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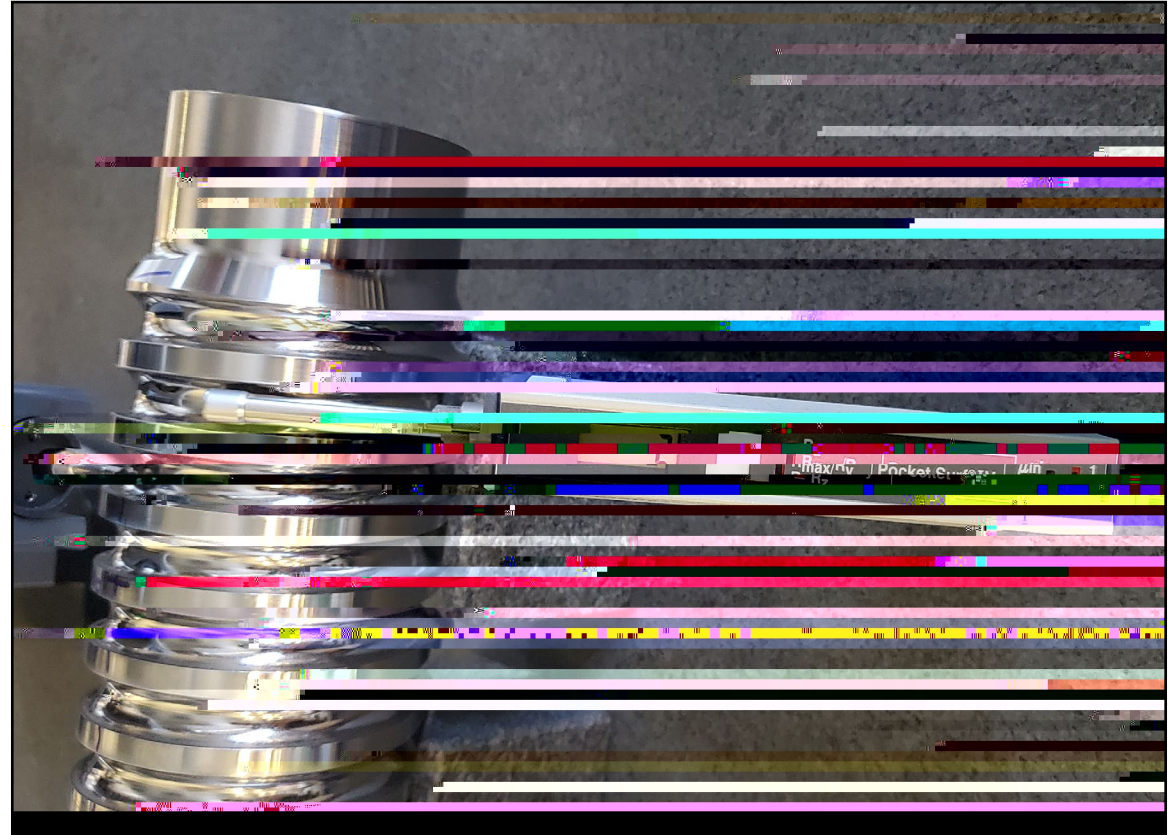
Project	Role	Funding Agency	Amount	Year Awarded	Status
Solid State Recycling of Thin Cross Section Metals	Principal Investigator	Oregon Best	\$75,000	2017	Completed
Ball Screw Rapid Forming	Principal Investigator	OMIC R&D	\$44,192	2018	Completed
Rapid Tooling with Additive Manufacturing	Principal Investigator	OMIC R&D	\$101,765	2018	Completed
Center of Excellence for Cutting Tools Inspection	Principal Investigator	Business Oregon	\$500,000	2018	Completed
Cutting Tool Geometry Inspection and Optimization	Principal Investigator	OMIC R&D	\$85,101	2019	Completed
Decision Tool for Additive Manufacturing Application	Co-Principal Investigator	OMIC R&D	\$54,596	2020	Ongoing

Project	Role	Funding Agency	Amount	Year Awarded	Status
Developments in Alloys with Multi-Principal Elements for Cutting Tools Applications	Principal Investigator	OMIC R&D	\$127,729	2020	Ongoing

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- To offer a new solution for rapid forming of a specific type of ball screws.

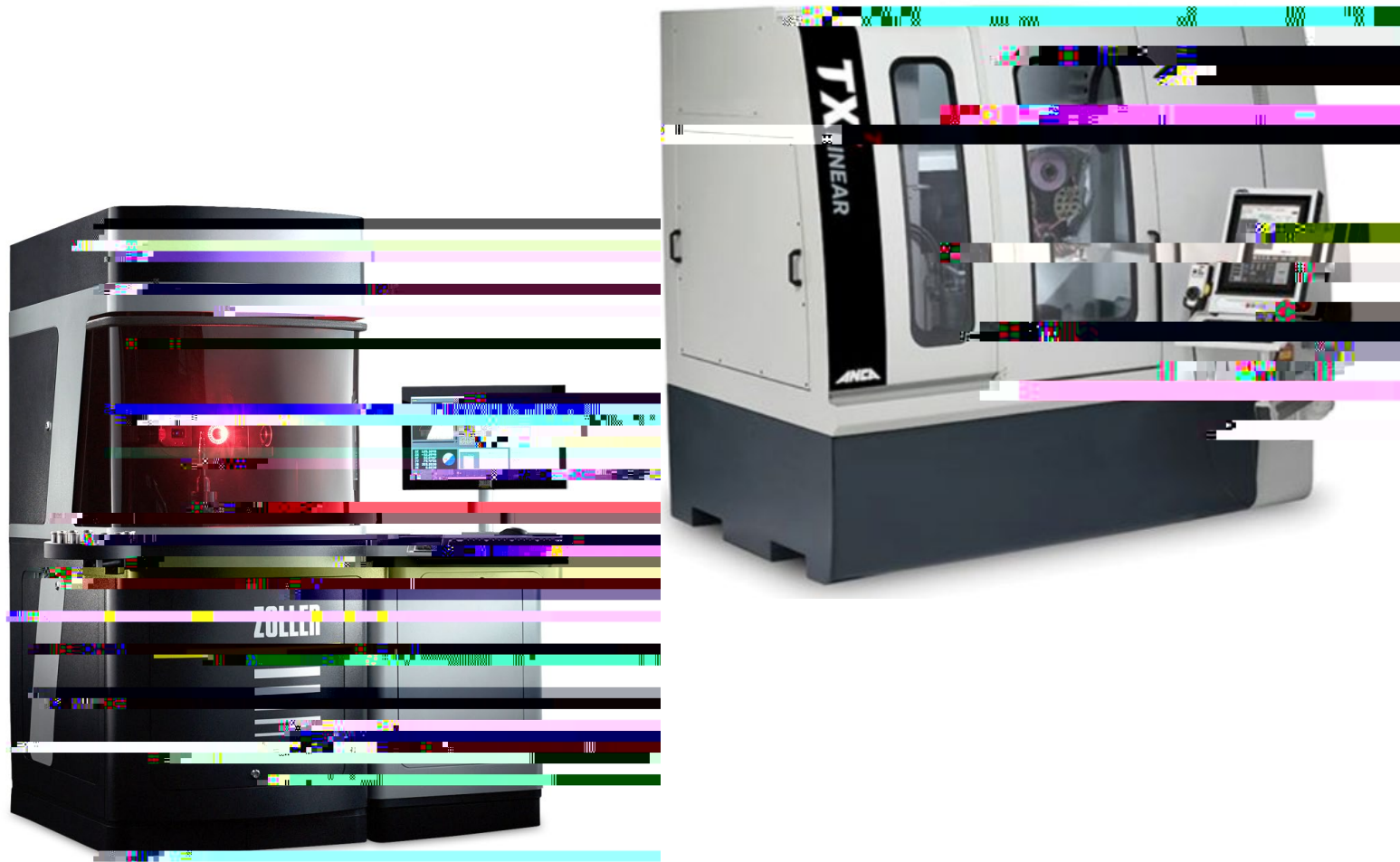




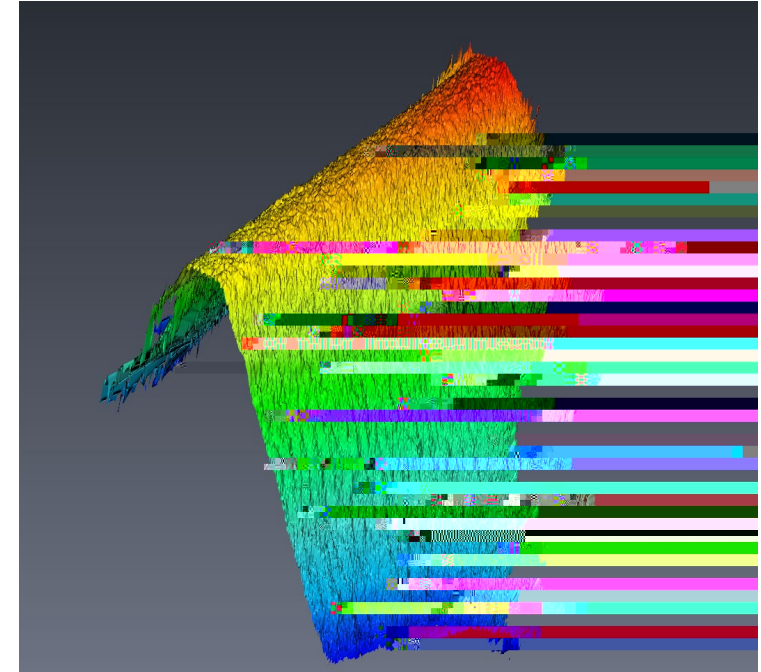






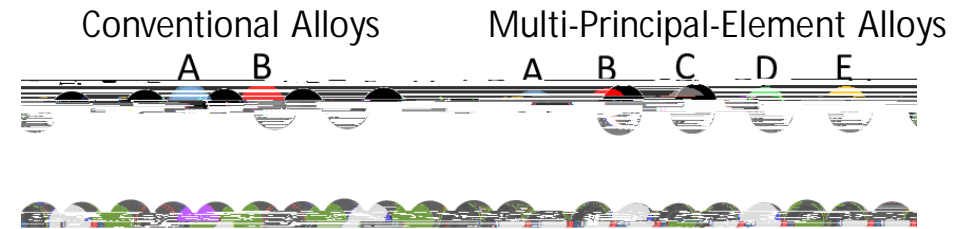


- Tool life prediction before it is too late!
- Objectives:
  - To develop best practices in optimization of the edge-preparation of drilling tools while learning how to measure the cutting tool microgeometries.
  - To develop edge-preparation optimization methodology for a drilling tool.
  - To develop predictive model for tool life.



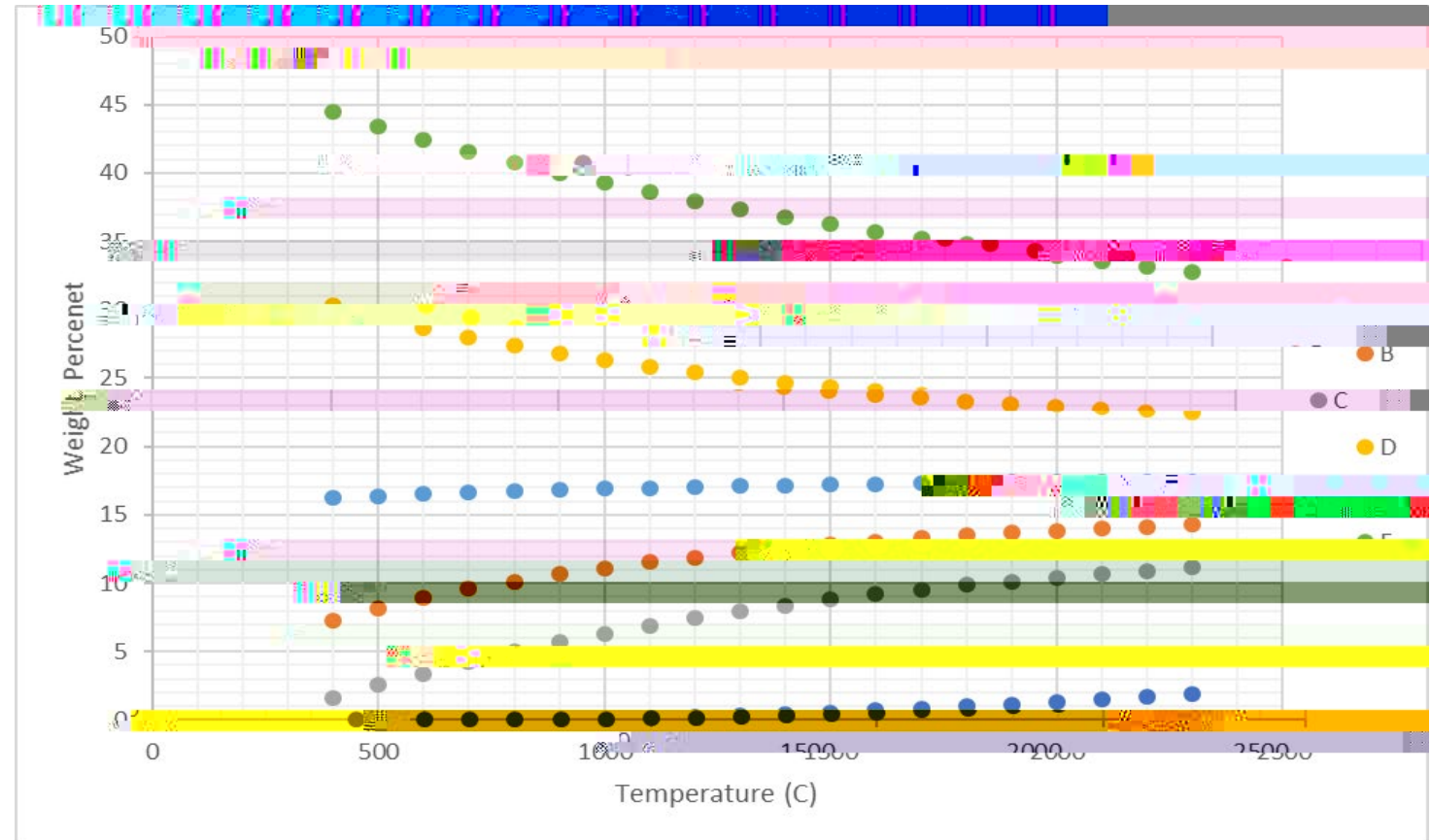
- A team from both PSU and OIT will work together to match the desired project outcomes by developing a suite of software

- How to eliminate cobalt in cutting tools?
- Objectives:
  - To explore capabilities of advanced multicomponent alloys to find an alternative to conventional carbide and ceramic cutting tools.



Like adding carbon into iron

- In collaboration with OMIC industry partners, mechanical properties and microstructure of the prototypes will be tested and validated to evaluate the feasibility of the designed alloys for cutting tools applications.



# Oregon

# TECH

Oregon Tech  
OMIC R&D  
OMIC R&D Members  
SPGA Office