

30.01.2023

## **Approaching market launch: BURKHARDT V5.90S wood chip gasifier**

### **Stable situation on the wood chip market and compelling technical innovations**

**Mühlhausen / Oberpfalz.** BURKHARDT GmbH is starting the New Year with the launch of its new V5.90S wood gasifier with combined heat and power module. As a further development of the proven BURKHARDT wood pellet gasifiers, the V5.90S with CHP ECO 220 uses wood chips as fuel. The V5.90S will come onto the market around the middle of 2023. BURKHARDT looks forward to gaining new customers who will benefit from the good availability and stable price level of wood chips.

### **Gasifier concept rethought**

As an innovative specialist in building and energy technology, BURKHARDT has since 2010 been focusing its inventive talent and technical knowhow on the use of different fuels for its wood gasifiers for regenerative heat and power generation. The multi-stage gasification process of the V5.90S is innovative, has minimal heat loss and is accommodated compactly in just one reactor. The V5.90S also offers high product gas quality and a high degree of automation. The developers have also used proven and modified plant components for gas cleaning and conveying as well as the downstream CHP unit from the conventional wood pellet gasifier.

### **Single-source solutions – from research to market maturity**

Whether researching premium quality wood chips, investigating the use of different wood chip qualities for the gasifier or developing drying units for wood chips – BURKHARDT R&D activities cover the entire chain from raw material to market-ready product. The company already operates five V5.90S woodchip gasifiers at its headquarters in Mühlhausen, Germany. And more than 45,000 operating hours confirm the market readiness of the V5.90S.

### **V5.90S wood chip gasifier contact person:**

Claus Burkhardt  
Harald Gottschalk  
email: [energy@burkhardt-gmbh.de](mailto:energy@burkhardt-gmbh.de)

V5.90S wood gasifier with ECO 220 CHP unit	
Electrical output	160 kW
Thermal output	240 kW
Electrical efficiency	30.0%
Thermal efficiency	45.5%
Fuel	Wood chips P31S M10 A1.0 with <2m% [ $<15\text{mm}$ ] from logs or flitch
Fuel consumption	750 g/kWh
Dimensions of wood gasifier (L x W x H)	6.1 m x 2.2 m x 3.8 m



**Everything in one reactor:** The compact V5.90S system offers lower heat loss. In contrast to conventional gasifiers, the conversion in the reactor takes place in descending co-current flow and in the fixed bed. A further new feature is the multi-stage gasification process, which ensures clean product gas and is decisive for efficiency and high availability of the downstream gas engine. The innovative gas-air heat exchanger provides further efficiency gains.