ENGINEERING
TOMORROW

Danfoss

One valve, **numerous benefits**

When Swedish forestry machine manufacturer Gremo agreed to put an innovative Danfoss proportional valve to the test on its forwarder machine, it did not take long to prove why it is an industry-changing addition to mobile machine technology. By simply changing the hydraulic valve on their forestry crane to a Danfoss valve in the PVG family, Gremo witnessed productivity go up and fuel consumption go down.

The forwarders that cut, collect and load trees onto trailers in Sweden's 28 million hectares (69.19 million acres) must be robust and able to withstand the challenges of their tough working environment. After spending more than 6,000 hours in the field, it's safe to say that the Danfoss solution passed the test.

During the field test, experienced driver Stefan Jusslin noted the fuel efficiency as well as the benefits to utilizing PLUS+1® compliant components. "The onboard computer registers everything, so we know how much fuel we use per cubic meter of timber. I can see that our machine is running cooler and saving a lot of fuel," he said. "The crane is also more precise and runs smoother. That's a big win."

Comparative tests of Danfoss and conventional valves measured a 16 percent increase in productivity and fuel savings of 25 percent on the crane duty cycle. The efficiency improvements can be attributed to smart metering, minimized back-pressure and variable load-sensing margin control. An adaptive energy regeneration function is also available to optimize system efficiency by detecting opportunities for flow and energy regeneration.

Danfoss is engineering tomorrow with solutions that improve efficiency and productivity. Whether it's integrating a new valve or finding an entirely new system, striking the balance between machine power and fuel efficiency is within reach.

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