

Copro-Drive System

pmchydraulics



Fully automatic hydraulic auxiliary drive system



A fully automatic hydraulic drive system, the Copro-Drive System integrates tractor and machine drive systems into a single road train unit that copes with difficult terrain.

PMC innovation integrates tractor and machine drive systems

PMC Hydraulics has developed a new breakthrough technology that integrates tractor and machine drive systems into a single "road train" unit. The fully automatic hydraulic auxiliary drive system, Copro-Drive, has been designed in close cooperation with a global manufacturer of hydraulic motors, SAI Spa.

The road train feature copes with difficult terrain

The Copro-Drive System controls direction and speed using the tractor's ISO Bus system. It enhances the typical wagon train traction by between 20-25%, thus reducing rolling resistance, in cases when the wheels pull up land in front of them.

The new drive system complements the tractor's pulling force and enables the tractor and its machine or trailer to function as a road train. The road train feature reduces the risk of wheel spin, and thus allows the unit to drive into places otherwise inaccessible to combination vehicles.

Advantages

- Reduced rolling resistance
- Less fuel consumption
- High efficiency based on more motor efficiency
- 20-25% more starting power
- 10-15% better driving force
- High maximum speed

Customized and easy-to-operate

The flexible Copro-Drive System can be customized to meet OEM specific production features. The standard system is easily plug and play retrofitted to almost any conceivable trailer combination or machine, if the tractor is equipped, at a minimum, with ISO Bus generation 1. The system is user-friendly in operation with simple tractor controls, including start/stop, adjustment of torque and four led indicators.

Main Specifications

- 100-130 lpm minimum
- 200 bar tractor/350 bars external pump
- Power up to 40/75 kW
- Speed working mode up to 20 km/h
- Speed transportation mode up to 60 km/h
- Automatic speed control
- Manual torque control
- Electronic/hydraulic safety monitoring of all functions
- Hydraulic system protection against connection failures
- Free PC based tool to start up the system and for error monitoring
- Control in tractor: easy start/stop, adjustment of torque functions with 4 led indicators.