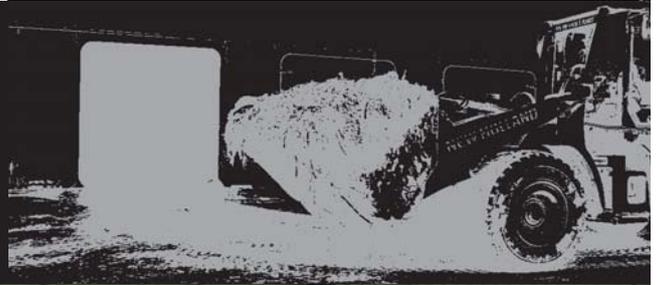


Job Report 7

NEW HOLLAND CONSTRUCTION W170C



Even with the unfavourable material consistency, loading and unloading the fermenter is no problem for the W170C, due to the high breakout forces and the exceptional thrust.

PROBLEM

Marburger Entsorgungs-GmbH (MEG) operates a modern composting plant in the Cyriaxweimar district, in which approximately 10,000 tons of organic waste from households and parks in the Marburg region are processed into compost every year. Since the beginning of the year, an additional dry fermentation plant has been installed to manage the two-level composting process in which the waste is initially fermented to produce biogas before it is composted as usual. The biogas is then used for power generation and the processing heat is stored in the district heating network.

SOLUTION

After a performance comparison with a CAT 938H and a Komatsu 320-6, the MEG decided to purchase a new New Holland W170C with a 4.5 m³ lightweight material scoop. The wheel loader has a 5 speed transmission, open axles and a differential lock with a 100% locking value for the front axle.



WWW.NEWHOLLAND.COM



TASK DESCRIPTION

The range of use of the machine includes the handling of compost material, and filling and emptying the fermenter. For the optimal operation of the whole plant, firstly the 240 ton fermenter must be loaded with biological waste, which then ferments for up to 21 days. In the process, the fermented material reaches a density of 1.0 t/m³, and becomes hard like concrete. The fermented biomass must then be transported about 120 m from the fermenter into the composting boxes. As the wheel loader then returns empty to the

fermenter, the quick operating cycle and the high acceleration of the W170C were important arguments in the purchasing decision. Even with the unfavourable material consistency, loading and unloading the fermenter is no problem for the W170C, due to the high breakout forces and the exceptional thrust. Due to the excellent traction, the wheel loader itself easily achieves good filling levels with the large lightweight material scoop, also when emptying the fermenter, and therefore saves valuable time.



NEW HOLLAND W170C



According to the customer, in the configuration with a 4.5 m³ lightweight material scoop, the W170C achieves handling capacities of 240 tons in an operation cycle of only 1.4 hours, despite the extremely challenging operating conditions. The average diesel consumption during heavy duty action is identified by the MEG as only 11.2 l/h. The productivity of the W170C is therefore around 20% higher than the competitors CAT and Komatsu, whilst the diesel consumption is also 2 l/h lower, in comparison to the competitors' models. The high driving speed and good acceleration of the New Holland Machine were also convincing factors. The W170C reaches its highest speed of 38 km/h after only 100 m, which saves valuable time during the unavoidable empty runs.



CUSTOMER'S OPINION

Mr Ackermann, driver of the W170C, is especially impressed by the speed and agility of the large wheel loader. He also praises the smooth and yet very precise steering of the machine, and the very secure driving feel with a full scoop. Overall, he was most impressed by the quick loading and the exceptionally high thrusts and breakout forces when unloading the fermenter.



WWW.NEWHOLLAND.COM

