Prevention and Reduction of Waste

Currently there are no formal procedures in place for a systematic approach to waste. The company has undertaken Waste Minimisation Projects, however one will be implemented as part of the Environmental Management System being developed and implemented.

Techniques already implemented for the Prevention and Reduction of Waste are described below.

Melting Department

Through the production of Spheroidal Graphite castings we achieve a yield of 62% of the total metal poured. All runners, risers, cut-off and rejected castings are fed back to the melting in a cleaned condition. 38% swarf from the machining department is stored in 2 tonne tipping skips to allow any surplus coolant to drain, this is also fed back into the melters weekly, this amounts to 2 per week.

Green Sand Moulding

80% of the green sand moulded in recycled in the process at the casting knockout. The casting is separated from the sand, the sand then goes through a cleaning process of removing tramp metal/metallic before returning to the main storage hoppers for re-mixing at the point of re-mixing fresh clay, coal dust and water are added to achieve the sand quality required. As we continually add new sand by core input , sand has to be removed, most of this is sent to a third party for reuse

Core Shop/Air Set Binder use

Core Shop

Materials used for the production of cores are of significant cost, therefore the impact of raw materials are continually monitored wherever possible. CORE Machines are controlled through VOLMETRIC MEASUREMENT of sands, resins and hardeners T.E.A. Resins are checked daily, through loss of ignition. T.E.A. Is metered through pumps. The cores boxes are designed with mandrels / loose pieces 'A' to create the cavity required in the core technically 'B' to reduce weight where possible, reject cores/sand mixes are sent to the airset section where the sand is attritically reclaimed, it is then sent pneumatically to a thermal reclaimer, after this process the sand is blown back to either Core Shop or Air Set to be used as new sand. This equates to a reduction of approximately 5% of sand purchased.

Air Set

This is a self contained unit, chemical input is monitored, all cores/moulds produced on this section the sand is automatically reclaimed excess is blown to thermal recalimer and blown back as new sand. Material input originally resins for both for both these areas where delivered in 205 Kg steel drums, material is now delivered in returnable IBC's

Packaging

Agreement has been reached with some key suppliers to pack incoming goods onto Euro Pallets allowing to reuse instead of disposal.