



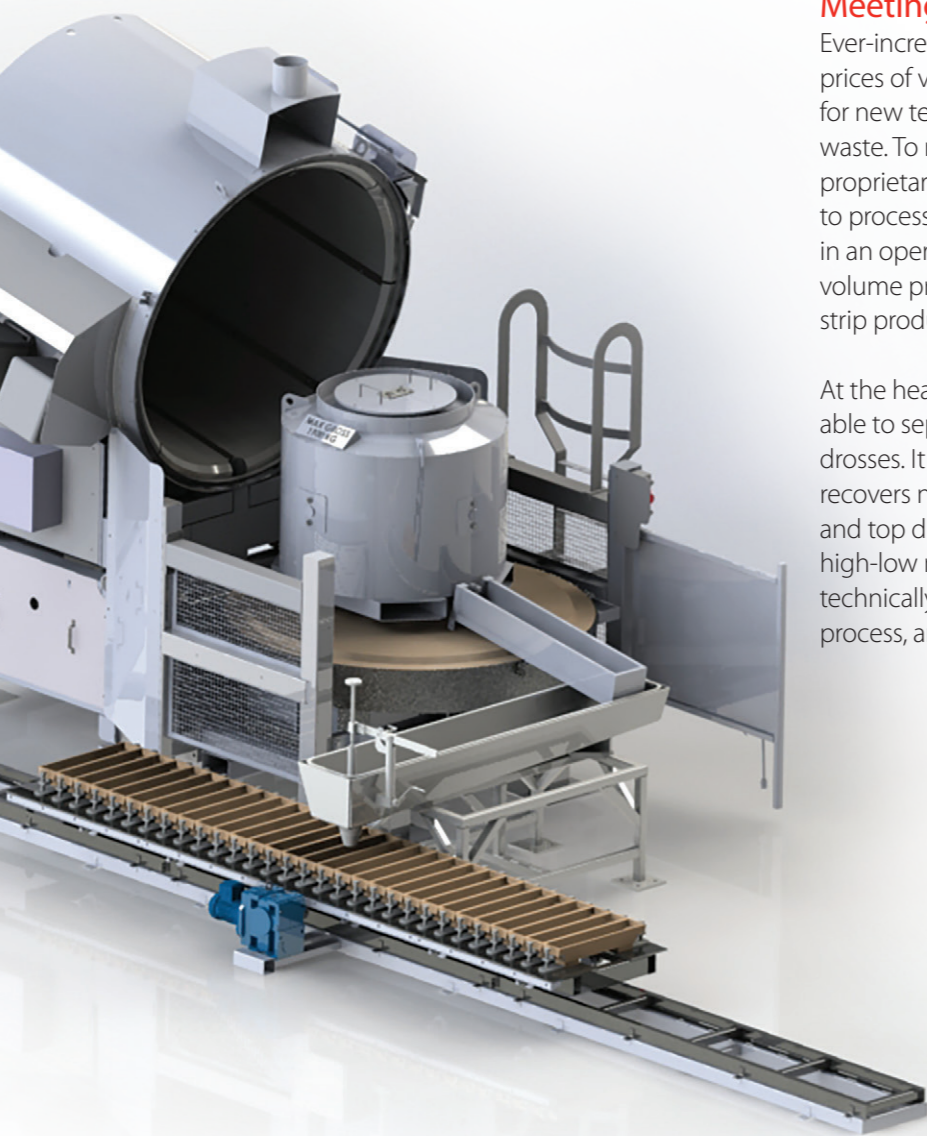
In-house Lead Recovery Technology



Pyrotek[®]

Why Pyrotek?

Pyrotek is a global engineering leader and innovator of performance-improving technical solutions, integrated systems design and consulting services. Nonferrous metals companies worldwide rely on Pyrotek to help them improve extreme temperature performance. Our products and solutions are in use globally in auto, aerospace, rail transportation and high-tech manufacturing.



Meeting a Need

Ever-increasing environmental regulations and fluctuating prices of virgin lead around the world have created a need for new technologies to recover metal and manage process waste. To meet this challenge, Pyrotek has developed its proprietary lead recovery system technology that is designed to process dross and recover viable lead that can be reused in an operation. The system is designed and built for dross volume producers, such as battery manufacturers, anode and strip producers and secondary metal refiners.

At the heart of the system is a thermo-mechanical device able to separate free lead from material mixtures and top drosses. It is a highly efficient in-house industrial system that recovers nonferrous metal from industrial process wastes and top drosses, including "rich wet" drosses, ash, dust and high-low melting metal mixes. The recovered lead is both technically and commercially acceptable for reuse in the process, and any lead-oxide residues can be sold.



The Benefits of Pyrotek In-house Lead Recovery Technology

- Reduction in the volume of virgin lead bought at LME rates
- Smaller environmental footprint
- Reduced volume of residual skimmings being disposed
- Increased value of lead-oxide residual skimmings that can be sold
- Low operational cost
- Recognized technology by the European Commission's Integrated Pollution Prevention and Control Directive
- Easier to use than other systems on the market, with greater ease in loading the drum
- Specially designed lids to minimize the escape of lead dust
- Global presence with local service

Pyrotek MLR-1500 Lead Recovery System

Unit Drum Capacity

1500 kg of lead skimmings

Operational Costs

Gas:

- 30 m³ per burn
- Optional light oil with approximately 30 dm³ per burn

Labour:

- 30 minutes per burn
- Average cycle time for 1500 kg charge is three hours

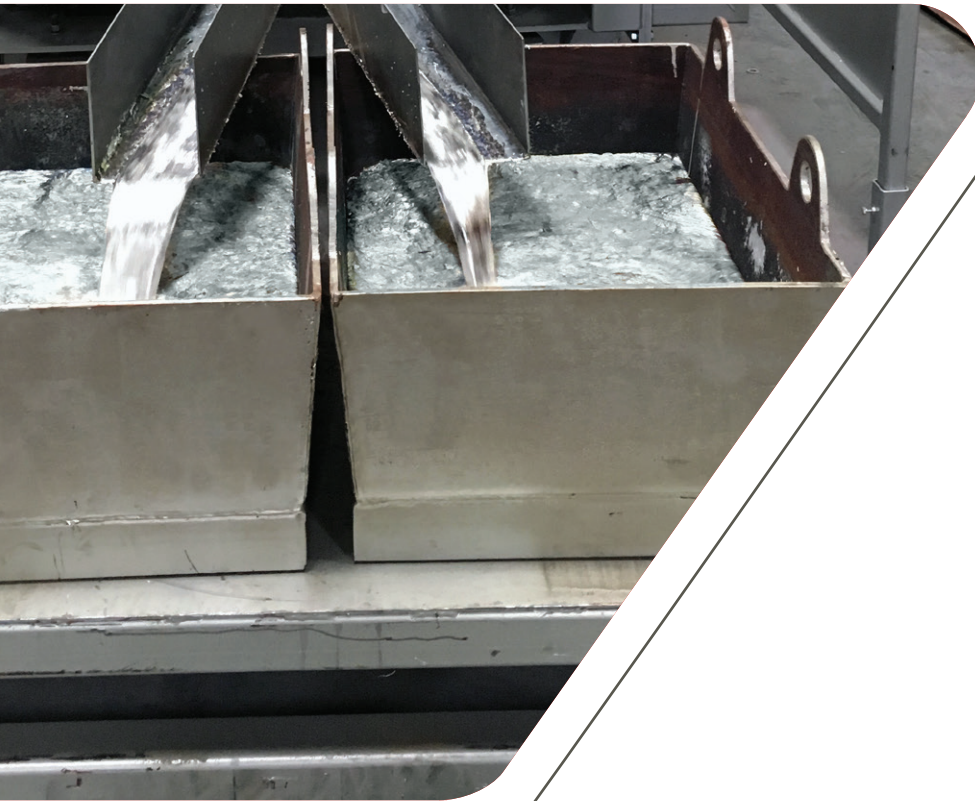
Drum:

- 200 cycles depending on wear and tear of local operation

Ingot Casting Machine (Optional)

Pyrotek also offers an ingot casting machine as auxiliary equipment to the lead recovery system. The machine's specially designed ingot moulds have collapsible sides for easier operator handling—no manual lifting or turning of the ingots is required. The typical cast ingot weight is 40 kilograms. The casting machine includes a launder, headbox and stopper rod system for safe and easy flow control.





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