

Fleet management system for snow grooming vehicles



Description of the solution

Cost reduction through fuel economy and maintenance cut-downs becomes possible with ISAAC Instruments' "Fleet management system for snow grooming vehicles". Optimizing new equipment purchases and usage is another advantage to acquire such a solution. Sustainable development and reduction of negative effects on environment is also part of benefits for the resort's image.

In the perspective of taking the right actions to improve fleet management, using the right tools to analyze the acquired data is as important. Performance improvement needs efficiency by the snow grooming vehicle operators and in-house training for them.

ISAAC Instruments divides its snow grooming vehicle solution into 3 parts. The first part is the hearth of the solution. Part 2 and 3 are optional and may be added at any time.

1. Vehicles management
2. Activities management
3. Real-time vehicle monitoring and tracking

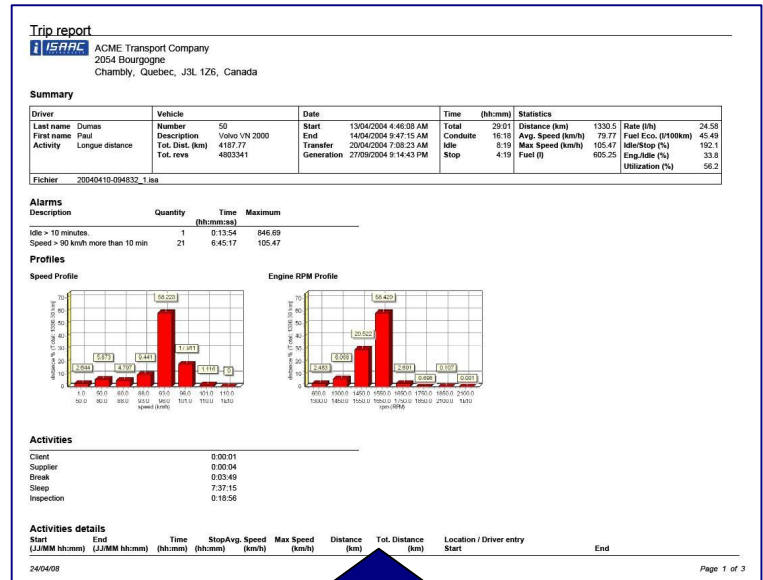
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1. Vehicles management

At the end of each work day, critical parameters recordings are automatically transferred via radio-communication. ISAAC Fleet Manager™ software processes the data and automatically generates reports and emails for the fleet managers.

Critical parameters

- ü Drive time
- ü Idle time
- ü Stop time
- ü Excessive speed and speed profile
- ü Excessive RPM and RPM profile
- ü Active trouble codes
- ü Vehicle position on the resort for the complete work shift (Playback on an aerial map)
- ü Longitudinal impacts (collected from internal accelerometers)
- ü Accelerator pedal position
- ü Demanded engine torque
- ü Actual engine torque
- ü Total fuel consumption – Fleet and individual vehicles (Gallons)
- ü Average fuel economy – Fleet and individual vehicles (Gallons/Hour)
- ü Total tiller time
- ü Tiller activation count
- ü Total winch time (on models with winch)
- ü Winch activation count



For every IDLE, STOP or IMPACT events, the customizable report identifies the location, the time, the duration and the driver

2. Activities management

Using the Palm PDA, the operator can enter the different steps of his shift to record the following activities:

Date, time, duration, location of:

- ü Shift
- ü Pauses
- ü Lunch
- ü Trail section (route)



3. Real-time vehicle monitoring and tracking

The ISAAC Real-Time Vehicle Monitor™ software allows managers to monitor and track the snow-groomers' activities while in operation. All vehicles can be monitored and positioned on a map at any time.