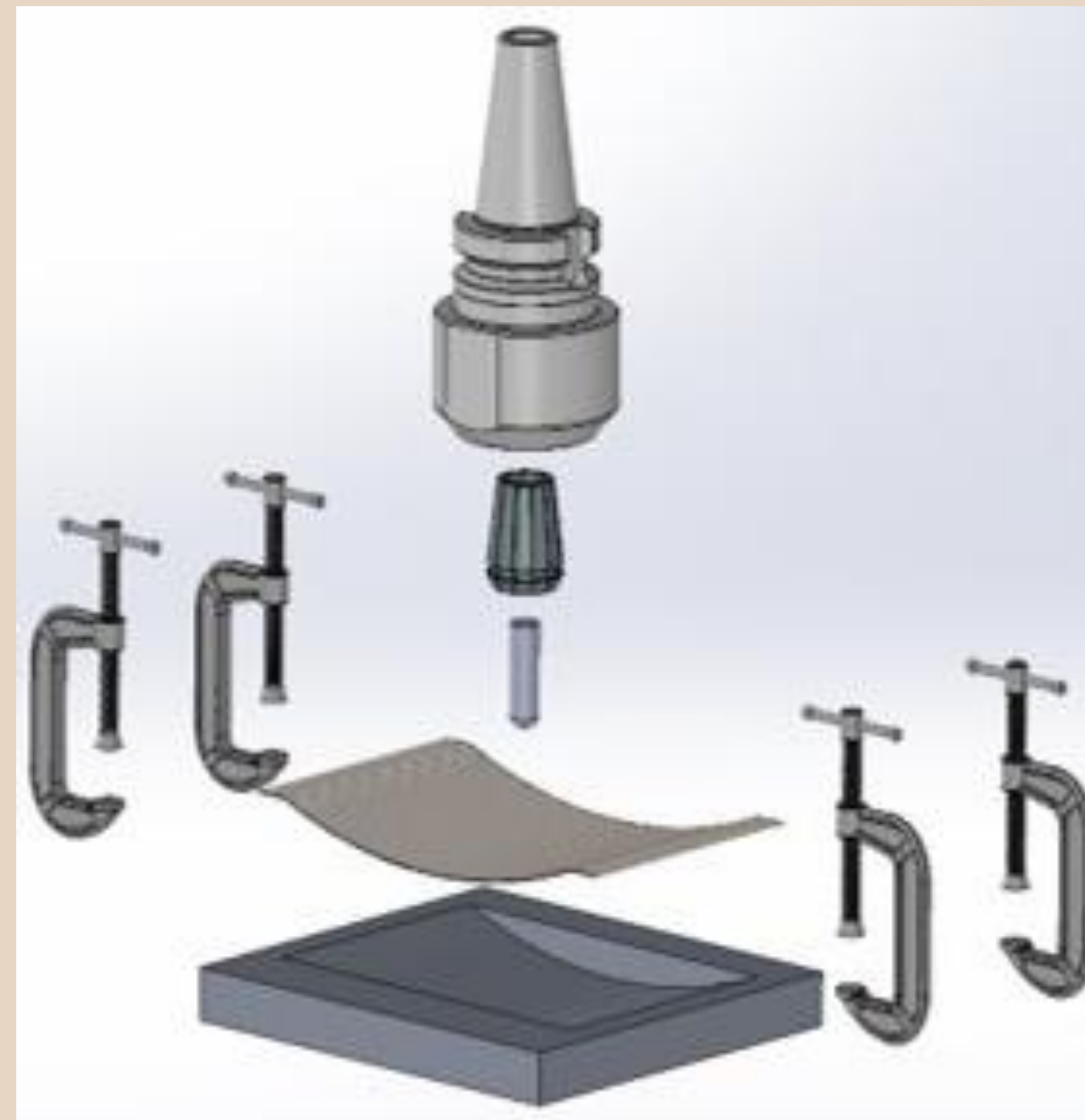


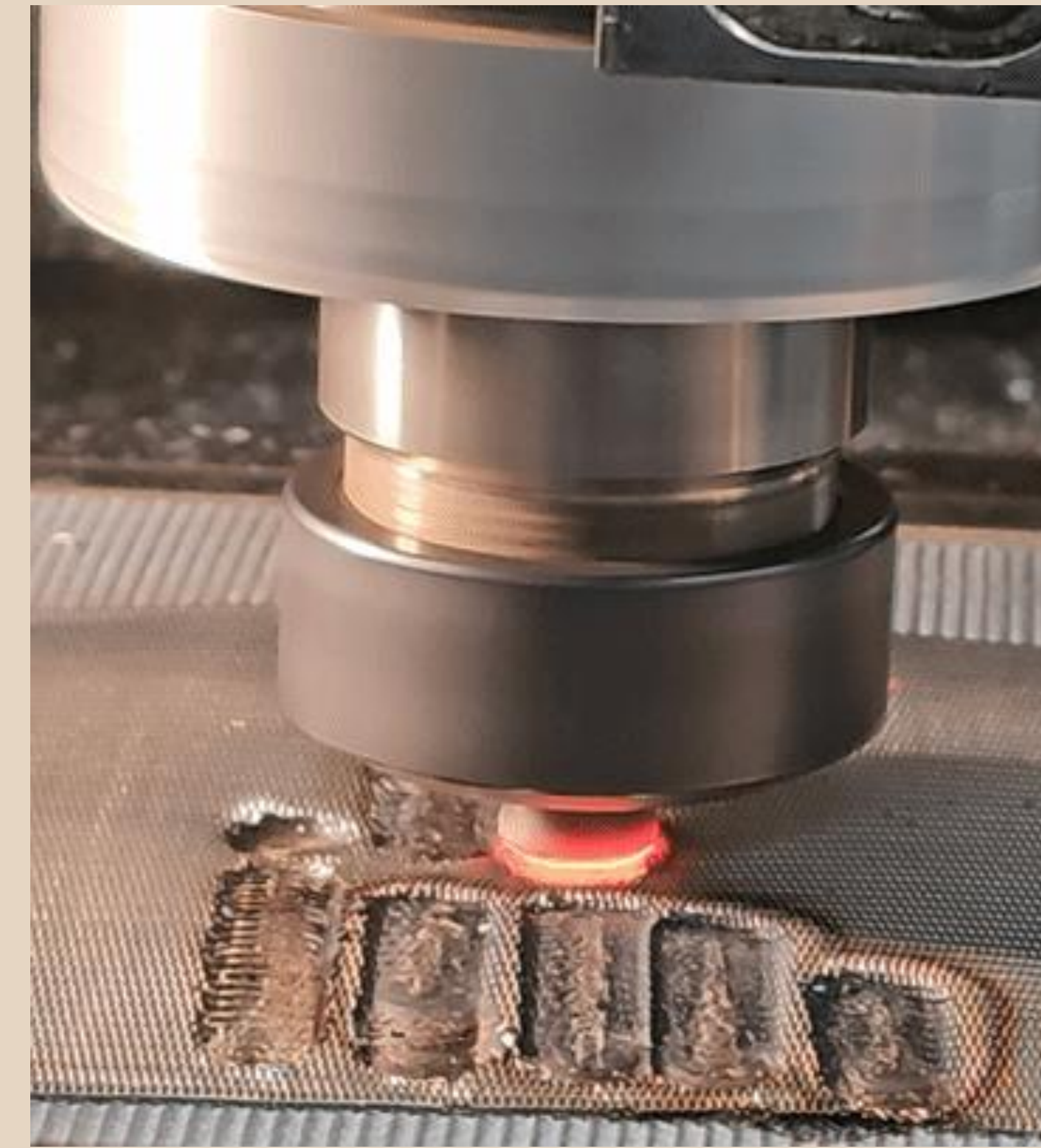
### Project Overview

Traditional manufacturing of large steel components results in significant material waste and relies on fusion-based processes that introduce defects and distortion. This project develops a solid-state additive manufacturing process (SPIN-AM) that uses friction-generated heat to plastically deform and consolidate steel without melting. By optimizing tool geometry and process parameters, the system aims to achieve repeatable, high-quality multi-layer deposition.

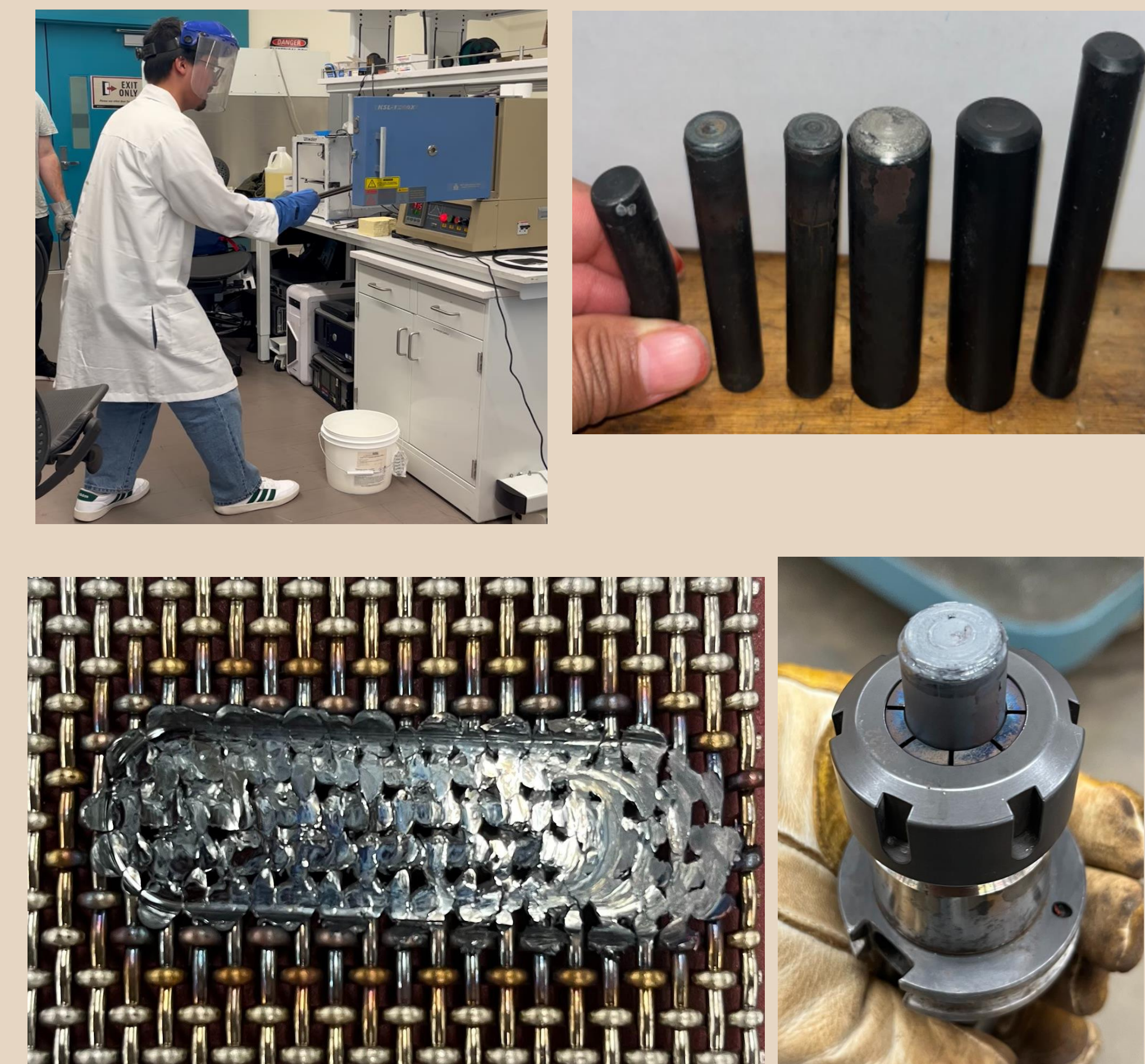
### Full Assembly CAD



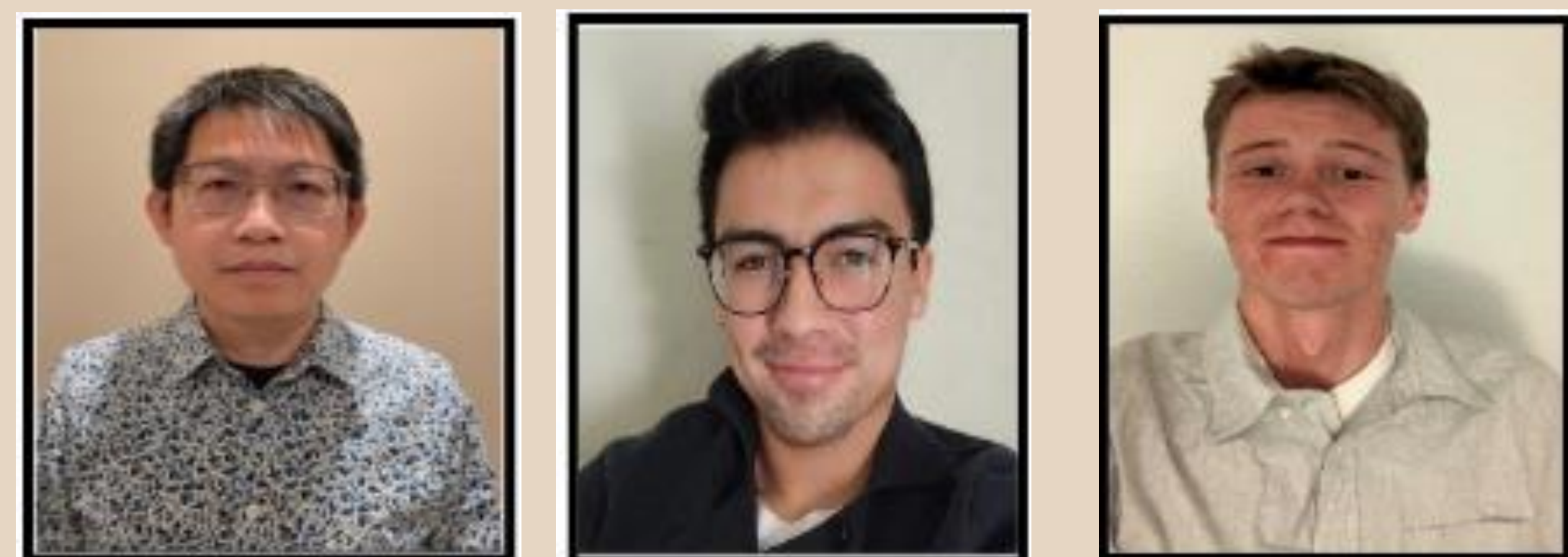
### Final Design Process



### Manufacturing



### Meet the Team



Kea Mok

Seth Peraza  
(Team Lead)

Sam Kaplan

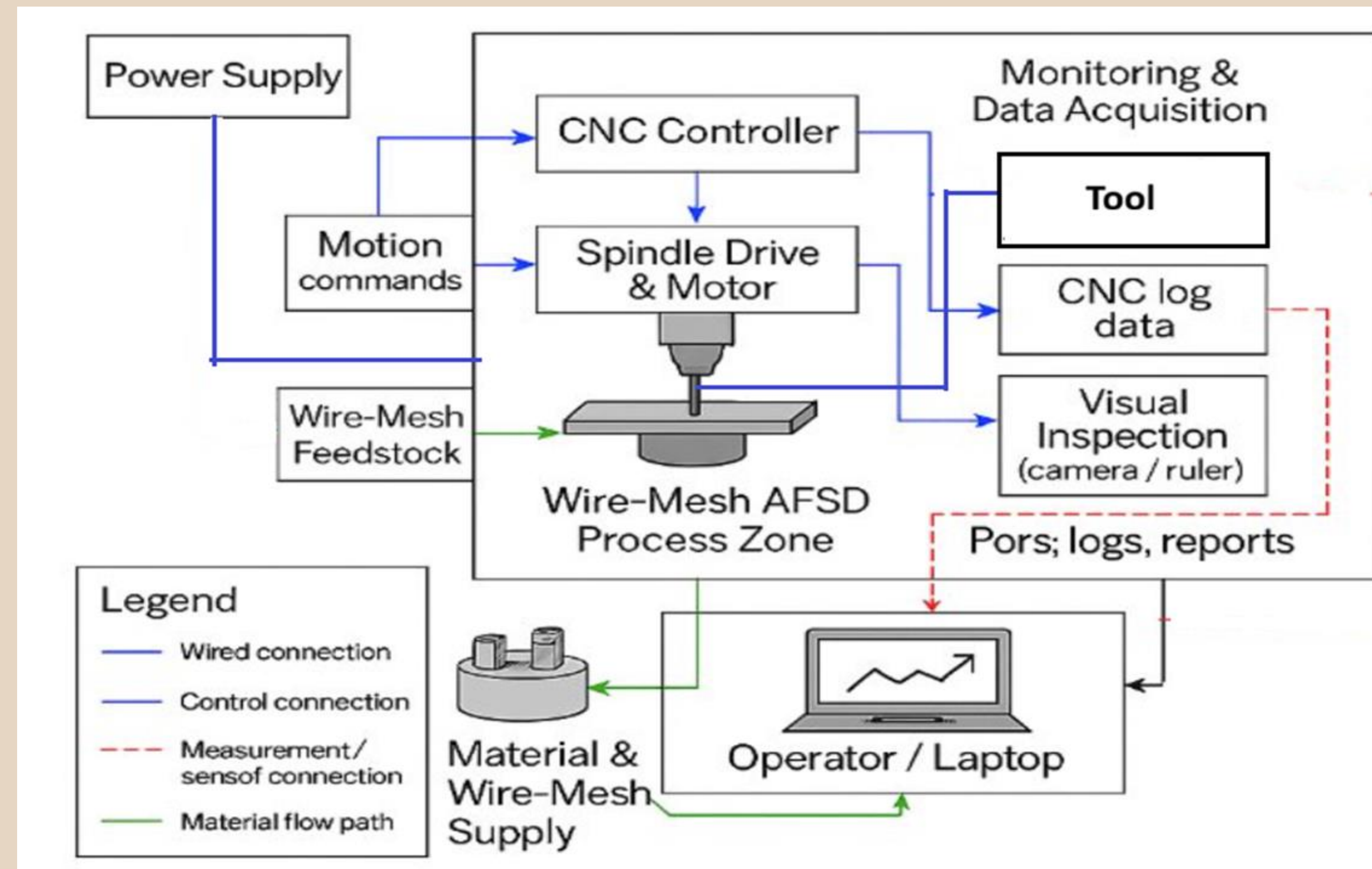


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(Sponsor)

### System Level Diagram



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