EQUIPMENT FEATURE

ATTACHMENTS

MAKING THE GRADE

David's Dozer transforms CTLs into a cost-effective grading solution

The V-Loc System from David's Dozer is allowing contractors to use a compact track loader on grading projects that would usually require a small dozer.

The attachment company was created in Miami, Florida by David Armas, who operated compact dozers and was tasked with grading projects.

In the 1990s, Armas began to notice the emergence of compact track loaders on jobsites.

"Back then, skid steers were wheeled machines with 60 or 70 horsepower. What he witnessed at this time was the emergence of the compact tracked loader, where skid steers exchanged wheels for tracks and grew their chassis and their engines," said Toby Allen, vice president of sales and marketing for David's Dozer. "These larger platform machines increased the capability, torque and traction opening the skid steer concept to much greater possibilities and diversified applications."

After he realized the work he was doing on dozers could be completed by a track loader, Armas left his job and spent his life savings on a new Caterpillar compact track loader.

He then set about developing the grading technology to fit onto his new machine and started his own grading business; International Fine Grade.

"David soon won a growing loyal portfolio of customers who all appreciated the work he was able to achieve with his CTL and V-Loc System," Allen said. "Every jobsite and even gas station that David pulled up at people would ask about the machine and where did he get it. He soon realized that there was a wider need for the product that he had developed for himself and that the V-Loc System could be productized and sold to customers."

The first patent

In 2012, the first patent was awarded, and since then David's Dozer has gone on to be awarded numerous patents within the grading field. The company continued research and development on the grading solution. IFG evolved into David's Dozer, which today manufactures and sells the V-Loc System.

"The advantage of the origins of our business is that the product has been built from the ground up by someone who has sat in the seat for a living," Allen said. David has faced every problem and challenge that you are likely to encounter on the jobsite and the V-Loc System is designed to overcome these issues and deliver the best performance."

V-Loc System

The V-Loc System includes three main components; the V-Loc blade with stabilizing brackets, the V-Hydra valve assembly and the V-Lectral X2 electronic module.

The V-Loc blade is stabilized vertically thanks to the patented V-Loc method, which neutralizes the pitch axis of movement.

"The V-Loc does not depend upon wheels to stabilize its pitch when pushing dirt. This means that the operator can achieve significant downwards pressure," Allen said. "Therefore, an operator can arrive on-site with the V-Loc and can spread out material, rough the site, cut where it's high and fill where it's low."

The machine control system, which incorporates a laser, GPS or robotic total station, is installed onto a compact track loader and connected to the V-Loc System via the V-Lectral X2 module. Next, the desired grade is set on the control panel for the machine control system.

"We find that laser works best for us in 90 per cent of our applications," Allen said. "Lasers have been around for over 30 years, the technology is developed and the apparatus is heavy duty and hard-wearing, perfect for construction applications."

The control panel then tells the V-Hydra valve assembly to adjust the height and cross-slope of the V-Loc Blade in order to keep the blade edge on grade.

"By automating the complete grading performance of the machine, the operator only has to drive the CTL," Allen said. "With the machine control, the operator can grade a consistent site accurate to one eighth of an inch."

Lower cost grading

According to the company, the V-Loc System combined with a CTL can replace a compact dozer on various jobsites, including large commercial and residential developments, parking lots, sports fields and roads.

"Now that this work can be done by a CTL with a V-Loc, a business owner can reduce the business costs. The V-Loc and CTL has a lower purchase price than a dozer," Allen said. "CTLs are more mobile and can be towed behind a truck rather than requiring specialized hauling. CTLs are more versatile, if the operator is not pushing dirt, he can simply swap out the attachment. This machine never sits idle."

The V-Loc is available in 1.8 metre, 2.1 metre and 2.4 metre sizes. For most full-sized track loaders, the 2.4-metre-size is recommended by the manufacturer.

"This is so that you are still wider than the width of the machine when at full yaw to windrow your material off to one side," Allen said. "However, we do have customers with applications where space is tight, and they prefer a smaller blade to access different areas."

The CTL should also have at least 65 hp to deliver the required torque for pushing material.

"The great advantage of our technology is that it will work on any brand CTL and with any machine control technology," Alen said. "Therefore, customers can reduce their cost when buying our system as nine times out of 10 they already own their machine."

Currently, the V-Loc System is the sole product manufactured by David's Dozer.

"We are focused on developing the V-Loc System to be the best grading attachment available in the world, but who knows what may happen in the future," Allen said. EJ