



## Thermal Spray Technology

Extreme surface wear requires extreme solutions from EternAloy®.

### Advantages of EternAloy®

- Greater wear-resistance and increased operational life
- Low porosity, elevated temperature durability
- HVOF, HVOF, and Laser Metal Deposition (LMD).

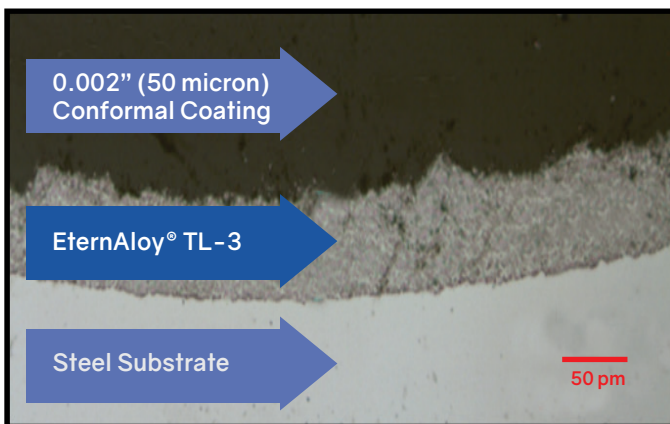
### EternAloy® Delivers Proven Superior Performance

- Surface Coating Powders
- Customized Powders
- Cutting Tools

### Application 1:

Industrial Machine Component  
Proven 2x to 5x Life Improvement  
with EternAloy® HVOF Thermal  
Spray Coating

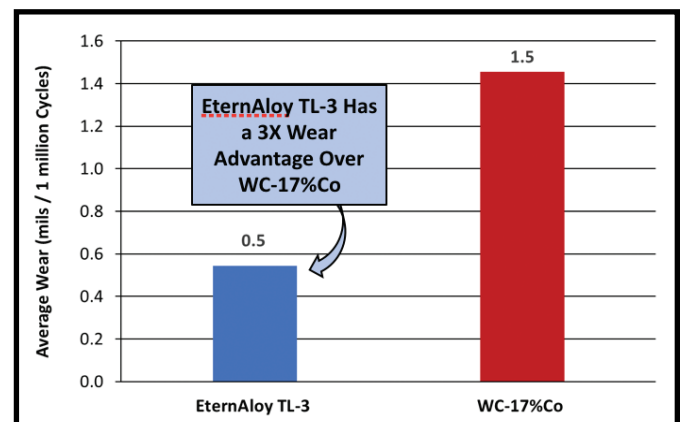
Industrial components with coating thicknesses as thin as 0.002" on a contoured surface outperform the best tool in a high-volume manufacturing operation.



### Application 2:

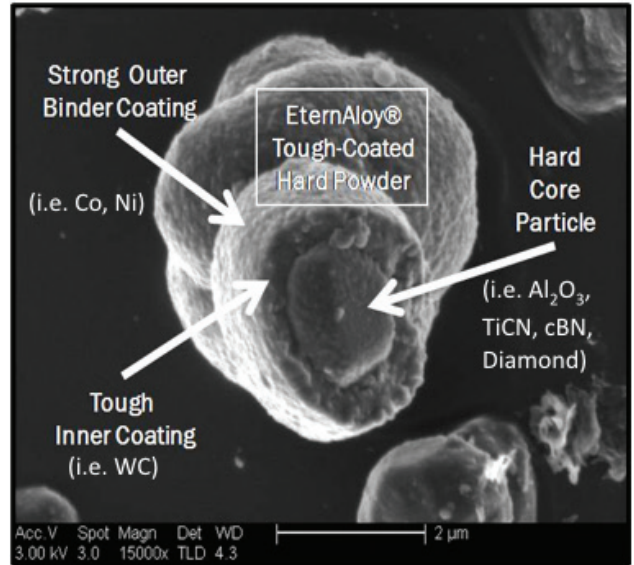
Aerospace Coatings Performance  
EternAloy® TL-3 versus Aeronautical  
Grade WC-17%Co

HVOF Thermal Spray:  
Block-On-Shoe Wear Test:



## EternAloy® Tough-Coated Hard Powder (TCHP):

- EternAloy® is the world's only designer and producer of nanoengineered metallized powders, utilizing globally-patented (TCHP) technology.
- EternAloy® TCHP products consist of extremely hard core particles encapsulated in a very tough and uniform protective shell.
- EternAloy® TCHP surface coating grades include TL-3 (Ti(C,N) core) and NL-3-2 (Al<sub>2</sub>O<sub>3</sub> core)
- EternAloy® Custom-designed TCHP development services are available for unique applications.



## EternAloy® Hardness / Toughness Comparison:

