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METHOD AND APPARATUS FOR ABRASIVE RECYCLING AND WASTE
SEPARATION SYSTEM

ABSTRACT

The present invention provides a method of handling abrasive solids materials used in an abrasive cutting procedure which jets a high-pressure abrasive slurry through a nozzle onto a work piece over and/or in a catcher tank. This handling method includes catching the used abrasive slurry together with work piece kerf material in the catcher tank, and passing at least some abrasive solids collected in the catcher tank as a slurry to a partitioning apparatus which includes a vibratory sieve. The handling method also includes partitioning the slurry with the partitioning apparatus in order to provide at least two solids streams. One of the solid streams passes through the sieve and the other passes across the sieve whilst entrained as a slurry. The handling method further includes passing as a slurry to the nozzle for jetting a pressurised or pressurisable slurry that has partitioned solids stream which has passed through the sieve.

Figure 1



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