



Tool and Equipment Challenge Application Form

Have you or your work group made a tool or modified a piece of equipment to get work done better, faster or cheaper? Why not let everyone share in the success? Fill out the form below. Your best practice may even qualify for an award and be used throughout the state. Most of all, thanks for helping make MoDOT the best it can be.

1) Describe your best practice. (Attach photos, videos and diagrams if available.)

The Steel Plate Transporters, developed and built by Jeff Bailey and Matt Elsea, simplifies the process of placing a steel plate over a hole in a bridge deck. The trailer is pulled by a pick-up or dump truck. The steel plate can be loaded, transported and put in place by one person. They built two of them, each one being a little different.

2) How does MoDOT benefit from this best practice? (Check all that apply.)

- Saves money
- Saves time
- Simplifies work
- Improves safety

Describe how: Both money and time is saved as this takes only one person and one truck to transport. A pick-up can be used. Safety is improved as the person only has to attach cable to plate and winch steel plate into place on the trailer. Drive to the location and lower plate over hole. No more loading plate onto a dump truck with a loader, driving to site and dumping steel plate onto the bridge deck and hoping it falls in the right place.

3) When was your best practice implemented?

June, 2008

4) How much does your tool or equipment modification cost? (Please attach a complete materials list.)

Total labor hours:

127 Hr.
THM43401
92 Hr.
THM43402

Total material costs:

\$1737.76
THM43401
\$2184.61
THM43402

5) Contact information: Name

Kevin Rose

Telephone

816-229-3540

District/Location

Dist. 4 Blue Springs-Special Operations

Please save and send your completed form and any attachments to your district challenge coordinator.

Or sign and mail your completed form through department mail.

(Signature if mailed)

(Date)

Thanks for helping make MoDOT a world-class organization!

Material list and cost for Steel Plate Transporter
THM43401

4 ea. 3x3x24x3/16 Sq. Tubing	\$ 446.40
1 ea.4x4x20x1/4 Sq. Tubing	\$ 165.10
1 ea. Turn block	\$ 89.16
10 ft.1/2x12 Flat steel	\$ 172.40
1 ea. Trailer connector and adaptor	\$ 19.98
4 ea. U bar clamps	\$ 144.65
12 ea. Hitch pins	\$ 49.08
1 ea. Roll of 16 ga. Wire	\$ 13.99
2 ea. Fenders	\$ 23.44
2 ea. Spindle	\$ 44.34
1 pr. Complete hub assembly	\$ 85.02
2 ea. Tires	\$ 313.39
2 ea. Light box	\$ 59.30
1 ea. Tow ring	\$ 28.23
2 ea. Adjustable channel	\$ 16.30
2 ea. Pin and clip for receiver	\$ 7.58
1 ea. Swivel jack	\$ 59.60

Total \$ 1737.76

Material list and cost for Steel Plate Transporter
THM43402

5 ea. 3x3x24x3/16 Sq. Tubing	\$558.40
10 ft. 1/2x12 Flat Steel	\$ 172.41
4 ea. Hold down clamps	\$135.49
1 ea. Gear winch	\$ 66.09
4 ea. Spring assembly	\$ 8.67
Shipping	\$ 225.11
1 ea. Ceiling winch	\$ 258.08
2 ea. 3" Flat mount block	\$ 35.90
100 Ft. 5/16 cable	\$ 68.54
2 ea. Eye hooks	\$ 7.96
4 ea. Clip and thimble kit	\$ 10.76
2 Fenders	\$ 23.44
2 ea. Spindle w/pin	\$ 44.34
1 pr. Complete Hub assembly	\$ 85.02
2 Tires	\$ 313.39
2 ea. Light Box	\$ 59.30
1 ea Tow Ring	\$28.23
2 ea. Adjustable Channels	\$ 16.30
2 ea. Pin & Clip for receiver	\$ 7.58
1 ea Swivel Jack	\$ 59.60
Total	\$ 2184.61















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