

Heiner Kleine-Wechelmann, sales manager at Höcker Polytechnik, explains how wood chips can be efficiently used as a resource with BrikStar briquetting presses

“Self-produced wood briquettes have never been so valuable”

Planing inevitably produces chips and they are becoming increasingly valuable in woodworking. This is especially so with increasing energy prices and the additional costs of carbon taxes. In the form of briquettes, this production “waste” is turned into high-quality, CO₂-neutral heating material that can be profitably produced even by smaller businesses with a low chip volume per year. Investing in a briquetting press can therefore pay off very quickly. One tonne of wood briquettes has the equivalent calorific value of 500 litres of heating oil, the combustion process is slow, storage is straightforward, and if the wood briquettes are not used for in-house heating, they can be easily sold.

The BrikStar briquetting presses from Höcker Polytechnik will show just how easy it is for organisations to have their own self-sufficient energy source. The

presses, which have been used 1,000 times over by wood processing companies, are characterised by their compact design, extensive standardised equipment and energy-efficient operation.

High-quality briquettes with a 65mm diameter

The presses use an automatic start/stop system with a level indicator so that the material is collected in the container until an amount required for briquette production has been reached. This standby mode reduces energy consumption and is also easy on the machine. A stable, spring-loaded mixing arm then moves the chips to a screw conveyor, which transports the chips in doses to the hydraulic press where they are then pressed into briquettes at high pressure. The briquettes then move via optional transport lines into silos, containers or bagging carousels and wait for the heating season.



Wood briquettes are a high-quality, carbon-neutral fuel with an energy content of up to 5.5 kW/h per kg

The wood chips are compressed into high-quality briquettes by a factor of 1:10 (maximum), and, with a diameter of 65mm, they have the best shape for storage and combustion. The elongated round briquettes facilitate a continuous, long-burning process and are stable enough to be easily poured and safely stored with minimal fire risk. Other advantages – including a low residual moisture content (depending on the starting material that is processed), and a largely residue-free combustion process with a small amount of soot and ash – make the briquettes ideal sources of energy.

Operation with minimum manpower

The chip collection container is filled manually in stand-alone solutions. The presses are much more practical as an integral part of Vacumobil dust collectors or MultiStar filter systems. They can be operated unsupervised and manual intervention is only required when changing

the briquette collection containers. Both filling and briquette handling can be automated if desired.

Space for a company’s own briquetting system can be made both in the workshop, or outdoors – with additional weather-resistant equipment. Projects can be implemented with a small amount of space with the “deconstructed” variable BrikStar V briquetting press where the collection container with the mixing arm or sliding base, the screw and hydraulic press, as well as the control system, are individual components. A place for briquetting should be found in any event.

If large quantities of chips are delivered in batches, a larger collection container and a press that is adapted to the required briquetting capacity are recommended. The presses are available with briquetting capacities of up to 50 kg/h up to a capacity of 170 kg/h and therefore cover most applications. For higher chip volumes, the combination of several presses is an option.



BrikStar C briquetting press. Compact, robust design with maximum ease of use

The perfect briquetting solution for small businesses

Briquetting up to 50kg of material per hour only requires a set-up area of 2 m² and a BrikStar C3-C12 briquetting press. The chip collection container has a volume of 1 m³ and the hydraulics work with 3 kW. Once the container has been filled with the minimum amount of chips, the level indicator gives the starting signal. Production begins and the briquettes are conveyed into bags via an optional cooling section. The integrated automatic briquette length control ensures consistent quality with changing material types. Alternatively, Vacumobil dust collectors with an integrated BrikStar CS press can also be used. This saves space and the capacity is the same. Both solutions are suitable for users with a low chip volume, and are especially suited to when the briquettes are used as heating material for the company's own heating.

Lots of chips, lots of briquettes, no carbon taxes and high yields

For companies with a high volume of chips, the production of wood briquettes has already developed into a new source of profit. Several presses often work in parallel operation. Given that the price of briquettes is linked to the price of fossil fuels, higher energy prices also increase the

company's own revenue. It is often worthwhile to install a production system in an existing production facility. Wood briquettes are carbon-neutral as they release the CO₂ bound by trees during the combustion process again. As a renewable energy source, wood briquettes are therefore exempt from CO₂ taxation until 2025 according to the current status, and act as cheap energy sources when produced and consumed in-house.

Protect the environment. Briquettes make dust from plastic recyclable

Production waste from plastics manufacturing, such as dust or chips, is difficult to recycle, even if sorted by type, and has to be disposed of at great cost. However, if the residues from plastic production are



Vacumobil dust collector with integrated BrikStar briquetting press



MultiStar filter system with BrikStar briquetting press as the discharge unit

pressed into briquettes of the same type, they can often be recycled. This reduces disposal costs and helps save resources while protecting the environment. Here too, BrikStar briquetting presses have proved themselves with many materials in plastic-processing industries.

Easy to maintain and use

Höcker Polytechnik briquetting presses are designed for permanent use. Thanks to a combination of stable frame design and high-quality, robust technology, organisations can rely on the presses for workshop operations in the long term. Regular maintenance and care is important for this, and the essential components of the press are accessible from all four sides for ease of maintenance.

The fact that they are easy to use is, of course, also helpful in day-to-day operations. It is simple

to configure the essential settings of the press, such as briquette length or hardness via a 4.3" touch panel. Another helpful feature is the integrated briquette counter. Every briquette produced brings the user closer to profitability and they become more enthusiastic about briquetting on their own.

Calculating the potential of briquetting for the company

For those involved in wood processing, it may be worthwhile to roughly estimate the annual volume of chips, and to calculate the potential of briquetting for their own company. In many cases, such an investment has paid off in as little as the first one-to-two years, and the sawdust is too valuable to be used exclusively for oil stains. ●

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