

ALTEK™

TOTAL DROSS MANAGEMENT SOLUTIONS

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FACT-SHEET TARDIS Gen II



The Altek **TARDIS** Gen II is the Best Press Technology to cool your Hot Dross and obtain the maximum In-House Recoveries.



Patented, designed and built by ALTEK. The **TARDIS** Gen II is the best available technology for the treatment of hot dross. The highest in-house metal recoveries are achieved; the cooling cycles are very short (2-15 minutes); it is safe and easy to operate; it is environmentally clean; low in operating and maintenance costs; and occupies very little space. Compared to other systems, The **TARDIS** Gen II generates the highest in-house and overall metal recoveries. The **TARDIS** Gen II is designed and built to suite each customers special requirements without the headaches of high maintenance. The capital cost is low and the return on investment is fast.

The Advantages

- Fully Automatic
- Short Cycle
- High in-house recoveries
- Increased Overall Yields
- Environmentally Clean
- Low Capital Cost
- Low Maintenance Cost
- Safe to Operate
- Simple Sturdy Design
- Reduced waste generation
- Operator Friendly
- Little Space Required
- Low Operating Cost
- Fast Payback

Fast Efficient Process

The hot dross is skimmed into special alloy two piece cast steel skim pan sets. The skim box is placed into The **TARDIS** Gen II and the cycle is automatically activated. At the end of the cycle the skim box is removed. The pressed dross is then discharged into storage hoppers or bins for recycling at the dross processor or for further treatment. The pressed metal in the form of sows, collected in the sowmold below, is returned to the generating furnace for re-melting. The various stages of the process treating white aluminium dross may be seen in the photos to the right.



Furnace Skimming



Before Pressing



During Pressing



After Pressing



Pressed Dross Skull

The Automated Pressing Action

1. Maximum Metal Drain
2. Compression of Dross
3. Separation of Metal & Oxide
4. Rapid Cooling
5. Containment of Dust
6. Stops Fume Generation

Versatile

Treating hot dross for cooling and draining pure metal, is best achieved within a temperature range of 675-900°C (1250-1650°F). In this range the molten metal in the dross will flow well, allowing a maximum amount of drain and an efficient separation of metal from oxide (and flux for black dross) in pressed dross skulls.

The **TARDIS** Gen II is a versatile system, well suited to process both **WHITE**, **BLACK DROSS** and **SALT CAKE**. With more than 20 models available, The **TARDIS** Gen II can treat dross generations from 50 kg to 2272 kg (110 lbs. to 5000 lbs.) in one pressing. For the International market the systems conform to CE standards and are fully metric. The **TARDIS** Gen II has been successfully used to process **WHITE DROSS** from primary plants, extruders, sheet mills, and die casters, as well as **BLACK DROSS** from secondary smelters, can (UBC) recyclers and foundries.

Results

Typically our customers can achieve between 5 to 25% drain from the dross (depending upon alloy type, operation type etc.) with secondary aluminium recovery from the pressed skull of 40 to 70% (depending upon alloy, operation type etc.)