Application Form

Have you or your work group found a better, faster or cheaper way to get your work done? 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 additional documents if needed.)

This chipper is now a multifunctional machine that allows for year round usage also resulting in a reduction in time spent on shoulder repairs and reduces material wasted. This innovative idea improves the overall safety of the shouldering operation. This machine and its current attachments are easily changed from a chip spreader to a shouldering machine in less than 30 minutes. The shouldering wing can also be adjusted to repair a shoulder from one to six feet. The shouldering attachments were available from existing equipment currently on hand, a shoulder conveyer box, Monroe jr. wing and misc. hydraulic parts. The shouldering machine has proven to be a cost effective and safe unit by already completing more than 110 miles of shoulder repair in less time with no accidents.

2) How does MoDOT benefit from this best practice?

☒ Saves money ☒ Saves time ☒ Simplifies work ☒ Improves safety

Describe how:

(Improves Safety) Employees no longer have to stand in harms way between the Grader and Dump Trucks. The Shouldering Machine Operator and assistant can see what is going on in front the machine, has total control to shut the operation down quickly and has good communication with other coworkers on the machine.

(Saves Money) By utilizing one machine for multifunctional use in our year round operations, also this machine accurately places material in both chip seals and shouldering operations which reduces the amount of excess material wasted.

(Saves Time) The shouldering modification has allowed a reduction in time spent on shoulder repairs: this one machine can be shared district wide and still meets district goals. Operator of the Shoulder machine latches to the hitch of the trucks keeping the two units together, which reduces the amount of material spilled on pavement which we previously had problems with in our past practices. Both Chip Seal and Shouldering Operations are now a continues moving operation. This shouldering machine easily allows for one single pass to repair shoulders with various amounts of material needs.

(Simplifies Work) Employees only need to back up to the Chipper/Shoulder Machine so they can be latched on and pulled. Truck drivers can concentrate on spotter showing them when to raise and lower their beds to dump material or to avoid overhead power lines.
3) When was your best practice implemented? 03/15/2007

4) How much does it cost?
   Total labor hours: 335hrs.  Total material costs: $1127.70

5) What level of approval has your best practice received? (Check all that apply)
   □ Immediate supervisor  □ Area supervisor  □ District/Division head  □ Central Office staff
   □ I need an Idea Advocate

6) Contact information: Name: Keith Hartwig  Telephone: 660-542-0731
   District / Division: 02/Maintenance

Please save and send your completed form and any attachments to: Solutions@modot.mo.gov.
Or sign and mail your completed form through department mail to: Solutions At Work
   Organizational Results
   PO Box 270
   Jefferson City MO 65102

Thanks for helping make MoDOT a world-class organization!

Employees involved in the creation of this solution.

Name          Title Description
Keith Hartwig - Maintenance Superintendent II
Jeff Miller   - Equipment Technician Supervisor
Garrett Gillespie - Equipment Technician Supervisor
Jason Harvey - Roving Senior Equipment Technician
Doug White   - Regional Maintenance Supervisor
Donald Standley - Maintenance Crew Leader
Eugene Oser  - Senior Maintenance Worker

Materials List

Hydraulic Hoses, Fittings and Valves - $780.42
Metal                                 - $305.02
Bearings                              - $42.26

Missouri Department of Transportation
Major Components used for the construction of the Shouldering Machine.

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<th>Asset Value</th>
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<td>$1,822</td>
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<td>$2,789</td>
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Total Value $5,344 of Shouldering Machine
HEARTLAND FARM & LAWN
880 Hwy. Blvd.
ligginsville, MO 64037
660) 554-7434
91 N.W. 58 Hwy
Centerview, MO 64019
(660) 656-3600
25921 HWY 85 North
Carrollton, MO 64633
(660) 542-2485

MO HWY AND TRANS DEPT
P. O. BOX 8
MACON MO 63552 US

ACCOUNT NO
10101

INVOICE DATE
08JAN07
10:18
INVOICE NO
03 3003300

QUANTITIES

ORDERED
SHIPPED
B/O

PART NUMBER
DESCRIPTION
BIN

LIST
NET
EXTENSION

** FINANCIAL PLAN NO 00249 **

** PURCHASE**

** FARM PLAN # 9948 **

** PROD CODE # 120 **

** PARTS **

This purchase is subject to the terms of the Farm Plan *

Credit agreement. I grant Farm Plan a purchase money *

security interest, except as limited in that agreement, in*

* the goods described.

** MAKE: JD MODEL: SERNO: **

297
N X431-12-RL BULK HOSE WHSE 1.15 .53 157.41 PC
7
N X10143-12-12 HOSE FITTI PP07 9.41 9.41 65.87 PC
1
N X11343-12-12 HOSE FITTI PP07 27.61 18.11 18.11 PC
2
N X13943-12-12 ELBOW FITTI PP16 28.22 23.14 46.28 PC
2
N X10643-10-6 HOSE FITTI PP12 10.54 10.54 21.08 PC
2
N X10643-8-6 HOSE FITTI PP12 6.05 4.96 9.92 PC
204
N X431-6-RL BULK HOSE PP .58 .27 55.08 PC
2
N AT33033 FITTING Z-4 20.67 20.67 41.34 PC
2
N AT32332 ELBOW FITTI Z-2 11.13 11.13 22.26 PC

Terms net cash. All accounts not paid by 10th of month following purchase are subject to a finance charge at a monthly rate of 1.5%. Annual rate 18%.

I certify the items on this invoice are for agricultural use. If these items are not used exclusively for this purpose, I will be liable for the tax, interest & penalty.

SIGNED ______________________________

DESCRIPTION

ACCOUNT

AMOUNT

SALES TAX

PLEASE PAY THIS TOTAL ▶ CONTINUE
**HEARTLAND FARM & LAWN**

1880 Hwy. Blvd.  
Higginsville, MO 64037  
(660) 584-7434

91 N.W. 58 Hwy  
Centerview, MO 64019  
(660) 655-3600

25921 HWY 65 North  
Carrollton, MO 64633  
(660) 542-2485

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**Parts Invoice**

**MO HWY AND TRANS DEPT**

**P. O. BOX 8**

**MACON MO 63552 US**

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**SALESMAN** | **ORDER NO.** | **MO. NO.** | **PHONE** | **INVOICE DATE** | **TIME** | **INVOICE NO.**
---|---|---|---|---|---|---
331 | 03004393 | | | 08 JAN 07 | 10:18 | 03 3003300

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**QUANTITIES**

**PART NUMBER** | **DESCRIPTION**
---|---

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**PRICES**

**LIST** | **NET** | **EXTENSION**
---|---|---

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**DESCRIPTION** | **ACCOUNT** | **AMOUNT**
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**PLEASE PAY THIS TOTAL**

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**437.35**
**HEARTLAND FARM & LAWN**

MO HWY AND TRANS DEPT
P. O. BOX B
MACON MO 63552 US

**Parts Invoice**

MO HWY AND TRANS DEPT

**SALESMAN ORDER NO.**
342
**RO. NO.**
03004399
**PHONE**

**INVOICE DATE**
08JAN07
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13:04
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**PARTS HOURS MON.-FRI. 7:30AM-5:00PM**
**SAT.-7:30AM-12NOON.**
**TWENTY DOLLAR AFTER HOURS PARTS CHARGE**
**CALL TOLL FREE 1-800-214-3337.**

**INVOICE CONTAINS** 85.24** DISCOUNT**

**DESCRIPTION**

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**PLEASE PAY THIS TOTAL**

124.56
## Parts Invoice

**HEARTLAND FARM & LAWN**

**MO HWY AND TRANS DEPT**

**P. O. BOX 8**

**MACON MO 63552 US**

**SHIPTO**

**MO HWY AND TRANS DEPT**

**D. Wilt**

**SALESMAN**

**332**

**ORD NO.**

**03004528**

**PHONE**

**INVOICE DATE**

**16 JAN 07**

**TIME**

**11:49**

**INVOICE NO.**

**3003393**

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### TERMS

- **Parts Hours Mon.-Fri. 7:30AM-5:00PM**
- **Sat.-7:30AM-12NOON.**
- **Twenty Dollar After Hours Parts Charge Call Toll Free 1-800-214-3337.**

**Invoicing Contains 108.34 Discount**

### DESCRIPTION

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**Please Pay This Total**

**118.51**

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I certify the items on this invoice are for agricultural use. If these items are not used exclusively for this purpose, I will be liable for the tax, interest & penalty.

**SIGNED**

**LF-1137C Ver. 1050102**

**ORIGINAL COPY**