Material Process Engineer

The rise in vehicle and equipment lightweighting has propelled aluminum and additive manufacturing into every manufacturer's weight reduction strategy. However, high costs and slow build speeds are preventing powder-based aluminum technologies from scaling to production. Alloy's novel method provides the on-demand flexibility of additive manufacturing with the unit cost of casting. This will transform the aluminium-heavy industries by offering a step change in manufacturing and design efficiencies.

The team consists of startup veterans who are no strangers to hard tech. We are looking for an experienced, tenacious, and creative material process engineer to join our team. The candidate will work to source, develop, and standardize processes for a novel feedstock material. Strong communication, flexibility, and the desire to "wear many hats" will all be essential skills for a successful applicant. As the company grows, the candidate's roles and responsibilities will change. Alloy considers the professional development of its employees a top priority and will work with employees to create fulfilling roles.

What you will do:

- Source feedstock materials and work with suppliers and partners to establish processes
- Develop new material processes with an understanding of product development goals
- Identify and manage supplier relationships
- Tune process parameters to make performance improvements
- Lead quality control and process improvements efforts with production scale-up
- Develop automated data collection, statistical analysis, and reporting on quality metrics
- Proactively outline achievable specifications and coordinate in a cross-functional manner
- Identify and outline distribution and reuse streams

About you:

- You take ownership of your projects - complete tasks efficiently and effectively
- You are adaptable and excel when working in a fast-paced environment
- Willing to travel up to 25% of the time
- 4+ years of experience with a BS in a relevant field

Preferred skills*:

- Experience in aluminum manufacturing
- Firm understanding of metal material properties and processes such as rolling, casting, extrusions, heat treatment, welding, or joining
- Background in surface finishing and coatings
- Experience establishing and running DOEs, process capability, continuous improvement, statistical process control, and FMEAs
- Strong foundation in quality, metrology, mechanical testing, surface characterization

- Experience developing and optimizing manufacturing processes with suppliers
- Understanding of aluminum industry material standards
- Strong statistical background and experience with six sigma techniques
- Understanding of supply chain challenges with scaling

*These qualifications are meant to serve as guidelines for who should apply, but do not encompass all attributes or skills that make you a great fit. We encourage interested candidates to apply even if they do not meet all criteria, especially women or other underrepresented groups who, according to research, may otherwise hesitate.