AggreScreed™ by TerraTec Industries

WHAT THE INNOVATION IS AND WHY IT IS INNOVATIVE:

The AggreScreed™ is a bulldozer attachment that is used to lay gravel for roads, runways, parking lots, etc. without the use of stakes and does so in a single pass which minimizes gravel segregation and breakage.

Attachable to virtually any bulldozer (though a 125-250 horsepower sized dozer is recommended) the 16-foot AggreScreed blade adjusts to 24 feet in two-foot increments. It’s capable of laying gravel at any depth from zero to 15 inches and can even create up to a three-and-a-half percent crown in a single pass. That means huge potential savings in labor and equipment costs by reducing the number of times required to handle the gravel to spread it to the required depth.

For example, assuming a surveyor using two men to lay three rows of stakes every 40 feet would take about three days per mile to complete, eliminating that process saves approximately $3,120 per mile. And regardless of the quality of the surveyor’s work, there is always guessing between stakes resulting in re-grafts. Additionally, it’s normally necessary to make multiple passes just to spread the gravel and then to make at least two more passes to achieve a crown; with the AggreScreed the crown is built in to a single, full-width pass, eliminating even more time.

WHAT IT CHANGED OR REPLACED:

The AggreScreed can minimize handling the material from three to six times for a finished grade down to two times including the finished grade. It also replaces the need for placing survey stakes and can be used with minimal operator training.

Because the AggreScreed is so accurate, it eliminates typical overages figured into jobs in order to ensure proper depth throughout. So in laying 7,000 tons per mile at $14 per ton, and eliminating a minimum five percent overage, the AggreScreed saves $4,900 per mile. While every job varies these figures are conservative. And, in an industry that often operates at 10% margins or less, every percentage point counts.

WHERE AND WHEN IT ORIGINATED, HAS BEEN USED, AND IS EXPECTED TO BE USED IN THE FUTURE:

In 2004 Myron Mullett, TerraTec Industries’ CEO, was working on a government contract job that required his excavating company to lay 90 miles of gravel. So he began to explore the possibility of designing a blade that would maintain gravel precisely without the need for stakes. That was five years and three prototypes ago. Now, TerraTec’s AggreScreed is set to change the way roads are built.

Recently the AggreScreed was used to build a small runway at Fort Carson in Colorado Springs, CO. In a mere hour of operating time the six inch base of aggregate measuring 50 feet wide and 1,000 feet long was laid and ready for finishing. The only downtime was waiting for the trucks to bring more material.

We expect the AggreScreed to be very popular among commercial construction companies as well as State Departments of Transportation and local County Road and Bridge Departments.
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