

# Toughing through terrain

Wet surfaces, muddy paths, icy conditions, uneven terrain — your machines are built to handle them all. While par for the course, inefficient systems may still lead to loss of control, affecting the productivity and predictability your customers depend on.

Danfoss offers a broad range of anti-stall and traction control solutions that can make a dynamic impact in the overall performance and safety of your machine.

Combining pumps, motors and speed sensors, Danfoss solutions can safely manage the power on each side of the machine — even when traction levels differ — so operators can focus on the job at hand. One example of a system solution is utilizing hydrostatic drive systems driven by H1 pumps with H1 motors at each wheel. When low-traction situations are detected by wheel speed sensors, Danfoss microcontrollers control the displacement of each motor independently, reducing ground damage while achieving maximum tractive force.

Danfoss solutions can also be implemented to prevent stalling. In dual-path vehicles, this requires managing engine power



in parallel with ground speed requirements to optimize vehicle performance. Using a combination of motors, speed sensors, pressure transfers and built-in software intelligence, it is possible to dynamically readjust how much power is sent to each side of the machine — providing better control over vehicle direction, movement and speed.

With a broad range of system solutions available, the best way to implement them is to work together with Danfoss engineers at an application development center (ADC). There, we will help you develop, test and prove a traction control or anti-stall solution that fits your application and vehicle needs.

The ADCs allow you to replicate real-world, variable friction conditions, from a steep-grade gravel slope to the muddiest field. This allows you to conduct repeatable traction control solution testing, effectively reducing development time and unnecessary costs.

By partnering with Danfoss, you can offer your customers machines with proven anti-stall and traction solutions that keep them more efficient and productive.