

Payback Analysis – SMC Example

Assumptions: SMC Wheel Cover Application

Press:	300 Ton Compression
Mold:	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:	\$60 (US)
Current Cure Time:	90 seconds
Proposed Cure Time:	76 seconds
Current Cycle Time:	145 seconds
Proposed Cycle Time:	131 seconds
Machine Utilization Rate:	90%
Assumed Cycle % Savings:	10% (14/145)
SmartTrac Cost:	\$20,000/press (doesn't include cost of sensor install)

SMC Wheel Cover Payback & ROI:

$8 \text{ (hours/shift)} \times 3 \text{ (shifts/day)} \times 5 \text{ (days/week)} \times 50 \text{ (weeks/year)} \times 60 \text{ (\$/hour)} \times .90 \times .10 = \underline{\$32,400 \text{ savings/year-press}}$

Payback: $\$20,000/\$32,400 = .62 \text{ years or } 7.4 \text{ months}$

1 Year ROI: $\$32,500/\$20,000 \times 100 = \underline{162\%}$

3 Year ROI: $(\$32,400 + 2 \times (32,400 - 3000^*)) / (\$20,000) \times 100 = \underline{456\%}$

* 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)
- Further cure time reduction (if possible) will lead to even better ROI
- Reduce press start-up and mold change time improving machine utilization

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