

Customer: oil extraction company
Task: fuel consumption monitoring of oil dewaxing units
Solution/product: DFM fuel flow meters
Result:

- in short term – 10% (first three month);
- in long term – up to 40% (auxiliary equipment);
- optimization of work of teams engaged in current and major repairs of wells;
- 30% decrease in downtime of wells, queued for maintenance

CUSTOMER



Customer's company is the largest oil extraction company in Ulyanovsk region. There are 39 oilfields being development.

All the oilfields being developed by company are divided into two groups: the Southern group and the Northern group.

The Southern group oilfields are located at the north-east of Ulyanovsk region in Melekessky, Cherdaklinsky and Novomalyklinsky districts, the Northern group oilfields are at the south of Ulyanovsk region and also on the territory of Penza region.

Resource base growth and development is provided by accomplishing the complex of geological exploration.

MACHINERY
 1600/100 class oil dewaxing units and lifts on Kamaz chassis (43118 series)
Chassis:
 Tanks volume: 350+210 l
 Engine power 280-310 h.p.
 Min. fuel consumption: 54,4 l/h
Oil dewaxing units:
 Fuel consumption:
 Mode 1 – 35 l/h
 Mode 2 – 110 l/h

TASK


Project on optimization transport and logistics divisions was split into several stages. Fuel monitoring of special mobile machinery, such as mobile oil dewaxing units, dewaxing machines and lifting equipment was one of the most important tasks.

This equipment is designed for removing hydrate paraffin deposits from tubing with the help of saturated high- and low-pressure steam. Equipment is also used for heating and washing vehicles, heating industrial, municipal, household, water and gas equipment.

Operational efficiency of mobile maintenance teams has a direct impact on downtime of oil wells. That's why another important task was to monitor auxiliary equipment operation time and its fuel consumption.

SOLUTION

DFM fuel flow meters are mounted into fuel system and measure total, hourly and trip fuel consumption. For supplementary monitoring, each DFM has option of recording modes of engine operation and performs self-diagnostics to detect interference to the system.

Evgenij Kondratenia, Technoton

"We proposed DFM fuel flow meters for 13 machinery units with high fuel consumption. To choose flow meter for special machinery correctly It is necessary to consider fuel consumption parameters. We decided to use DFM 100 differential fuel flow meters for main engine and DFM 250 autonomous fuel flow meters for auxiliary equipment."




RESULT

During first three months of operation, fuel consumption decreased by 10 % from predefined quotas. After mounting DFM on other machines of the fleet, fuel savings reached 30-40% from previously accounted fuel consumption.

Oleg Shulga, customer's company representative

"Installation of DFM fuel flow meters allows to receive real information on operation time of special equipment and its actual fuel consumption. We achieved dramatic reduction in downtime of machinery and oil wells."

"Thanks to implementation of effective telematics system, the company freed up funds for further development of infrastructure of the Northern and Southern groups of oilfields."



* details are hidden. If you want to know customer's name - please, contact info@technoton.by