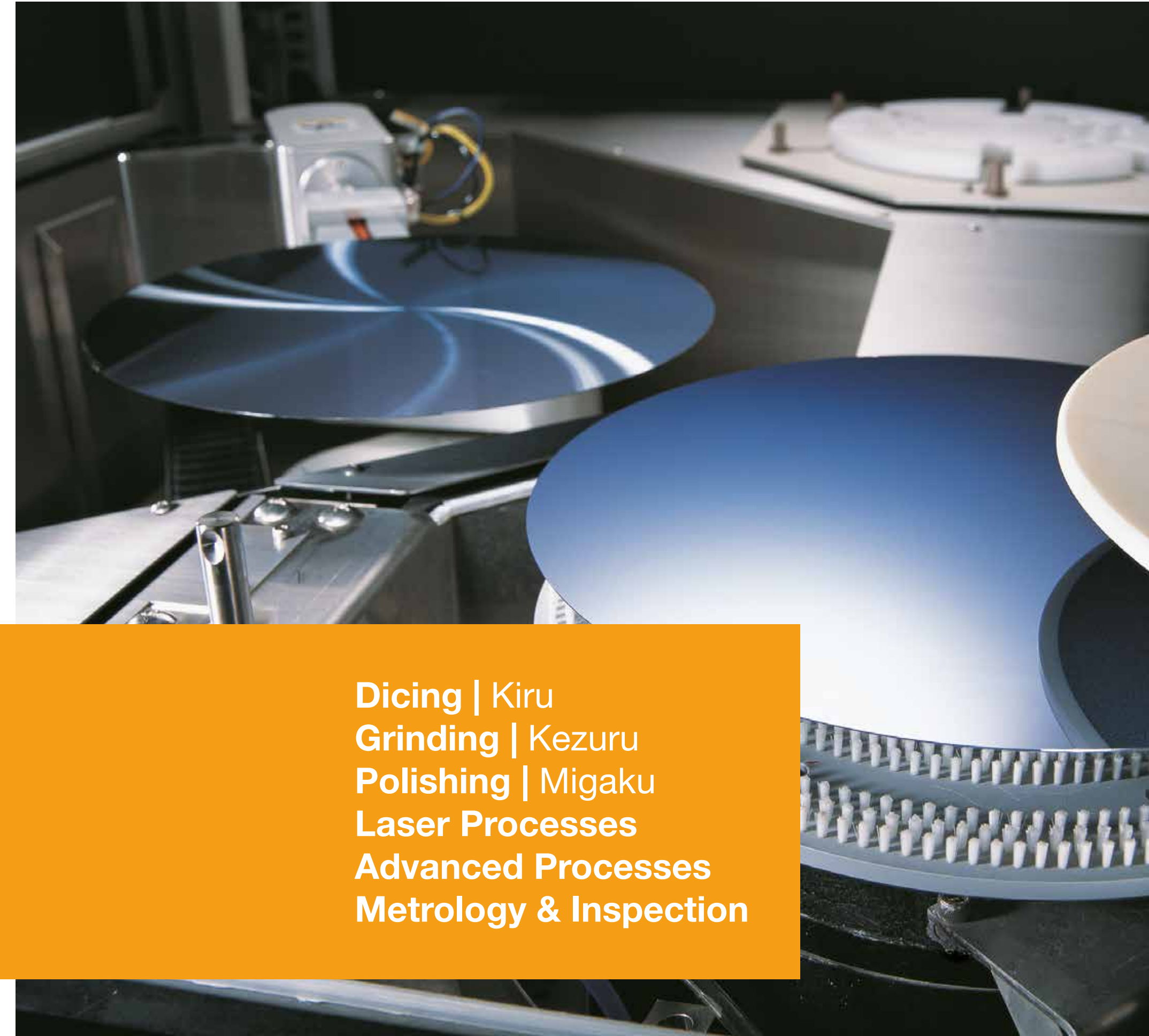
Facts and Figures

- 2006: Start of DGS at DISCO HI-TEC EUROPE in Munich
- 2009 & 2013: Cleanroom extensions due to increasing demands and capacity limits
- Since 2016: Per month more than 12 000 processed wafers
- Since June 2018: Cleanroom extension of 800 m² – total processing area: 1330 m²
- Shift service: 2 shifts / 7 days a week



DGS Dicing-Grinding Service
DISCO HI-TEC EUROPE GmbH

*Part of global
semiconductor
development through
advanced dicing-
grinding services.*



Contact

DISCO HI-TEC EUROPE GmbH

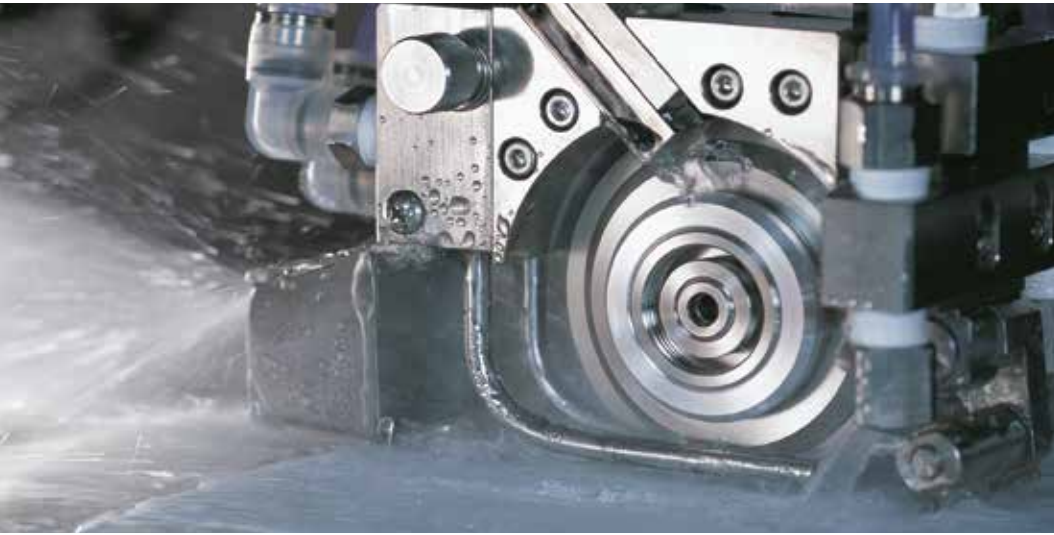
Liebigstrasse 8
85551 Kirchheim b. München
Germany

Phone: +49 (0)89 90903-0
Fax: +49 (0)89 90903-199

E-Mail: dgs@discoeuropa.com
Web: www.discoeuropa.com
www.dicing-grinding.com

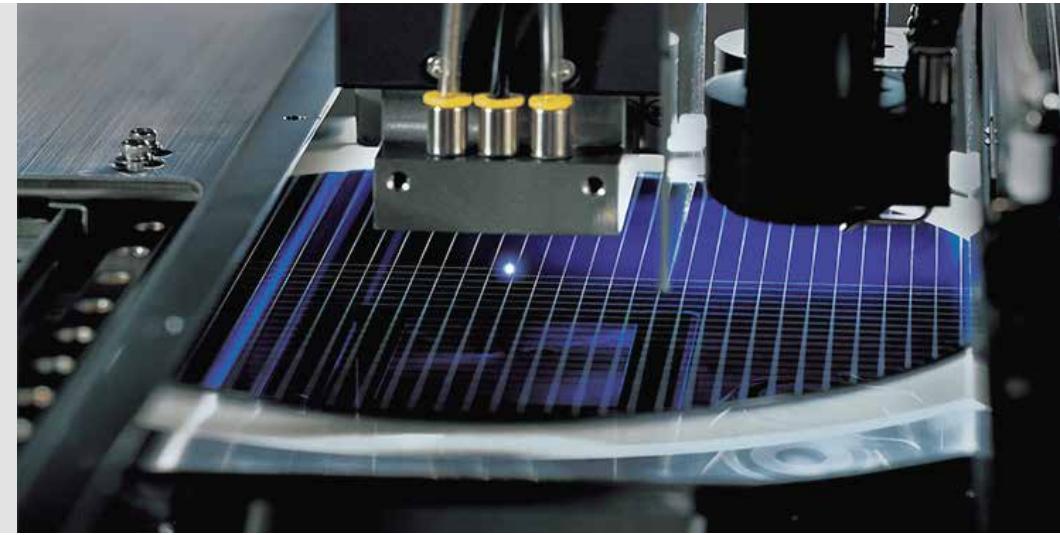
**Dicing | Kiru
Grinding | Kezuru
Polishing | Migaku
Laser Processes
Advanced Processes
Metrology & Inspection**

Dicing | Kiru



- Single Cut
- Step Cut
- Bevel Cut
- Pattern Grooving
- Chopper Cut
- Circle Cut
- Edge Trimming
- Ultrasonic Dicing

Laser Processes



- Stealth dicing (SD)
- Stealth dicing of SiC
- Laser ablation
- Laser grooving
- Die attach film (DAF) cut

Why dicing-grinding service by DISCO?

DISCO HI-TEC EUROPE's Dicing-Grinding Service (DGS) is an integral component of any manufacturing stage when it comes to high precision processing of ICs, MEMS, LEDs, other micro components and their inspection/metrology. As a complete service, DGS implements exact customer requirements as well as develops ideal material handling.

Typical materials we process:

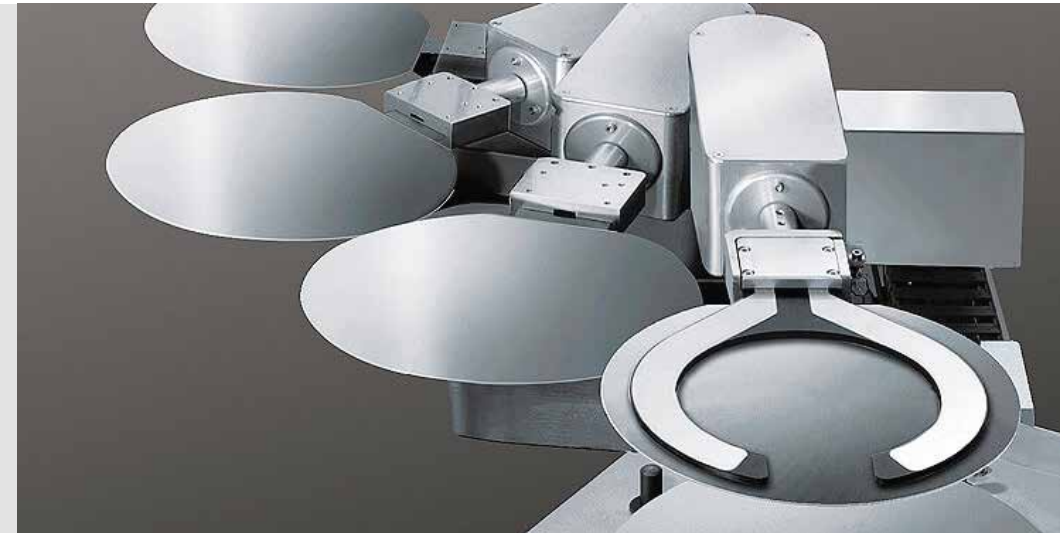
- Silicon and other semiconductors
- Sapphire
- Quartz
- Glass
- Bonded Materials
- GaAs
- SiC
- Ceramics
- QFN / Lead frame
- FR4
- Compound materials
- Other materials on demand

Grinding | Kezuru



- Single wafer grinding
- Partial wafer grinding
- Individual (die) chip grinding
- Edge trimming (by grinding)
- Poligrind/Ultrapoligrind
- TAIKO

Advanced Processes



- Dicing before grinding (DBG)
- Stealth dicing before grinding (SDBG)
- Plasma etching
- Surface planarization



Polishing | Migaku



- Dry polishing
- Chemical-mechanical polishing
- Stress relief process for higher die strength and reduction of warpage

Metrology & Inspection



- 3D surface metrology system
- Atomic Force Microscopy (AFM)
- Automated Optical Inspection (AOI)



DGS Quality Management system is DIN EN ISO 9001 and DIN EN ISO 14001 certified and all processes are subject to strict controls.