

T & E First-Round Winner

Innovations Challenge
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>

April 2015

Prepared by Transportation Planning
Missouri Department of Transportation

Material Load Indicator



Description

This innovation is a sensor mounted inside the spreader bed that indicates when material inside the bed is low. When the spreader bed is two-thirds empty the sensor will activate a light mounted on the outside of the bed warning the driver that the bed is nearly out of material. When the material feeds past the sensor the trigger on the sensor will pop up causing the light mounted on the outside of the bed to light up. The light is visible from inside the cab of the truck.

Benefit

This innovation improves safety by eliminating the need for operators to climb on snow and ice covered trucks. It reduces the risk of injury to the operator since they do not leave the safety of the cab to check the material. The innovation saves time and money by eliminating the use of empty spreaders. The driver's job is made more efficient by making fewer trips to the maintenance building.

Parts and Labor

Sensor - \$45.00
Mounting box - \$5.00
Wire - \$16.25
Switch - \$8.40
Light - \$6.25
Plug - \$11.82
Bolts - \$2.44
Total - \$95.25 with four hours of labor.

For More Information Contact:

Gregory Buckner at (573) 604-0914.

Additional photos can be seen by accessing the Innovations Challenge homepage at:
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>.