

Machinery



Measurement technology



Innovation and technology transfer Our services

- Development and optimization of machining processes
- Contract research for companies
- Research and development in joint projects
- Seminars, conferences and technical workshops
- Consulting, research and literature review



Contact

Hochschule Furtwangen
Kompetenzzentrum für Spanende Fertigung KSF
Jakob-Kienzle-Str. 17
78054 Villingen-Schwenningen
Maria Kohmann
Tel.: +49 7720 / 307 - 4328
Fax: +49 7720 / 307 - 4208
Mail: ksfinfo@hs-furtwangen.de
<http://ksf.hs-furtwangen.de>

Hochschule Furtwangen

KSF, Institute for
Advanced Manufacturing

Head of Institute
Prof. Dr.
Azarhoushang



Main research areas and services

2024-07



Cutting technologies



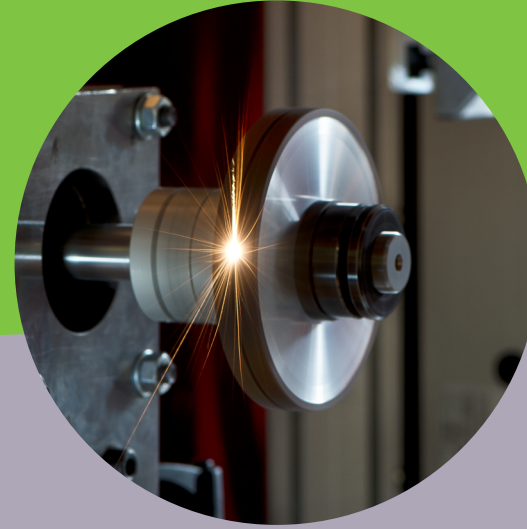
- HEDG
- Difficult to machine materials
- Microgrinding
- Non-conventional machining and hybrid machining
- Dry grinding
- Modelling and evaluation of processes
- Measurement and process monitoring

Grinding and finishing technologies



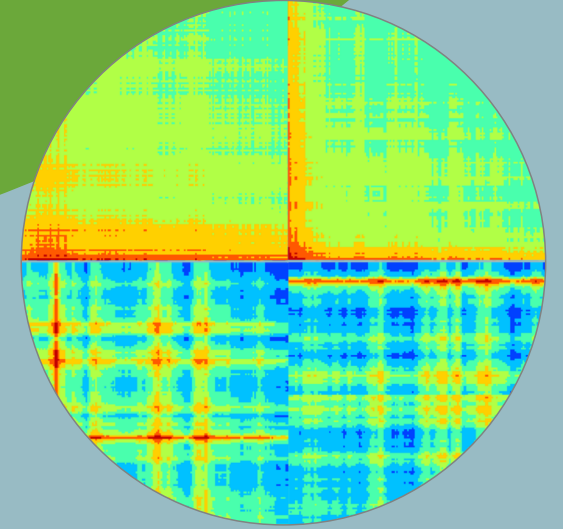
- High-performance, high-speed grinding, HEDG
- Difficult to machine materials
- Micro grinding
- Hybrid machining
- Superfinishing
- Lapping and polishing

EDM, laser technology and additive manufacturing



- Microstructuring
- Conditioning of grinding tools
- Functional surfaces
- Hybrid processing
- Additive manufacturing (SLS)
- Production of micro tools
- Contour production

AI and Simulation



- Expert systems
- Machine learning
- Data-based manufacturing
- Condition monitoring
- Quality prediction and -assurance
- In-process and in-situ measurement
- Adaptive process control
- FEM (process modeling)