

#### INNOVATIVE SOLUTIONS BACKED BY DECADES OF EXPERTISE:

At Transcend and Peerless, we specialize in addressing complex contamination and performance challenges across industries. CECO Separation and Filtration, along with Transcend and Peerless, bring industry-leading expertise to tackle complex contamination and performance challenges. Through innovative technical services, we diagnose, solve, and optimize operations to enhance efficiency, reliability, and long-term success.

SERVICE	KEY FEATURES	<u>BENEFITS</u>
Scanning Electron Microscopy (SEM)	Identifies particle size, physical traits, and chemical composition of contaminants.	Pinpoints root causes of process upsets for swift resolution.
Physical and Chemical Contaminant Analysis	Uses Energy Dispersive Spectroscopy (EDS) for in-depth elemental and chemical analysis.	Solves contamination issues at their source, improving reliability.
Independent Lab Testing	Collaborates with third-party labs for filter efficiency and bulk separation performance testing.	Provides unbiased results and validates CFD designs for optimal performance.
Computational Fluid Dynamics <b>(CFD)</b>	Over 30 years of expertise with extensive flow models and pre/post-retrofit analysis.	Optimizes equipment design and demonstrates measurable improvements.
Multi-Phase Flow Modeling	Estimates liquid droplet sizes and simulates real-world conditions using proprietary methods.	Enhances separation efficiency and ensures accuracy across various pressure and flow conditions.
Filter Media Evaluation	Tests porosity, integrity, and chemical composition of new and used filters.	Maximizes filter performance and longevity through comprehensive evaluations.

## **Unleashing the Power of Advanced Technical Services**

#### Accelerated Problem Solving

Our expertise in contaminants and flow analysis allows us to identify and resolve bottlenecks faster, minimizing downtime and improving overall efficiency.

# Validated Performance

Using CFD models and independent lab testing, we ensure our solutions deliver measurable, validated improvements across all applications.

### Precision and Reliability

From pinpointing contamination sources to optimizing separation processes, our advanced methods deliver accurate results you can depend on.







