

HYDRA DRIVE SYSTEM

Hydra Drive System (HDS)

HydraSpecma's intelligent assisted drive axle for agriculture – available in two sizes: HDS 2550 and HDS 3000

HDS 2550

- » Variable hydraulic motor
- » Drum brakes with hydraulic actuator
- » Suitable for tyres from 1 meter to 1.5 meters
- » Overall width: 2550 mm
- » Max. static load: 15 MT
- » Max. dynamic load at 40 km/hr: 12 MT
- » Typically used for: forestry-, hook lift-, constructionand agricultural trailers

HDS 3000

- » Variable hydraulic motor
- » Drum brakes with hydraulic or pneumatic actuator
- » Suitable for tyres from 1.5 meter to 2 meters
- » Overall width: 3000 mm
- » Max. static load: 22 MT
- » Max. dynamic load at 40 km/hr: 15 MT
- » Typically used for: large trailers and slurry tankers



Hydra Drive System is an intelligent and variable assisted drive system that uses the tractor's power beyond hydraulic connection and ISOBUS electrical system. It is a *Plug & Play* solution.

The system is delivered with a complete axle with an integral differential lock, drum brakes, hydraulic motor and electronic control system based on *Danfoss PLUS+1®* platform. The axle and the operating system are developed by **HydraSpecma** and is designed to withstand harsh working environments and with focus on user-friendliness.

- » Hydraulic connection directly to the tractors existing power beyond.
- » Flow requirements from 50 to 200 l/min.
- » Max. pressure: the tractor's hydraulic, normally 200 bar.
- » Fully variable system that can vary up to 10:1 which leads to:
 - Reduced oil consumption which makes it fit many tractor sizes.
 - Less fuel consumption .
 - Up to 25% less power requirement compared to other assisted drive systems.
- » Freewheeling up to 40-50 km/h.
 As default is the working area set to 0 to 15 km/h. However, it can be changed to higher or lower.
- » Mechanical differential lock

Hydra Drive System operating system – two control options

The operating system is now available in two different variants – as control unit or as a touchscreen.



CONTROL UNIT

- » User-friendly
- » Easy to handle with gloves
- » Intuitive
- » Displays the error code



TOUCHSCREEN

- » Setup and diagnosis directly on the screen
- » Shows error with explaining text
- » LOG see historic data
- » See the status in real time

The operation of the hydraulic assisted drive axle is managed via a simple **CAN-bus** control unit directly connected to the ISOBUS service socket in the tractor.

The system can run in either: AUTO or MANUEL mode.

Fully automatic operation requires an ISOBUS connection.

When the AUTO mode is activated, HDS automatically synchronieses with the tractor's forward and revers movements, braking function, and working area.

When switching tractors, the **Hydra Drive System (HDS)** is easily calibrated to fully utilize the tractor's flow capacity.

