2014 You Show Us

MILLING SCOOP

Arapahoe County Road and Bridge
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Problem Statement

In the fall of 2013 Arapahoe County Road and Bridge purchased a milling attachment to use with a skid steer for the milling of cracks, bumps and soil mixing. We had incredible success with the implementation but found that the crew was spending extended time on the cleaning of the milled area. Shovels were fine for removal of about the first inch or two of millings but then near impossible once touching the milled surface. Push brooms were also not an acceptable tool for the job.

Discussion of Solution

The patching crew came up with a very innovative and creative solution. They took a standard 6-ft wide skid steer bucket that was 18-in tall and turned it into a custom milled surface trench cleaner. The bucket has a 22.5-in *center scoop* that sits 2.5-in below the standard front cutting edge. It extends out from the cutting edge a total of 8.5-in, has a 2-ft flat section and then a 10-in taper to the back of the bucket. This bucket is 100% custom designed to work the trench behind our mill attachment to clean out millings and dirt from the hole.

Labor, Equipment, and Materials Used

The Road and Bridge patch crew decided to partner with our Fleet department to complete the project. We were able to utilize a spare bucket that we had in the yard and with some scrap steel. With about one day worth of welding and a labor total of fewer than four-hundred dollars, we had a completed project.

Total Cost

The total cost of the project was just under four-hundred dollars with parts and labor. It was less than a full day for the labor.

Savings and Benefits to Agency

This bucket has saved us on average, about ten minutes per crack (2' x 24') that we clean out and then repair. With an average of about five cracks a day, that gives us close to a full hour of available labor time every time we use the bucket.

Photos











