

CEtech ScrollTherm® – E-SCRAP Treatment Process

Benefits

- Reduces pre-treatment sorting and labor – uses automated removal of larger pieces of steel, aluminum, and plastics prior to input into ScrollTherm unit.
- ScrollTherm treatment removes all organics and residual aluminum from e-scrap, thereby simplifying most separations prior to critical material recovery.

How Does ScrollTherm Work?

- Shredded e-scrap is continuously fed into all-electric ScrollTherm unit.
- All organics (epoxy, plastic parts, printed circuit boards, wire insulation, etc.) are gasified by thermal desorption/decomposition (no combustion occurs).
- Non-separable (small or assembled) aluminum pieces are converted into alumina powder for easy removal.
- Volume reduced e-scrap is cooled, carbon and alumina fines are removed, and concentrated metals transferred for critical material recovery.
- Critical materials are more efficiently recovered using existing technologies.



STV75 Pilot Test Unit

Critical Materials:
Gold, Silver,
Platinum,
Palladium, Nickel,
Cobalt, Copper, etc.