

Ion Exchange and Plasma Electrocoagulation

Cyanide, Metals, and Mining Waste Remediation

Metals mining is one of the most environmentally intensive industries in the world, and the extraction of mineral resources carries with it inherent environmental responsibilities. To help the mining industry achieve economic and environmental goals, Encotech has developed new tailings, process water, wastewater, and other fluids treatment technology.

By combining our patented **Plasma Electrocoagulation (PEC)** system, along with industry-proven **Ion Exchange (IX)** resins, Encotech provides cutting edge treatment and destruction of cyanide and toxic chemicals; Arsenic, Mercury, Cobalt; other metals capture and remediation; and precious metals recovery.

Regulatory frameworks worldwide increasingly mandate more stringent environmental stewardship throughout the mining life cycle, from initial extraction through to post-closure remediation.

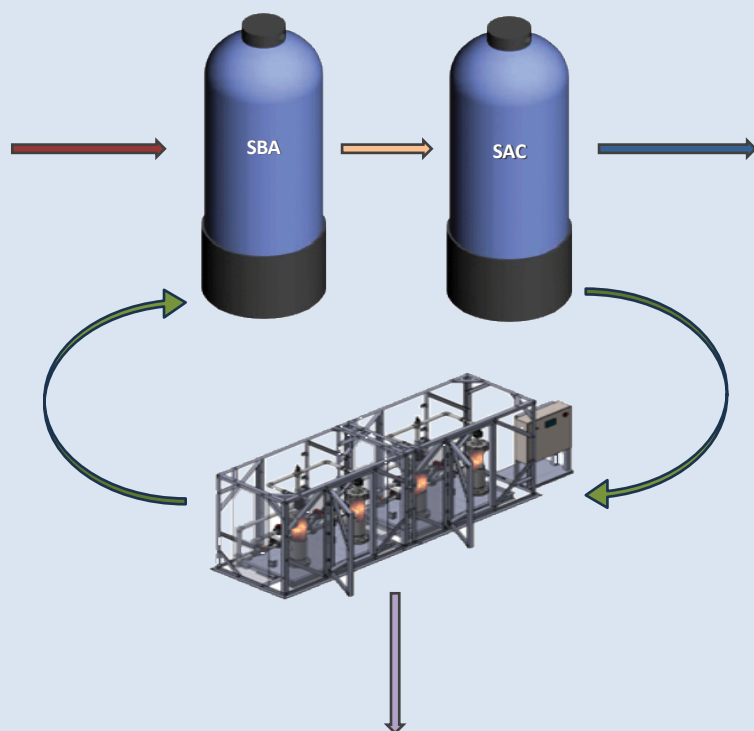
Cost-effective technologies for waste treatment, tailings remediation, and process water recycling and re-use are now crucial for the longevity of mining operations. Encotech's PEC and IX systems are the most effective solution for water and waste management issues, reducing ecological impact, and providing for responsible and sustainable natural resource utilization.

Strong/Weak Base Anionic (SBA/WBA) Resins

- Cyanide, Cyanate, Thiocyanate capture
- Arsenate, Selenate, Phosphates, and more
- Concentrate contaminants for treatment
- Elute with concentrated chloride

Strong/Weak Acid Cationic (SAC/WAC) Resins

- Metals softening and demineralization
- Toxic metals, divalent ions
- Concentrate metals for processing and treatment
- Elute with concentrated sodium



Plasma Electrocoagulation (PEC)

- Three(3) Phase Alternating Current (AC) power
- Aggressive oxidation/reduction environment
- Destroy cyanide and related species
- Oxidize and reduce metals contaminants
- Fast coagulation and precipitation
- Full regeneration brine recycle

Encotech Ion Exchange + Plasma EC Systems

- Closed loop recycle system = low cost
- No waste brine, minimal solids disposal
- Modular system for fast deployment
- Turn-key operation
- Containerization for cold weather
- Cyanide species destruction, toxic metals elimination



ENCOTECH

Environmental Remediation Systems and Services

Encotech is a leading environmental remediation systems provider dedicated delivering a level of service to our customers and partners that is unmatched in the environmental market. Our goal has always been to prepare for and address every detail in advance, from scheduling to the smallest system specification to on-site safety, so that we deliver superior products and services the moment our equipment and technicians arrive on a project site. As market demands force our competitors further and further away from the focus on quality, technology, and reliability, Encotech has made these ideals the core of our business and in doing so we have been able to pass that quality on to our customers.

Founded in 1976, and later incorporated as Encotech in 1985, we have grown from a company delivering activated carbon and related products into an organization that offers a wide range of turn-key environmental remediation and process application systems and solutions.

With our in-house manufacturing capabilities, Encotech can provide any combination of processes in fully integrated packages that are prefabricated for ease of on-site installation. Additionally, our experience in process automation allows our customers the option of fully hands-off operation, with Programmable Logic Controllers, off-site monitoring and telemetry, and control logic design capabilities all available upon request.

Our project sites span the globe, with experience ranging from small, in-home, Point of Entry Treatment (POET) systems to packaged treatment systems for overseas government projects to the largest Superfund project ever undertaken. In all our projects, our focus has always been to supply quality equipment and service while also anticipating and responding to our customers' ever-changing needs.

Since May of 1998, Encotech has been headquartered in Eighty Four, PA. From this location in southwestern Pennsylvania, we provide quality service to our customers throughout the United States and around the world – *our goal is complete customer service for complete customer satisfaction.*



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