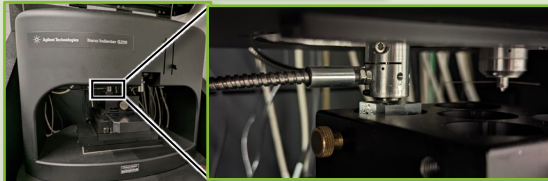
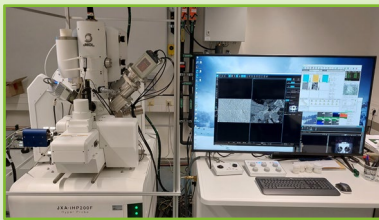
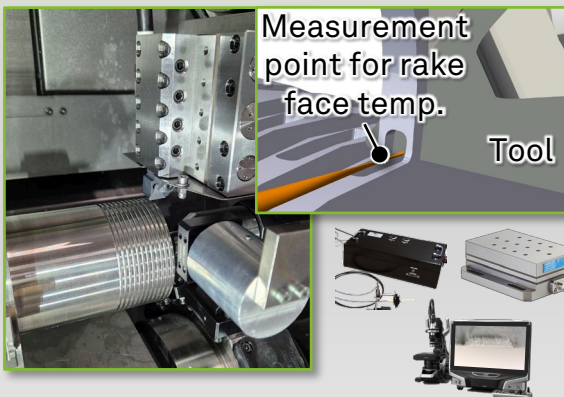


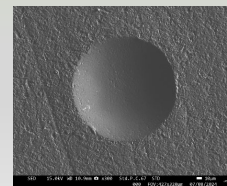
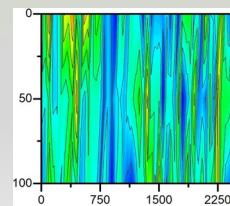
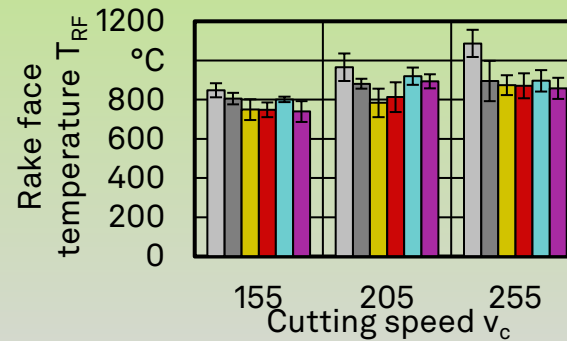
Fundamental characterization



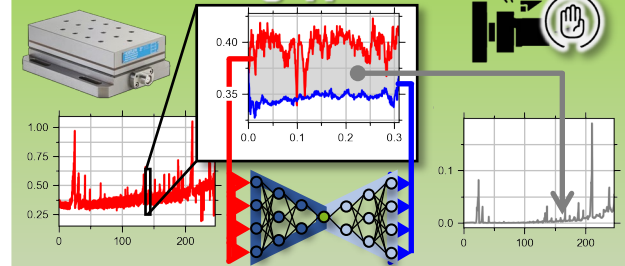
Operational experiments



Investigation results



Machine learning approaches



Autoencoder

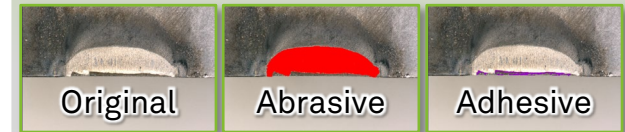


Image segmentation

Conclusion

- Successful application of the coating on cemented carbide tools for orthogonal turning
- Reduction of rake face temperatures through novel coatings
- Development of novel machine learning approaches for wear characterization