



April 23-28, 2018  
Paris-Nord Villepinte – France  
Hall 5A Stand F 046

# A slow and steady drive

## A NEW HYDRAULIC HYBRID VEHICLE DRIVE SYSTEM HAS BEEN DESIGNED FOR SLOW, CONTROLLED USE

By strengthening its range of full systems, Poclain Hydraulics is bringing more value to its customers. The company is leveraging its efforts through a strategic restructuring that will enable it to focus on system solutions.

Poclain Hydraulics' CreepDrive range, with a new dedicated motor and pumps, all from its high-performance range of products, is an example of the company's strategic focus. The expanded CreepDrive range will address the needs of a wider range of applications. The range will be introduced at Intermat Paris in April 2018, and available to buy in mid-2018.

### Constant hydraulic control

A hybrid mechanical hydraulic transmission from Poclain Hydraulics, the CreepDrive system enables vehicles to work at very low constant speeds regardless of the engine speed, thereby giving auxiliary systems the power they need to work effectively. When the system is disengaged, the vehicle is able to drive at normal on-road speeds with no mechanical transmission efficiency losses.

The complete CreepDrive range contains two motors, a variety of pumps and plug-and-play control kit, including the CANbus communication.

The new motor has two speeds over a wide range of displacements. Other new features include a reinforced shift cylinder and shaft seals as well as an extremely robust design. Compared with the existing motor, this new motor has double the speed and triple the torque. Despite this significant performance improvement, the motor length has only increased by 50mm (2in) and is lighter than comparable products to meet the needs and requirements of third parties who are installing the system.

Integration into a wider range of vehicle applications, including medium commercial vehicles, where constant speed and accurate positioning are essential is now easier. CreepDrive removes added stress on braking and clutching that occurs when vehicles are working at low speeds, as well as the additional maintenance required to keep those systems working properly. Replacing friction braking with hydrostatic braking acting as an integral decelerator reduces the need to feather the brakes.



ABOVE: The CreepDrive system is designed for vehicles that operate at very low speeds

BELOW: Shifting transmissions can be achieved simply by activating a switch



This enables greater precision and less opportunity for error, helping operators increase safety and productivity.

In addition, radial technology eliminates the need for an additional reduction stage and offers some of the highest efficiencies on the market. This reduces fuel consumption and noise, which makes the system more suitable for urban applications. Additional applications include: road maintenance and marking/ stripping, bridge inspections, rail track maintenance,

airports, road sweepers, mulching/chipping, snow cutting, suction dredging, and slinging.

### Operational tips

The vehicle brake can be applied to enable hydrostatic ground drive and the mechanical transmission can be set to neutral while the engine power take-off (PTO) is engaged to drive the pump that supplies flow to the system's hydrostatic motor. A switch located in the cab engages a pneumatically controlled mechanical clutch that disengages the mechanical transmission and engages the hydrostatic transmission.

The driver can set the engine speed to the desired working RPM and, after releasing the brake, can move the joystick in the direction required.

Consistent low working speeds of 0-11mph (0-18km/h) are achievable in forward and reverse directions. When traveling at on-road speeds, the clutch is disengaged, thereby allowing the mechanical transmission to continue operating.

The full CreepDrive system will be on display at the Poclain Hydraulics Intermat booth in Hall 5A – Stand F046. **ivt**

Bruno Lacheteau, director of trucks and bus markets, Poclain Hydraulics



### FREE READER INQUIRY SERVICE

To learn more about this advertiser, visit [www.ukimediaevents.com/info/ivm](http://www.ukimediaevents.com/info/ivm) Ref: 512