Paver Production Reporting

Tracking Paver Performance in Real Time
A new way to monitor your machines

» See the performance of your paver as it relates to real productivity
  - Tons per day
  - Day’s total paving distance
  - Live speed
  - Total tons for the life of the machine

» A whole new way of seeing a paving shift
» Volume based measurement
  – Cross-sectional area known using flow gate height
  – Use speed of material conveyor to create a volume

» Currently assuming flow gates are full at all times
  – Testing new sensors for material height behind flow gate
In Guardian (web)

### Daily Totals
- **Tons Paved**: 188
- **LH Conveyor Tons**: 102
- **RH Conveyor Tons**: 85
- **% Time Paving**: 0
- **Linear Feet Paved**: 1936
- **Total Pave Time**: 54
- **Current Tons/Hour**: 0

### Prior Daily Totals
- **Tons Paved**: 223
- **LH Conveyor Tons**: 118
- **RH Conveyor Tons**: 104
- **Linear Feet Paved**: 3601

### Machine Totals
- **Total Machine Tons**: 6235
- **LH Conveyor Total Tons**: 3414
- **RH Conveyor Total Tons**: 2819
- **Total Cubic Yards**: N/A
- **Total Paved Linear Feet**: 5538
- **Total Pave Time**: 5370
- **Calibration Factor**: 8600

### Machine Data
- **Engine Speed**: 1903.8
- **Travel Speed FPM**: 80
On the machine

- Set Point: 300°F
- Actual: 298°F
- Tons/HR: 20
- Tons Paved: 45
- Feet Paved: 1145
- Paving Time: 9
Improved Communication

» Benefit by knowing how the job is going
  – Asphalt Plant Operator
    • Is the crew laying down faster than expected?
    • When can start to shut down and clean up?
  – Superintendents
    • Which crew is struggling?
    • Are we on pace to finish this job today?
  – Maintenance Team
    • How many tons have crossed this floor plate?
Industry Testing

» Paver production reporting is being used as part of testing for E-ticketing by Florida DOT with aim to:
  – Save cost,
  – Improve quality,
  – Improve worker safety

"I think this process (E-Ticketing) is going to revolutionize how contractors and transportation agencies collect, summarize, report, and use paving data which will lead to savings in time and money while improving pavement quality."

Richard Hewitt, FDOT State Construction Pavement Engineer