

Payback Analysis – Automotive SMC

Application Assumptions (or similar)

Press:	2500 Ton Compression
Mold:	1 or 2 Cavity
Material:	SMC
No. of Presses:	2 (1 SmartTrac)
Hours/shift:	8
Shifts/day:	3
Days/week:	5
Weeks/year:	50
Press Rate/hour:	\$150 (estimated)
Current Cure Time:	60 seconds
Proposed Cure Time:	51 seconds
Current Cycle Time:	90 seconds
Proposed Cycle Time:	81 seconds
Machine Utilization Rate:	90%
Assumed Cycle % Savings:	10% (9/90)
SmartTrac Cost:	\$20,000/press (doesn't include cost of sensor installation)

Payback:

$8 \text{ (hours/shift)} \times 3 \text{ (shifts/day)} \times 5 \text{ (days/week)} \times 50 \text{ (weeks/year)} \times 150 \text{ (\$/hour)} \times .90 \times .10 = \underline{\$81,000 \text{ savings/year-press}}$

Payback: $\$20,000 / \$81,000 = \underline{.25 \text{ years or 3 months}}$

1 Year ROI: $\$81,000 / \$20,000 \times 100 = \underline{405\%}$

3 Year ROI: $\$81,000 \times 2(\$81,000 - \$3,000*) / \$20,000 \times 100 = \underline{1,185\%}$

* Estimated cost of Annual Service Option and travel expense

Additional SmartTrac Benefits:

- Lower scrap rate due to elimination of under cure parts
- Trouble shooting tool for material, temperature, pressure, etc. variation
- Consistent quality/ lower standard deviation (all parts have same state-of-cure)
- Reduce press start-up and mold change time improving machine utilization

***Intelligent Process Control™ for
Faster, More Consistent Cures***