

PowerGrip[®] Application Success Story

Williams Loader Service utilizes a PowerGrip/PowerTilt Combo on a CAT 314 to Gain Weight Savings and Increase Overall Versatility

Overview

Region

Virginia, USA

Industry

Residential Excavation

Customer Profile

Williams Loader Services Inc. specializes in residential excavation and site development in the Palmyra, VA area. With almost 30 years of land overhaul experience, they pride themselves on professional project completion and customer satisfaction.

Business Situation

Williams Loader Services Inc. needed a more efficient, lighter weight option that was comparable to their existing hydraulic thumb for working on residential projects, such as picking up and stacking soapstone, ripping apart trees and grading in tight spaces.

Solution

When Williams Loader Services Inc added a PowerGrip to their CAT 314 in combination with a PowerTilt they began seeing the versatility and timesaving benefits immediately, with an added bonus of weight savings as well.

“PowerGrip Does everything I imagined it would do, yet it does it better. I can grade around houses, rip trees apart and pick up brittle soapstone without breaking it. There’s no tool that can do my work more efficiently and with such precision”

— Ken Williams, Owner, Williams Loader Services, Inc.

In the residential excavation field, time is money. For Ken Williams of Williams Loader Services Inc. the time savings that he gained from adding a PowerGrip multipurpose bucket to his CAT 314 was immense. When using the PowerGrip in conjunction with his existing PowerTilt attachment Williams is able to complete certain jobs, such as loading trucks, up to 30 percent quicker than with a conventional bucket/thumb combination. The PowerTilt/PowerGrip combo in addition to the 4 other PowerTilt attachments that Williams uses on his fleet





“There’s no question that you can do most jobs quicker with a PowerTilt/PowerGrip combo. I believe that 75 percent of operators would want a PowerGrip over a thumb if they tried it.”



— Ken Williams,
Owner, Williams
Loader Services Inc.

of backhoes has maximized his productivity and improved his bottom line.

Life Before PowerGrip



Prior to using the PowerTilt/PowerGrip combo, Ken Williams used a hydraulic thumb for clearing lots, and found it to be challenging at best. When loading trucks with the thumb, he would have to swing around the material at only one angle to

the truck, and when he was clearing and loading 6 foot saplings, he always had to rely on a chain saw to rip them apart, costing him extra man-hours swapping between the excavator and the chain saw at the job sites. With the PowerTilt/PowerGrip combo, Williams never has to leave his machine. The unique design allows him to angle the material into the truck in any direction, and ripping apart 6 foot saplings is no problem for the PowerGrip.

The PowerGrip with its unmatched, hand-like manipulation and dexterity is also unique in that it can be used to pick up and stack brittle stone with out breaking it; a task that Williams Loader Services does frequently. When they added the PowerGrip to their existing CAT backhoe, it also opened up the opportunity to add utility work to their services. In working on water and sewer lines, Williams found that “When getting into rocky material; you can scoop up a bucket of rocks, then open up the bucket 3 to 4” to separate the smaller material. You can never do this effectively with a standard bucket.”

Flexible Performance and Durability by Design

Helac Attachments integral designs have over a decade of research, engineering and innovation, providing the the most

“I would never buy another hydraulic thumb. The weight savings and overall versatility of PowerGrip puts it so far ahead of a thumb. I can clear lots, dig basements, cut a swale, rip trees apart, separate materials, and even pick up brittle soapstone without breaking it.”

— Ken Williams,
Owner,
Williams Loader Services, Inc.

efficient solutions for work site versatility.

PowerTilt is available for equipment up to 75,00 lbs in eight sizes with standard rotation of up to 180 degrees. Each model is designed for a specific class of machinery and individually customized to fit the carrier. In addition, PowerTilt is specifically engineered to work with a variety of other attachments, greatly enhancing your machine's versatility. Wide buckets, brushcutters, narrow buckets, hydraulic hammers, rippers and mowers, are just a few of the attachments that are compatible with the PowerTilt.

PowerGrip buckets are available for equipment up to 20 tons, in three sizes, with bucket width ranges from 24 inches to 48 inches in the trenching profiles and 48 inches or 60 inches in the ditching profiles. PowerGrip has been engineered with the flexibility to function as a trenching, ditching, grading or clamshell bucket and can also be used for gripping and loading. PowerGrip's adaptability allows it to be a true multi-purpose tool that can change from one job to another without the need to change tools.

Diversity of Tasks Performed with PowerTilt/PowerGrip Combo



Ken Williams uses their four PowerTilts and one PowerGrip on his entire fleet of backhoe loaders to perform a wide range of tasks throughout the residential excavation process, ranging from clearing lots, digging basements, tight grading, cutting a swale and picking up soapstone to ripping trees apart, separating materials and loading dump trucks.

Because there is no need to remove the PowerGrip bucket, Williams can switch easily from working on his excavating jobs to doing his water and sewer utility work; an important labor and time-saving feature.

For More Information

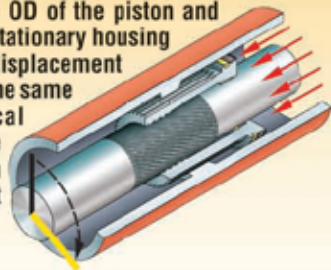
For more information about Helac Corporation's construction equipment attachments, call 800.797.8458. To access information using the World Wide Web, go to: www.helac.com.

For his excavation business, Williams uses a grading bucket with PowerTilt attachment one hundred (100) percent of the time, as well as a PowerGrip multi-purpose bucket in combination with a PowerTilt attachment on their CAT314. Williams stated, "I don't take the PowerTilts or PowerTilt/PowerGrip combo off the machines, even though they wouldn't be hard to remove. I personally use the machine with the PowerGrip fifty (50) percent of the time; the other fifty (50) percent of the time my operators use it. Currently we have over 3,000 hours logged onto the PowerGrip"

Inside Helac's Rotary Actuator Technology

Operation Technology

PowerGrip uses Helac's sliding spline technology for its operation. This technology is composed of a tubular housing that is integrated into the bucket shell and two moving parts: a central through shaft, which is attached to the jaw, and a doughnut-shaped piston. As hydraulic pressure is applied, the gears on the OD of the piston and ring gear of the stationary housing force the axial displacement of the piston. At the same time, the helical gearing on the shaft and piston ID cause the shaft to rotate and operate the jaw.



PowerGrip and PowerTilt use Helac Corporation's innovative sliding-spline operating technology to convert linear piston motion into powerful shaft rotation. Each actuator is composed of a housing and two moving parts — the central shaft and piston. As hydraulic pressure is applied, the piston is displaced axially, while the helical gearing on the piston OD and housing's ring gear cause the simultaneous rotation of the piston. PowerGrip and PowerTilt's end caps, seals and bearings all work in tandem to keep debris and other contaminants out of the inner workings of the actuator, prolonging product life and reducing required maintenance.



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PowerTilt is patent protected by U.S. #4906161 / 5447095,
Europe #0356738, Canada #1303553 / 2153961,
Japan #2614922, Australia #616786. Other patents may apply.
PowerGrip is patent protected by U.S. Patent 6370801 B1,
corresponding international patents pending.

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