



TRUCK UNLOADING - USA

EFFICIENT TRUCK-RECEIVING TECHNOLOGY MEETS COTTONDALE PELLET PRODUCTION TARGETS

With an annual permitted production capacity of 760,000 metric tons, the Florida-based Enviva-Cottondale biomass pellet plant requires high-performance wood-processing and handling systems capable of keeping materials flowing. When Cottondale needed to extend its receiving capacity, Enviva returned to Bruks Siwertell for its truck-unloading expertise.

Customer need

The Cottondale pellet production facility in Jackson County, Florida, USA, began operations in 2008 and was acquired by Enviva - the world largest producer of industrial wood pellets - as part of its acquisition of Green Circle Bio Energy in 2015. The pellets produced at the facility are exported from Port Panama City for international customers.

Processing more than a million metric tons per year of green wood at the plant is a Bruks drum chipper. Also, as part of the original equipment suite, Bruks Siwertell designed and supplied the complete woodyard system, starting at the log handling and chip reception, including a 22.9m (75ft) truck dumper and receiving hopper, and ending at the dryer. It included all conveying and storage, reclaiming, and processing equipment in between.

As the quest for renewable energy continues, biomass is showing considerable promise as a sustainable power source and decarbonization tool. In line with this, wood pellet producers are steadily increasing production and Enviva is no exception. To meet the plant's original annual capacity requirements of 550,000 metric tons, Bruks Siwertell delivered a complete woodyard in 2008. Now, with an annual permitted production capacity of 760,000 metric tons, the plant needed to boost its ability to receive raw materials, so, once again, it turned to Bruks Siwertell.

Our solution

Enviva-Cottondale wood pellet plant has an annual permitted production capacity of 760,000 metric tons. To maintain this, it ordered a second 22.9m (75ft) back-on truck dumper and a 4.9m-wide underpile chain reclaim hopper, with a 170m3 (6,000ft3) capacity. The new truck dumper has the capacity to unload processed wood at a rate up to 200t/h.

FACTS

CATEGORIES:

Truck Unloading

MATERIALS:

Biomass

CUSTOMER:

Enviva (formerly Green Circle Bio Energy)

ADDITIONAL FACTS:

Product Three 22.9m (75ft) back-

on truck dumpers, three 4.9m-wide underpile chain reclaim hoppers, a complete woodyard, with all conveying and storage and reclaiming equipment, and a Bruks drum chipper

Material handled Wood chips, sawdust

and bark

PRODUCTS:

· Truck unloading

LOCATION:

Cottondale, Florida, USA

SCAN THE QR-CODE: View the Case online





Bruks Siwertell's truck dump tipping platforms are one of the fastest, most effective ways to discharge free-flowing materials, such as processed wood, from bulk trucks. They deliver long-term, cost-effective operations and have been designed to reliably perform under very high-use conditions, offering an expected service life of two million tipping and lowering cycles, which exceeds 25 years of full-time operation.

They also have a low-profile design, which means that trucks tip their load as close to the ground as possible, reducing the impact of material flowing out the truck and therefore dust emissions. Dust-free operations can be achieved using Bruks Siwertell's totally enclosed receiving hoppers, and dust collection systems, which contain any fugitive emissions.