

Title (en)

METHOD AND DEVICE FOR RECYCLING ABRASIVE AGENTS USED IN WATER JET CUTTING

Title (de)

VERFAHREN UND VORRICHTUNG ZUM RECYCELN VON WASSERSTRAHLSCHNEIDABRASIVMITTELN

Title (fr)

PROCEDE ET DISPOSITIF POUR LE RECYCLAGE D'AGENTS ABRASIFS UTILISES DANS LA DECOUPE PAR JET D'EAU

Publication

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Application

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Abstract (en)

[origin: DE19645142A1] The invention describes a process and a device for recycling sand and can, for instance, be used to recycle part of the reusable cutting agents that accumulate during sandblasting, especially abrasive high pressure water jet cutting, and to produce waste water which can be introduced into a circuit. The method is characterized in that fine grain particles are rinsed in an up-current, sedimented during calming phase of current, after which they are filtered and collected, and large grain particles are carried away, mechanically pre-desiccated, dried and despatched for reuse. The inventive device essentially contains at least one classifier operating according to the principle of up-current separation, connected on the overflow side to at least one fine particle path, comprising a baffle plate clarifier, a sedimentation basin, a take-out device and a final clarifying basin, and connected on the outflow side to at least one large grain particle path, comprising an intermediate container for large particles, a dryer, a tank for dry product and pumps that pump the solid-laden water out of the cutting basin and redirect the water arising from the fine grain particle path and large grain particle path to the cutting basin as industrial water.

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