

### Payback Analysis – Typical Rubber Component

#### **Assumptions:**

Press:	300 Ton Compression/Injection
Mold:	2 Cavity
Material:	HNBR/ Nitrile/ Fluorelastomer/ Neoprene
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:	5 Minutes
Proposed Cure Time:	4.5 Minutes
Current Cycle Time:	5.5 Minutes
Proposed Cycle Time:	5.0 Minutes
Machine Utilization Rate:	90%
Assumed Cycle % Savings:	9% (0.5/5.5)
SmartTrac Cost:	\$20,000/press (doesn't include cost of sensor install)

#### Rubber Component Payback & ROI:

$8 \text{ (hours/shift)} \times 3 \text{ (shifts/day)} \times 5 \text{ (days/week)} \times 50 \text{ (weeks/year)} \times 60 \text{ (\$/hour)} \times .90 \times .09 = \underline{\$29,160 \text{ savings/year-press}}$

Payback:  $\$20,000/\$29,160 = \underline{.69 \text{ years or } 8.2 \text{ months}}$

1 Year ROI:  $\$29,160/\$20,000 \times 100 = \underline{146\%}$

3 Year ROI:  $(\$29,160 + 2 \times (\$29,160 - 3000^*)) / (\$20,000) \times 100 = \underline{407\%}$

\* Estimated cost of Annual Service Option and travel expense

#### Additional SmartTrac Benefits:

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

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Faster, More Consistent Cures***