

Volume reduction and dust free due to briquetting of PU dust

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PU panels are used for high-quality building insulation. The production of these panels creates large amounts of fine shavings and waste. These are dusty and have a very low bulk density. After the briquetting the material is dust free and the volume is extremely reduced, only with that way the material can be disposed. The first machine was sold 24 years ago to the company Kingspan and is still running today. Many more followed, and particularly recently the demand for these machines has risen considerably.

The Kingspan group was founded in the late 60s in Ireland, where its headquarters are to this day. Further sites are located in Canada, America, Australia, Asia and many European countries. Kingspan Insulation produces high-quality insulation material for various uses in domestic, as well as industrial scenarios, mainly in the form of plates or panels made of Polyurethane (PU).

During the processing of insulation panels a lot of PU dust is produced through sawing, cutting, finishing and trimming of edges. This dust is constantly sucked up centrally and removed from the production. The main characteristic, apart from its high dust production when processing, is its low bulk density (typically values of only 0.02 to 0.04 kg/l). The material has to be compacted before the disposal.

In 1992, Kingspan in the Netherlands installed a RUF briquetting machine of the type RB 330, which is still running to this day. The press processes around 200 to 220 kg per hour. In general: The products are solid briquettes with a density of 0.3 to 0.7 depending on the composition of the raw material. A volume reduction of roughly 1:10 to 1:20 and dust-free conditions are achieved by the briquetting.

Only through briquetting the waste can be transported properly. When there are aluminium edge strips in the material, the briquettes must be disposed of (combustion). In some cases, clean material can be re-used.

The machine in the Netherlands has reached an impressive 50,000 working hours (last serviced in Dec. 2013 at 45,800 hours) and is still working perfectly. The briquetting machine impressed the client so much, that he invested in a further two RUF presses. These two machines are also still used in production today. In addition to this, Kingspan is using RUF presses in other sites of theirs also.

